



# Imperial Horizons of the Silk Roads

Archaeological Case Studies



Edited by  
**Branka Franicevic**  
**Marie Nicole Pareja**





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And One for the Road!

# Introduction

Branka Franicevic and Marie N. Pareja

## Current State of the Field

For millennia, the diverse peoples and cultures of Afro-Eurasia were interwoven as delicately as the silken threads for which the exchange routes are named—threads that became both a precious commodity and a fitting metaphor for perhaps the most expansive network of connections and exchanges in preindustrial history. The travel and terrain changed quickly and frequently, however, and the Silk Roads served as a testament to perseverance in travel and exchange. The many highways were treacherous and wound through narrow, steep mountain passes and bleak, expansive deserts where caravans often faced starvation, bandits, and imprisonment, whether lawful or not. Marine routes were no better, brimming with pirates, harsh weather and disease, and innumerable people were lost to the sea, whether by accident or purposeful deposition. Nevertheless, as people traversed vast imperial horizons, empires ravenously vied for resources as the quest for power and status continued.

The main arteries of the Silk Roads allowed for the cultivation of monopolies on certain materials, such as Afghanistan's lapis lazuli, South Asia's spices, or China's silk, which constitute important and unique facets of Silk Road scholarship (Daryaee 2010). Port-studded shorelines along maritime routes testified to the immense scale of exchange in the form of urban growth and prosperity, as evidenced by purpose-built bazaars and markets—veritable heartbeats of each trade hub (Morrisson 2012). Many scholars focus on the exchange of rare, exotic, and precious goods, materials, and even animals from within these marketplaces (Boulnois 2008; Tucker 2015; Whitfield 2015). The surrounding settlements served as melting pots for ideological, philosophical, iconographic, culinary, and linguistic customs and styles from throughout the Afro-Eurasian continent. The vast scale of interaction and its web of direct and indirect effects on the rise and development of global cultures is far from fully understood. Subsequently, this field is of great academic interest. Seemingly disparate disciplines engaged with the Silk Roads during different periods and in various ways: historians, anthropologists, curators, art historians, theologians, sociologists, philosophers, archaeologists, and those who specialise more particularly in politics, economics, migration and mobility, technological development, iconography, palaeobotany and palaeozoology, and others.

We often return to these well-worn routes in a quest to better understand ourselves, our collective past, and our shared identities. Nevertheless, material culture studies and archaeological projects dedicated to the Silk Roads are consistently challenged by a myriad of factors, not the least of which are modern regional conflicts. Additional difficulties disproportionately affect (largely archaeological) fieldwork: inhospitable environments, political situations, tenuous excavation permits, or a simple lack of funds, among other challenges, all of which have only been exacerbated by the Covid-19 pandemic. Consequently, recent projects are few, highly localised, and necessarily small in scale.

## **Our Contributions to the Field**

It seems the best-documented, most dynamic phases of Silk Roads exchange may be associated with surges in political power and/or explosive populational migrations. Perhaps the earliest clear phase of Afro-Eurasian exchange, the Bronze Age (c. 3000–1177 BC) can serve as a foundation of exchange across the continent, most strongly driven by regions experiencing the surge and subsequent ebb of power: Yellow and Yangtze River cultures, the Indus, Mesopotamia, Ancient Egypt, and the Aegean, to name only a few. Almost a millennium later, between c. 206 BC and c. AD 220, The Han Dynasty and Rome raced to prominence from either side of the Eurasian continent. Power and influence shifted yet again in another dynamically volatile period, c. AD 618 to c. AD 907, from the Tang dynasty in China and Central Asia to India and on to the Persian Empire. Just as various political groups' power expanded, so did their numerous religions, including but not limited to Buddhism, Zoroastrianism, Christianity, and Judaism. By the 13th and 14th centuries, Mongols seized control of most of the routes between China and Europe. Even today, one can see the imprints that the Silk Roads left on the physical landscape, which serve as invaluable indices for understanding both the people who lived and travelled through these regions, as well as their relationships with the environment. Both human and physical geography are of particular significance when studying exchange, as they provide integral clues to the peoples who traversed these routes through vastly different and unexpected terrain.

Perhaps it is unsurprising then, that the current corpus of scholarly work that contributes to our fundamental understanding of the types of interactions among people, animals, traditions, cultural environments, and the broader physical landscapes of these routes remains relatively underrepresented. It is from this foundation that the current volume was conceived. The editors hope that this transhistorical, transcontinental collection of essays will serve to help fill a notable gap in Silk Roads scholarship by providing many and various methodologies that allow for the reframing of current and future conceptions of trade and exchange.

## **Authors' Contributions by Chapter**

This series of academic case studies focuses primarily on the ways in which the Silk Roads frontier regions were transformed by the exchange of goods, raw materials, and cultures. What do archaeological landscapes reveal about the formation of habitation sites? How are social identities represented and understood in burial practices? How can iconography offer clues to the earliest vestiges of transcontinental trade? Our contributors engage with matters that are foundational to understanding migratory practices, civilian settlements, belief systems, and the places where they overlap. In doing so, each study provides a context for comparative debate that engages the multifaceted aspects of environment and society cohesively, rather than engaging them each as disparate fields. Such methodologies offer the potential for both broader and more nuanced models and frameworks for understanding these networks and those who populated them.

The studies illustrate the significant exchange among Africa, Asia, and Europe from at least the 4th millennium BC through the 10th century AD. The present volume is unique in both its archaeological focus and broad timespan. Although founded on conventional academic approaches and perspectives in Silk Road studies, this anthology develops a slightly different

framework by offering synthesised archaeological projects on a geographically and temporally large, environmental scale. The resulting array of investigations provide transdisciplinary frameworks that interrogate traditional conceptions of time, place, and identity. This diversity of perspectives emphasises the innumerable paths into and through the study of the Silk Roads, and thus greatly benefits future fieldwork and fieldwork-adjacent projects, from inspiration through implementation and execution to completion and full publication.

Our volume is by no means exhaustive in scope, but rather each case study serves as a methodological example from which others may draw inspiration for their own projects and respective disciplines. Although episodic by virtue of each author's temporal specialty, the breadth of these studies facilitates discussions surrounding the archaeology of the Silk Roads from various complementary and unique perspectives. To gain a deeper and more nuanced understanding of the waxing and waning of trade and exchange along the Silk Roads, this volume begins in prehistory with comparative material culture studies. To provide consistency, the contributions are grouped into related thematic sections: migrations, settlements, and spiritual traditions. Due to the various types of evidence employed by the case studies, the sections are not mutually exclusive. Each study addresses an environmental or anthropological question connected to movement (people, goods, beliefs, practices) and then uses a range of methods to support cultural or historical interpretation in archaeological contexts to support a range of material evidence.

The first section of this volume is dedicated to human mobility and migration in terms of environmental and spatial patterns. In chapter one, Marie N. Pareja challenges traditional Silk Roads chronologies and proposes that some of the earliest Eurasian exchange occurred during the late Neolithic and Early Bronze Age periods (4th and 3rd millennium BC). Her finds are based in the study of confluence: she recognizes that the movement of people, iconography, raw materials, goods, and even disease (from as far as northern Siberia, Southeast Asia, Southeast Africa, Scandinavia, and the British Isles) are supported by textual sources and material analysis studies. Through this study, she illuminates the presence of prehistoric Afro-Eurasian Silk Roads, which is well illustrated in tandem with travelling monkey imagery.

In the following chapter, Branka Franicevic argues for the inextricable enmeshment of animals with the (re)creation, existence, and subsequent decline of the Silk Roads. She illustrates that animals often literally carry the brunt of responsibility in exchange, whether through literal silk-making, transporting, functioning either as or necessarily with luxury materials and goods, entwinement with religious belief, as military support, and as agents for the spread of disease. Critically, using current biomolecular evidence, she re-evaluates and redefines the centrality of animals to the Silk Road.

In chapter three, Anna Bloxam demonstrates the construction of social identity and transmission of multigenerational social memory in the early British Bronze Age. A combined methodological approach allows her to reconsider atypical funerary rites, which she argues are clear indices cultural mixing between those with deep local roots and those new to the area. Anna's work constitutes the westernmost bounds of the maritime Silk Routes.

Andrew Hutcheson and Simon Kaner explore the roles of religions from the 6th to 10th centuries in chapter four. By comparing large-scale burial monuments in Japan and the North

Sea areas, their findings demonstrate how landscapes of conversion progressed by ruling groups with the adoption of Christianity and Buddhism.

Dulcie Sydney Daffodil Newbury and Karina Croucher (chapter five) examine the concept of feminine impurity in religious and cultural frameworks, particularly in relation to menstruation. The authors analyse the preserved remains of menstrual structures, seclusions, and archaeobotanical remains in central and southeast Asia from c.AD 600 to c. AD 1200. The study concludes that comparable fertility rites and rituals were performed throughout this area, as both demanded by the individuals' or local culture's beliefs and traditions.

The second section of this volume focuses on iconographic and object-based inquiries that re-examine and re-evaluate traditional interpretations of material culture. In chapter six, Marie N. Pareja offers a new possible interpretation of Bronze Age Aegean evidence for the existence of at least one central goddess: a polyvalent Aegean Potnia. She argues that by consciously crafting a syncretic deity and corpus of generalized cult paraphernalia, Aegean Islands (whose survival depends on their function as hubs for trade) could be considered ideologically adjacent to whomever sees a familiar figure in their goddess. Potnia is a paradoxical deity of duality, at once fierce warrior and gentle nature goddess, traits shared with the central Mesopotamian goddess, Inanna. Through a critical re-evaluation of imagery, artefact, text, and historical and religious parallels, Pareja proves that the connections and exchange between these regions are much closer and stronger than traditionally thought.

In the following chapter, Sara Ann Knutson examines silver *Abbasid* coin assemblages from northern Eurasian regions. Her study demonstrates that the circulation of highly portable, relatively standardized items throughout an exchange network can inform economic and social interactions between Afro-Eurasian communities. Such small objects also, therefore, serve to associate people and landscapes, thus further informing modern perspectives on such networks between the 8th and 10th centuries AD.

Emilia Smagur, Riza Abbas, Sitaram Toraskar, and Andrzej Romanowski (chapter eight) evaluate the role of commerce in the development of an ancient *Sopara* port in India from the 3rd century BC through the 9th century AD. By implementing surface survey and geographical information systems (GIS) analysis, the authors emphasise the complexity of landscape use during this 1100-year span, while also addressing both urban planning and the diachronic development of the port.

In chapter nine, Robert Jones re-examines the images of the domesticated horse in China through two lenses: as both physical art object and as metaphysical, supernatural being. Where the flying horse motif appears, a distinct intercultural connection is evident among pre-Hellenic South, East, and Central Asian cultural groups, which were previously thought to be rather isolated from one another.

Ran Zhang, in chapter 10, reconsiders the study of Early Chinese ceramics in the Western Indian Ocean. By revisiting the distribution of three key features (number, variety, and value) of ceramics, the investigation reveals a complex yet interactive long-distance economic contacts between Tang China and the Abbasid Caliphate. With the transregional approach to chart exchange routes and nodal points, it becomes possible to grapple with larger investigations



of intercultural exchange and connectivity between Africa and the eastern regions of the early Silk Road networks. Such studies have implications for mapping the ancient cities and certainly impact matters of global ecological restoration.

Iró Camici concludes the case studies in chapter 11 by considering social change and complexity in the ancient world. By closely examining pottery from the Mycenaean period, she observes changes in ceramic vessels to detect and better understand the indications of a shifting social climate among the inhabitants of Mainland Greece. In particular, she discusses technological traditions as a way of understanding cultural connectivity between production centres and peripheral areas of the early Silk Roads. By combining ethnography and experimental archaeology, Camici illustrates the changing perception of distance, rarity, and value through Mycenaean pottery.

These case studies serve to reconsider traditional notions of the Silk Roads, whether prehistoric or historic, that presupposed too-easily disrupted transportation, centralised trade, and the dislocation and estrangement of societies from their environments. A considerable portion of this volume's value can be attributed to the diversity and novelty of the methodological approach—in many cases, transdisciplinary in nature—undertaken by the authors. Critically, this collection of case studies serves both as a sampling of history and culture from various locales throughout this network of exchange while also serving as a sort of handbook for the various ways of engaging with the surviving material record in light of sociocultural networks. This volume is particularly valuable to the field of archaeology which, as a relatively new discipline that navigates the applied sciences and liberal arts, requires a toolbox of multifaceted approaches. If nothing else, each chapter of this collection may serve as a different tool, requiring a distinct yet related skillset, within the proverbial archaeological toolbox. These collected essays are a testament to our fundamental curiosity as humans about other humans, particularly their migration and movement – together with traditions, goods, practices, and ideologies—within and throughout the environment.

## **Conclusion**

This volume offers new perspectives and approaches to traditional inquiry through the application of a multitude of different techniques and methods. As such, these case studies shed new light on Old World connectivity, the lasting impact of which resonates even today. Dividing the volume into thematic sections allows for unique synthesis of current knowledge from datasets in different contexts, periods, and regions. An array of diverse cultures demanded interdisciplinary collaboration, which is pivotal in striving for greater research potential so that single realms do not omit the bigger picture of network connectivity. From an archaeological angle, the text is curated to showcase the complex histories of the Silk Roads while offering insight into humanity's ability to adapt and innovate. The volume also serves as a basis for establishing a much-needed framework that may bridge the plethora of disparate disciplines that lend themselves to this area of research. Critically, considering Afro-Eurasian ('global') exchange as inextricable with the Silk Roads is of central importance when engaging with prehistoric and historic pasts. In this respect, the book demonstrates how archaeological work can be integrated to deliver exclusive, intersectional, and integrative perspectives of the Silk Roads.

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## **References**

- Boulnois, L. 2008. *The Silk Road. Monks, warriors and merchants on the Silk Road*. London: Odyssey Publications.
- Daryaei, T. 2010. Bazaars, Merchants, and Trade in Late Antique Iran. *Comparative Studies of South Asia, Africa and the Middle East* 30 (3): 401–409.
- Morrisson, C. 2012. *Trade and Markets in Byzantium*. Dumbarton Oaks.
- Tucker, J. 2015. *The Silk Road: Art and History*. Philip Wilson Publishers Ltd.
- Whitfield, S. 2015. *Life along the Silk Road*. University of California Press.

**Part One**  
**Human Mobility and Migration**



# Chapter 1

## Global Interfaces and the Earliest Evidence for Afro-Eurasian Exchange<sup>1</sup>

Marie N. Pareja

### Abstract

*Recent interdisciplinary projects provide scientific evidence that indicate the ‘Silk Roads’ were in use long before the 1st millennium BC. Such studies indicate that the earliest exchange begins as early as the Bronze Age (c. 3000–1100 BC). Despite the movement of materials, technologies, iconographies, diseases, and people, some scholars are reluctant to consider this Afro-Eurasian exchange as something more than informal and opportunistic. This suggests, problematically, that each culture exchanged almost exclusively with nearby groups but with minimal awareness of populations beyond their neighbours. Before its eventual wane, the Silk Roads saw an early florescence during the Late Bronze Age, which is supported by textual, iconographic, genetic, and material evidence. This chapter first reviews such studies to allay any remaining hesitation regarding Bronze Age Indus-Aegean exchange. Next, the budding relationship between the Indus and Aegean will be examined through the lens of animal imagery to better understand notions of identity, access, and luxury. As a result, this paper challenges traditional Silk Roads chronologies and proposes that some of the earliest Eurasian exchange occurred during the Neolithic and Early Bronze Age.*

### Keywords

EXCHANGE, AFRO-EURASIA, ANIMAL, MONKEY, TRANSDISCIPLINARY

### Introduction

Neolithic and Bronze Age Afro-Eurasian exchange is often underestimated and therefore misunderstood due in part to the traditional and highly specialized nature of academia. This lack of broad interdisciplinarity often means that critical details that are well known in one field remain unknown to specialists in similar yet adjacent areas. Such is the case for many disciplines, but this is particularly prevalent in studies of prehistoric people. The complex interweaving of the many cultures connected by the prehistoric silk roads can be demonstrated by employing a broad and multifaceted approach to identifying contact and exchange, including but not limited to evidence for the movement of raw materials, iconography and artistic styles, documentation from surviving texts, and recent scientific analytical studies.

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<sup>1</sup> Thank you so much, Branka Franicevic, for the warm and generous invitation to contribute to and co-edit this volume. It has been quite a journey, and I am delighted that we have grown even closer. I am deeply grateful to Anne P. Chapin for her years of kind, candid, and relentless mentorship and friendship. Thanks as well to Robert Arnott, Reed Black, Tristan Carter, Tiffany L. Hunt, Jonathan M. Kenoyer, Leanna Kolonauski, Jed Kuhn, Amanda Pavlick, Kitty Sheridan, John Younger, and everyone else who has listened, read, ranted, and celebrated with me along the long road from the Indus to the Aegean and back again.



Figure 1.1: Map of Bronze Age Afro-Eurasia. Adapted by Marie N. Pareja from Google Earth.

Afro-Eurasian exchange is traditionally read through very particular, often discipline-specific, lenses. After centuries of deconstructing, categorizing, and compartmentalizing the past, it is time to move beyond the echo-chamber-like nature of distinct disciplines and turn toward a reintegration of knowledge. By crafting a unified, interdisciplinary approach to the past, it is possible to reconstruct a richer contextualization for imagery, objects, practices, and cultures. This study seeks to illustrate this approach by first establishing a foundation that shows the clear existence of Neolithic and Bronze Age Afro-Eurasian exchange by reviewing the available material evidence (raw materials, iconographic and stylistic features, textual documentation, and the results of scientific material studies; Figure 1.1). This evidence is then paired with a brief review of select technological dispersals (food, silk, and lime plaster wall painting). Once the value of such cross-disciplinary integration is made clear, this adaptable framework is then exercised through the lens of Bronze Age monkey imagery. Building on the recent discovery of Hanuman langurs from India depicted in Aegean wall paintings (where they are represented as blue), this highly integrative model tests whether one can trace any connection between the liminal, supernatural monkeys in Aegean art and the Divine Monkey from the earliest Vedic texts.

This first chapter serves as a foundation for the investigations that follow, as it engages with the earliest possible evidence for silk roads while weaving together the various threads of evidence that is truly transdisciplinary in scope. These routes for migration and exchange serve as a springboard for considering not only migratory practices but also the ways in which people settle along such routes, as well as the syncretic nature of belief systems that emerge and thrive in those sites and settlements.

## Established Foundations

The evidence for exchange routes based on the movements of (largely) inorganic raw materials is supported by a brief review of iconographic and stylistic parallels amongst various regions in Afro-Eurasia, particularly Bronze Age cultures of the Eastern Mediterranean. Primary documents (predominantly cuneiform inscriptions from Mesopotamia) provide textual confirmation for exchange with far-flung areas, but they also speak directly of local settlements populated by foreigners. Finally, recent material analyses provide scientific, quantifiable evidence that constitutes yet another aspect of multidirectional exchange ranging from as far as Siberia down through Southeast Asia, into India, the Steppe and Caucasus, Mesopotamia, regions of Africa, the Mediterranean, and finally up through broader Europe and into the British Isles and Scandinavia from at least the 4th, but possibly as early as the 7th millennium BC.

### *Inorganic Raw Materials*

The movement of organic materials during the Neolithic and Early Bronze Age (EBA) is difficult to track and as such, many scholars have focused on inorganic raw materials and their sources. Lapis lazuli, which naturally occurs only in northern Afghanistan, is considered one of the most valuable materials in the Bronze Age Aegean, where its earliest occurrence may date to the 4th millennium BC (Colburn 2008: 112; Kawami and Olbrantz 2013: 172; Sarianidi and Kowalski 1971: 12–13). Perhaps predictably, as one travels farther from the lapis mines in Badakshan, the later the period in which the blue stone first appears. As such, the earliest appearance of lapis may serve, in a way, as a tentative and preliminary map from which one may build an understanding of prehistoric exchange (Pareja 2021: 50–51).<sup>2</sup>

Although carnelian deposits are known from various Afro-Eurasian areas, the stone varies in colour and patterning based on the location from which it comes (Groman-Yaroslavski and Mayer 2015: 86; Ludvik *et al.* 2015: 7–15). The cutting and shaping of beads are also regionally specific (as are subsequent alterations), so that these stylistic aspects may be considered clear indications origin and/or travel (Chakrabarti 1993: 266). Indus-style carnelian beads are currently known as far east as Guangzhou in southeast China (Zhao 2014: 177–78), and as far west as Mycenae (Shaft Grave III), on the Greek Mainland (Ludvik *et al.* 2015: 17–18).<sup>3</sup>

Similarly, isotopic analysis of EBA tin from the Aegean<sup>4</sup> indicates an original source from the Indus River Valley (Weeks 1999: 2–7). Tin recovered from Late Bronze Age Mochlos (Crete), however, comes from mines in Cornwall (Berger *et al.* 2019: 1–46). Countless other raw materials were exchanged between the Final Neolithic period through the Bronze Age, including but not limited to amber, amethyst, chalcedony, gold, ivory, and a variety of metals (Chapin and Pareja 2020; 2021: 126; Colburn 2008: 210–12; Hughes-Brock 2011: 101–08; Loze 2011: 59–62; Ratnagar 2004: 106–211). For instance, copper and glass found in Scandinavia came from Cyprus, Egypt, and Mesopotamia (Ling *et al.* 2014; Ling and Stos-Gale 2015; Varberg

<sup>2</sup> One may also understand the technologies used with various inorganic raw materials as indicative of change and continuity in long distance trade, as shown by Massa and Palmisano (2018: 65–87).

<sup>3</sup> The Indus carnelian at Mycenae is found in later contexts than the Indus carnelian beads from Aegina, a small island off the eastern coast of the mainland, which were found in EB II contexts. These beads may constitute the earliest evidence for Indus-Aegean exchange (Aruz 2003; Pareja 2021: 51).

<sup>4</sup> From the sites of Poliochni, Thermi, and Kastri.

*et al.* 2015), while the Uluburun Shipwreck provides a snapshot of both the ties between people and the types of goods and materials in circulation in the eastern Mediterranean by the Late Bronze Age (LBA; Pulak 1998).<sup>5</sup> The vast exchange networks in existence from the Neolithic and EBA onward may indicate a necessary revision of the way the much later shipwreck is discussed.<sup>6</sup> Does the wreck truly indicate a uniquely rich and ‘international’<sup>7</sup> voyage around the Aegean, or is it one of many—representative of regional, well known (even traditional?), often-traversed routes—by the LBA? Through the integration of a diverse and varied set of evidence from seemingly disparate disciplines, it seems that the latter is most likely the case.

### *Iconographic and Stylistic Movements*

Exchange amongst Egypt, the Aegean, and the broader Near East (including Mesopotamia) flourished from at least the development of the Anatolian Trade Network (ATN; Bevan 2003; Şahoğlu 2005) through the Late Bronze Age.<sup>8</sup> Stylistic emulation and overlap between these areas—beyond direct importation—includes Aegeanizing styles in Egypt and the Near East (such as Kamares Ware imitations), the finds from Tel Dab‘a in Egypt<sup>9</sup>, Egyptianizing styles, motifs, and other imports found on Crete (Aston 2015: 9–10; Cline 1994; Dothan, Zuckerman, and Goren 2000: 1; Karetsou 2000; Phillips 2008), the Montet Jar and Egyptian items from the Temple of the Obelisks in Byblos (Tufnell and Ward 1966), among many others. Many of the items that preserve such shared styles and motifs are small, highly portable, and may often indicate identity.<sup>10</sup> In the most general terms, a multitude of iconographic motifs, figures, and compositions connect each of these regions to one another and those farther beyond (Pareja 2017: 113–18; 122–23; 2021, 43–56, 60–61).

Hybrid creatures, or monsters, constitute more readily observable evidence of not only contact and communication between these areas but a nuanced understanding and adaptation of imagery. For instance, the creation of the griffin is sometimes attributed to Egypt and sometimes to the Near East (Dubcová 2013: 165–67; Judas 2015: 126–28; Morgan 2010: 303–04). Conversely, the Egyptian deity Taweret transforms—as it passes through the Near East and Crete—into the Minoan Genius (Gill 1963, 5–9; Marinatos 2021, 215–21; Stocker and Davis 2020: 293–95; Weingarten 1991: 3–20). The many and varied bird-people (seen in Aegean glyptic art) were likely imported to Crete via the Levant from elsewhere in the Near East (Amiet 1986: 198; Dubcová 2020: 205–17; Sarianidi 1998: 28). The Minoan Dragon, a rarely featured figure in

<sup>5</sup> The ship bore ten tons of copper ingots from Cyprus, one ton of tin ingots, a gold scarab with Nefertiti’s post-mortem cartouche, Egyptian cobalt glass ingots, ebony from Africa, and a myriad of herbs, spices, and foodstuffs from the Near East including safflower, cardamom, almonds, figs, olives, pulses, and legumes, all of which were presumably loaded onboard at Ugarit, as suggested by the species of plants used for dunnage. Terebinth resin and orpiment from the Near East, Baltic amber beads, and high value crafted items (a diptych with ivory hinges, for example) found among the wreckage reflect an interest in not only raw materials, but a desire for finely crafted items made of exotic materials.

<sup>6</sup> When considered together with the problem of survival and the unusually well-preserved finds at Uluburun.

<sup>7</sup> If one may be so bold as to look for parallel terms to attempt to understand the ways that these Bronze Age people considered the world around them.

<sup>8</sup> With the exception of a desiccation period at the end of the EBA that temporarily paused long-distance travel for exchange (Warren 1974: 41–42; Wiener 2013: 34), and the period immediately following the eruption at Akrotiri (LBA IB).

<sup>9</sup> These illustrate a clear connection to Crete and a nuanced awareness of Minoan conceptions of wealth, value, and elite identity.

<sup>10</sup> Seals, sealings, beads, figurines, and other items of personal adornment are the most frequently cited types of items on which these shared motifs are found (Aruz 2003; Colburn 2008; Keay 2000: 16; Pareja 2021: 49–61).