CHAPTER II

Agents of Appropriation
Shipwrecks, Cargoes, and Entangled Networks in the Late Republic

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Introduction

In the early first century BCE, a large freighter was cruising along the tip of the Peloponnese when it sank off the island of Antikythera, Greece. Since its discovery in 1900, this shipwreck has been used to illustrate the types of luxury goods that Romans were importing from Greece and the Near East at the end of the late Republic: finely made glassware; gold and silver cups; wooden couches with bronze decorations; marble and bronze statues; and various ceramics, including amphorae from Kos, Rhodes, and Ephesus.[1] On the one hand, these remains represent a snapshot of trade, encompassing the various components involved in the production and consumption of objects within a formal economy. On the other hand, this shipwreck also preserves objects lost in the process of being transported between the contexts that scholars usually rely upon to provide an interpretative framework. But instead of interpreting the remains of the Antikythera shipwreck according to where they were produced or headed, we can also evaluate them as the material vestiges of the agents who were responsible for circulating goods, people, and ideas around the Mediterranean at the end of the late Republic.

In this chapter, I contextualize late Republican and early Imperial shipwreck remains within broader networks of production, transportation, and consumption in order to address processes of appropriation. So far, prior models have largely been consumer-driven, crediting consumers with the agency for selecting objects that were then used to construct a social

[1] See Kaltsas *et al.* 2012 for a monograph and catalogue of the Antikythera shipwreck. For the discussion of shipwrecks as indicators of the trade in luxury goods, see Hölscher 1994, Wallace-Hadrill 2008: 361–2, and Bouyia 2012a. Assigning objects to a category of "luxury" without social and economic contextualization is problematic: e.g., Berry 1994: 3–10, Wallace-Hadrill 2008: 338–45, and Zanda 2011: 1–6.

discourse.[2] Although consumers and producers certainly figured prominently in these selections, multiple agents acted to facilitate and determine the transportation and circulation of objects. Moreover, these agents spanned a range of geographical and chronological contexts. In addition to material goods, items such as religious cult, poetry, and slaves traveled within and beyond Italy – as other chapters in this section show.[3] Thus, a model of appropriation needs to highlight the people and objects that were transported, the people who assembled and shipped the cargoes, and the geographies that were traversed.

In order to integrate these various components and different stages, this chapter first develops a heuristic framework based on the concept of a *chaîne opératoire* that emphasizes the production of an object's form as well as meaning. Next, it uses this framework of an enchained sequence to untangle the appropriation of luxury goods at the end of the late Republic. When adapted for analysis of ancient shipwrecks, this model underscores the people, things, and landscapes intertwined in the processes of sailing a ship, arranging a cargo into a temporary assemblage for shipment, and creating social meaning for the objects. This approach moves away from a consumer-driven model of appropriation that centers on how Romans used or displayed foreign items in their villas, temples, or civic spaces, and it instead emphasizes the multiple Roman and non-Roman agents acting across different temporal and geographical scales. Late Republican and early Imperial shipwrecks provide a primary source of evidence for understanding which cargo assemblages were shipped across which maritime routes. This evidence shifts our focus from a top-down, elite consumer-driven model of appropriation to one that involves individuals across multiple social, economic, and cultural categories. Shipwrecks, such as the one at Antikythera, are not merely illustrations of economic trade; they are also evidence for the social processes that compelled the production, circulation, and consumption of objects around the Mediterranean.

Appropriation, Logistics Networks, and *Chaînes Opératoires*

As ships transported goods to Rome to satiate the growing desire for foreign imports, many of these cargoes met their demise while at sea.[4]

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[2] For consumer-centered approaches, see Wallace-Hadrill 2008, Rutledge 2012, and Walsh 2014.
[3] See Daniels, Myers, and Richlin in this volume.
[4] For example, in addition to the archaeological evidence, Lucian, writing in the second century CE, also notes that a ship had wrecked off Cape Malea while transporting some of Sulla's *spolia* back to Rome (*Zeuxis* 3). For more on the Roman social commentary for displaying booty and *spolia*, see p.000.

Reconstructing shipwrecked remains into what was once a ship is not always straightforward: organic materials such as textiles, food stuffs, or people are rarely preserved except in traces recovered through analyzing remains such as residues, botanical or faunal remnants, or impressions in semipermanent objects.[5] Although statistically quantifying this transport can be problematic due to the factors influencing archaeological recovery, the number of known shipwrecks peaks in the first century BCE and first century CE.[6] The majority of these ships were transporting amphorae filled with wine, olive oil, and fish sauce, but several included cargoes of furniture, statues, building materials, glassware, animals, and slaves from Greece, Africa, Asia Minor, and the Near East.[7]

Within a broader logistics network, ships connect nodes of production and consumption in interregional and localized systems; any resulting shipwrecks illuminate the connections between these nodes, albeit by preserving what were meant to be transient associations between objects.[8] For example, the Antikythera shipwreck that opened this chapter was transporting glassware of Syro-Palestinian and Egyptian production, ceramic vases (*lagynoi*) commonly produced in Asia Minor, and marble statues possibly quarried on Paros and carved on Delos.[9] These various regions of production in the Eastern Mediterranean are linked by the routes of traders who brought raw materials to the craftsmen and who then transported finished objects to a location where they could be loaded

[5] Because of the lack of preservation of many organic remains (e.g., textiles, timber, grain, spices, books, and slaves, among others), scholars turn to literary and epigraphic sources for details about their shipment. See Murphy 1983 and Stewart 1999 for discussions of preservation in shipwrecks.

[6] The quantification of known shipwrecks is presented, most notably, in Parker 1992a. For the discussion of shipwrecks as proxies of economic growth see Gibbins 2001, Scheidel 2009, and Wilson 2009: 219–29. Patterns from shipwreck data can be skewed by preservation, variances in long-distance and regional trade, types of cargoes, precision in dating shipwrecks, and survey methods: Wilson 2011: 33–9.

[7] These objects are not meant to be a comprehensive list of luxury cargoes but have been found among the first-century BCE shipwrecks at Le Grotticelle, Italy (Mocchegiani Carpano 1986: 178–9); Spargi, Sardinia (Beltrame 2000; Lamboglia 1961a, 1971); Fourmigue, France (Baudoin *et al*. 1994); Mahdia, Tunisia (Hellenkemper Salies *et al*. 1994); and Antikythera, Greece (Kaltsas *et al*. 2012). For the acquisition of slaves, see Bradley 1994: 31–56, Harris 1999, and Scheidel 2005.

[8] The term "network" refers to connections between entities, not only as geographic regions, but also systems of physical and social environments (see Latour 2005, Ingold 2008, and Knappett 2011a). The analysis of networks has a long bibliography: for useful discussions of trade networks see Sherratt and Sherratt 1993, Davies 1998, Brughmans 2010, and Knappett 2011a.

[9] Though it seems likely that the glassware originated in Syro-Palestine and Egypt given its form and material compositions, it is difficult to determine a workshop since similar glassware has been found throughout the Eastern Mediterranean and Greece (Avronidaki 2012). *Lagynoi* are common throughout Greece and the eastern Aegean; similar types have been identified in workshops in the Aegean, Asia Minor, and Cyprus (Vivliodetis 2012). The marble for the statues has been sourced to Paros, but the statues may have been sculpted on Paros, Delos, or at Pergamon (Vlachogianni 2012).

onto the Antikythera vessel. Each node in this network is produced by the interaction between people, goods, and actions not only at that specific node, but also at other nearby nodes in a highly interconnected system.

In order to more fully explore the link between these actions and interactions at each node, I will use the concept of a *chaîne opératoire* (an operational sequence) to emphasize the technical actions that transform raw materials into fabricated objects as well as the production of social and ideological concepts.[10] Analysis of an object extends beyond manufacture to incorporate behavioral interactions between people, objects, and actions throughout an entire sequence of material acquisition, production, distribution, consumption, repair, reuse, and discard.[11] For example, in the course of manufacturing ceramics, a potter performs a series of technical actions informed by social and technical knowledge in order to produce a vase, such as an amphora. For this ceramic sequence, interactions include knowledge of what type of clay to use, how to form the amphora, what shape to render it in, what wine to fill it with, which consumers to sell to, and how to seal, refill, and repair it as needed.[12] Understood in this way, a *chaîne opératoire* addresses not only the activity at the discrete nodes in a network – the individual steps – but also the connections between the nodes – the exchange of information that influences an object's physical form and imbues it with meanings.

Emphasizing this social component of a *chaîne opératoire* allows us to follow the behavioral and technical actions crucial to interpreting an object's changing meanings throughout appropriations. Within this framework of interpretation, objects derive meaning from their materials (objective physical properties) and from their materiality (subjective social qualities).[13] Over the course of an operational sequence, just as materials undergo a series of actions to produce technical forms, so too are materialities transformed when distinct social meanings are produced at each step. The elements of this enchained process are far from prescriptive; links can be manipulated as situations arise, according to the evolving sequential production (and reproduction) of social patterns and depending on access to resources.[14] Rather than following a single linear progression through

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[10] On the development of *chaîne opératoire* for conceptualizing production sequences, see Leroi-Gourhan 1964, Inizan *et al.* 1999: 14–7, and Bar-Yosef & Van Peer 2009.

[11] Skibo & Schiffer 2008: 10–22 and Hodder 2012: 54–8.

[12] For Roman patterns of ceramic manufacture, use, and reuse see Peña 2007.

[13] For defining materiality, see Ingold 2007.

[14] On the manipulation of links, see Leroi-Gourhan 1964: 231. Knappett 2011b argues against the prescriptive nature of a *chaîne opératoire*. For agencies of social reproduction see Dobres and Robb 2005.

discrete steps, an enchained framework incorporates iterative feedback loops in a nonlinear sequence to accommodate the continuous circulation of materials for which new social meanings were produced. These meanings shifted across different geographic and temporal scales.[15] Through this modified view of a *chaîne opératoire*, we can strive to recreate the voices within a sequence of distribution that are not usually represented in scholarship. These voices are the result of the agencies present within interactions between objects, people, and landscapes – aspects that are explored in the remaining sections of this chapter.

Agency of Objects: Ships and Cargoes

With the ability to influence actions and mediate social relationships, objects possess an agency that is relational as well as context dependent.[16] Therefore, though goods may reflect the social norms of those who *produce* them, they are also agents that actively mediate relationships for those who *acquire* them. Within the context of transportation, the material agency of objects influenced a cargo's assemblage, which was shaped both by the objects' physical qualities and by their positions within prevailing economic, political, and social structures of trade.

As objects were loaded onto a ship, their physical properties determined assemblage compositions, since their mass and arrangement in the hold influenced how the ship sailed.[17] For instance, because a cargo of wine-filled amphorae required a different arrangement in the hold than baskets of grain, a captain had to consider what other goods could be added to a cargo while still maintaining a proper displacement and distribution to allow the ship to sail safely. Thus, cargoes were determined by the physical constraints of sailing and by the technological sophistication of ships. By the second century BCE, advances in ship technology and in the

[15] See discussion in Knappett 2011a: 26–33, 2011b: 47. This approach incorporates Igor Kopytoff's proposed biographical life history of an object in which the life history of commodities is regarded as a cultural biography (1986).

[16] For the social agency of objects, Alfred Gell (1998: 17–23) outlines a relational agency in which there is an active participant who confers agency and a passive recipient onto whom this agency is conferred. These categories of agent and recipient are by no means absolute but can shift as the context changes across a *chaîne opératoire*.

[17] The weight of the goods and the distribution of that weight (the lading of a vessel) impact the trim and balance of a vessel (Marsden 1994). If the cargo is too heavy, the ship will sink; if too light, it will be unstable and difficult to sail, essentially sliding over rather than gliding through the water. Ballast was brought on board in order to add weight to certain areas, and heavier objects were loaded along the keel (the centerline) of the ship in order to provide an appropriate center of gravity (McGrail 1989).

construction and design of port facilities that could safely harbor larger
ships enabled an increase in trading activity.[18] Although this activity
included specialized transport and a proliferation of small ships moving
cargoes under 75 tons, it also meant the development of large freighters
over 100 tons: the first-century BCE wrecks at Madrague de Giens in
France and at Albenga in Italy were carrying 6,000–7,000 and
11,500–13,000 amphorae, respectively.[19]

Economic, political, and social motivations also shaped cargo assem-
blages, as evidenced by tax laws and regulations. Most notably, the Roman
state instituted reforms in 218 BCE with the passing of the *lex Claudia*,
which prohibited any senator from possessing a vessel capable of transport-
ing more than three hundred amphorae.[20] This law expresses a desire to
regulate the size of ships and scale of commercial activity for senators,
while still permitting senators to own ships for circulating products from
their villas.[21] Additionally, tax laws show that once a ship reached port,
captains had to distinguish which objects on board their ships were
circulating as commodities, private possessions, or property of the state.
A collection of tax laws at Ephesus (dated between 75 BCE and 62 CE)
reveals that commodities had to be declared and taxed, but items for
private (ἴδιος χρῆσις) and state use (δῆμος Ῥωμαίων) had the import tax
(τέλος) waived.[22] However, it can be difficult for modern researchers to
identify and distinguish these different economic categories from only

[18] On the correlation between advancements in technology and increases in maritime trade, see Wilson
2009: 226–7, 2011: 39 and Harris 2011: 257–87. Small ships engaged in local trade, sailing in shallow
waters that required low draft (Houston 1988). Hull constructions were modified to include wells for
transporting live fish (Boetto 2006, Beltrame *et al.* 2011) and accommodate *dolia* for transporting
liquids (Heslin 2011). Ships likely were also modified to transport live animals, although their
transport is visible primarily in iconography and has been inferred from references to exotic animals
used in *venationes* and other *munera*: Jennison 2005: 137–53 and Friedman 2011: 134–6.

[19] For the wreck at Madrague de Giens, see Tchernia *et al.* 1978 and for the wreck at Albenga see
Lamboglia 1961b. Ships carrying this many amphorae would have a capacity upward of 250 or 500
tons, respectively (see Parker 1992b).

[20] Livy 21.63.3–4.

[21] See discussion in Wallinga 1964: 20–2 and Tchernia 2011: 199–228. By 70 BCE, it seems that the *lex
Claudia* was among those laws that Cicero considered ancient and dead, perhaps because senators
found loopholes that enabled them to benefit from maritime trade (Kay 2014: 14, 150), among which
were the opportunities for backing maritime loans (Rougé 1980, Rathbone 2003, and Aldrete &
Mattingly 2010). For a discussion of the connection between politically influenced economic control
and social standing at the end of the late Republic, see D'Arms 1981: 20–47. For a discussion of the
lex's interface with Plautine comedy, see Dufallo in this volume (p. 000).

[22] The *lex portorii Asiae* distinguishes between items needed for the journey (such as the ship and the
equipment of a ship); those imported for private use; and those carrying anything for the public
purpose of the Roman people, including those set aside for religious functions (*lex portorii Asiae*
58–63, 74, 81, 84 [Cottier & Corbier 2008]).

material remains: whereas the size and type of a ship determined the maximum quantity of a cargo, the assemblage could include goods belonging to different types of exchange, such as spoils of war, gifts, state-owned materials, or items traded in an open market.[23]

An example of different economic categories aboard one ship is visible in Cicero's correspondences about acquiring sculptures for his villas. In one acquisition, Cicero requests that Atticus select herms and other statues appropriate for certain rooms and send them to Italy on a suitable ship.[24] Though Cicero initially mentions that Atticus may export the statues on ships belonging to Lentulus, he later instructs his friend to find an appropriate vessel if Lentulus' ships are unavailable.[25] What other items might have been transported along with Cicero's statues aboard Lentulus' ships? Although there are several individuals named Lentulus who may have owned these ships, John D'Arms makes a case that they were likely transporting wine from Italy to Athens because Dressel 1B amphorae stamped with "L. Lentu P.f." have been found in the Athenian Agora.[26] If this was the case, then on the return trip to Italy, Lentulus' ships likely transported slaves, Greek wine, tablewares, or luxury items.[27] Despite traveling with other artifacts, which could have been destined for the open market, Cicero's statues would have belonged to a different category of trade.

The types of trade in which a ship engaged resulted in either homogeneous or heterogeneous cargoes, as defined by the material nature of the goods contained in the assemblages.[28] In heterogeneous cargoes, luxury items were moved alongside goods such as wine, olive oil, and tablewares.[29] As discussed previously, the cargo from the early first-century BCE shipwreck at Antikythera, Greece contained a mixture of luxury and utilitarian items from the Near East and Greece.[30] Because of this diversity

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[23] The classification of goods into economic systems has a long bibliography associated with it: e.g., Appadurai 1986, Kopytoff 1986, and Horden & Purcell 2000: 342–400.

[24] Cic. *Att.* 1.9.2 with discussions in Leen 1991, Zimmer 1994, Miles 2008, and Bouyia 2012a.

[25] Cic. *Att.* 1.8.2.

[26] D'Arms 1981: 68. Filippo Coarelli (1983: 52–3) suggests that this "Lentulus" possibly refers to P. Cornelius Lentulus Spinther *cos.* 57 BCE or Lucius Cornelius Lentulus Crus *cos.* 49 BCE. Shackleton Bailey (1965: 284) argues that Lentulus was returning from his governorship of Cilicia in the East, whereas Coarelli (1983: 45–6) insists these ships were part of a commercial venture because there is no evidence that anyone with the name of Lentulus was in the eastern province in the years preceding Cicero's letter in 67 BCE.

[27] On discussions of trade, see Kay 2014: 189–213.

[28] For different definitions of cargoes see Parker 1992b and Nieto Prieto 1997: 149.

[29] See Brun & Castelli 2013 for an economic definition of the term "luxury"; see Wallace-Hadrill 2008: 329–38 for a discussion of a Roman social discourse of luxury.

[30] See the catalogue on the Antikythera shipwreck: Kaltsas *et al.* 2012.

of objects from different regions, researchers propose that the cargo was assembled at a large entrepôt that served as a major shipping hub and redistribution center, such as Delos, Ephesus, or Pergamum.[31] The mixed cargo of the Antikythera wreck contrasts sharply with the homogeneous cargoes of the first-century BCE shipwrecks at Madrague de Giens and Albenga; these ships were carrying large quantities of wine-filled amphorae with only some space left for additional goods.[32] Homogeneous cargoes originated from one node of production; mixed cargoes linked together multiple regions and different social, cultural, historical, and economic frameworks.

Since items in a mixed cargo were manufactured according to various material sequences and at different times, the remains of a shipwreck often represent different stages in multiple, intersecting *chaînes opératoires*. For example, the cargo of the shipwreck at Antikythera contained finished works of late Classical and Hellenistic bronze statues and first-century BCE Parian marble statues; these statues were neither the sole component of the cargo nor do they seem to have been selected for transport according to material, size, or type.[33] This diverse group includes marble and bronze statues of gods, Homeric heroes, philosophers, and athletes, to list a few thematic categories.[34] Though the statues' material dictates different *chaînes opératoires*, the timelines of production also showcase intersecting sequences. The Parian marble statues were likely produced by a single workshop in the first century BCE, during the years or decades immediately preceding the shipment.[35] In contrast, some of the bronze statues were cast in the fourth century

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[31] The discussion of possible homeports of the Antikythera shipwreck takes into consideration the ship's construction as well as the marble sources for the statues on board (see discussions by Kaltsas 2012: 15–6, Bouyia 2012b: 38, and Vlachogianni 2012: 70).

[32] Most of the amphorae on the Madrague de Giens were one of three variations on the type of Dressel 1B, which likely held wine; a different amphora type was stamped with Q.MAE ANT and was loaded on top of the Dressel 1B amphorae. In addition to the amphorae, the ship was also transporting several hundred examples of black-gloss pottery and coarseware (Tchernia *et al.* 1978: 33–59). The Albenga wreck also had Dressel 1 amphorae (Lamboglia 1952), whereas other ceramic items seem to have been for use while on board (Lamboglia 1965). For the transport of Italian wine and Dressel 1 amphorae, see Laubenheimer 2013.

[33] For an analysis of the statues in the Antikythera shipwreck, see Vlachogianni 2012. Additionally, single statues have been discovered in several shipwrecks and were found as solitary items on the seabed, perhaps jettisoned purposefully or accidentally by a passing ship (Tzalas 1997 and Arata 2005). In accordance with the Roman law for jettison, the captain, crew, and passengers decided what was thrown overboard in order to lighten the ship, but legally they would need to reimburse the owners of any cargo that was lost (Chevreau 2005 and Aubert 2007).

[34] Even within these thematic categories, there are variations, such as multiple sculptural types of Aphrodite (see analysis in Bol 1972: 43–7, Vlachogianni 2012: 65).

[35] Vlachogianni 2012: 64–9.

BCE and show signs of use in previous contexts.[36] Since the bronze statues already had undergone a series of distributions and reuses before being loaded on board the Antikythera ship, the *chaînes opératoires* of the bronze and marble statues differed not only in technical actions, but also in the sociohistorical frameworks according to which they were produced. On the one hand, the forms of the marble statues were produced in dialogue with consumers' tastes, which had been shaped by prior engagement with similar objects; the statues were newly sculpted for immediate consumption within a contemporary cultural milieu.[37] For the bronze statues, on the other hand, new social values were created through their displacement; their original form and prior contexts of display had been chosen according to sociohistorical frameworks in place during the fourth century BCE.

Having both fiscal worth as well as social value, an object was commoditized throughout multiple steps in a *chaîne opératoire* according to the temporal, cultural, economic, and social frameworks of those who engaged with it at each step.[38] As objects were moved around the Mediterranean, new assemblages and relations were frequently produced, thereby aiding in transforming the objects' social meanings and commoditization. When luxury objects were transported on board the Antikythera ship in a first-century BCE market, they entered into dialogue with prior shipments and distributions of *spolia* and *praeda*, objects that had been taken from conquests of Sicily, Greece, and Asia Minor during the third and second centuries BCE.[39] As a result of the conquests, foreign artifacts such as statuary and paintings flowed into Rome and reached private ownership, a development that many ancient authors saw as responsible for the eventual corruption of Roman values.[40] Within one system of Roman appropriation of luxury objects, what were once spoils of war switched between different social and economic frameworks when they were openly traded as luxuries; their meanings were transformed not only by geographic

[36] Although the bronze statues from the Antikythera shipwreck are heavily fragmented, several bronze statues have patches; whereas some patches are remnants of the casting process, others seem to be indicative of prolonged use due to their locations on the statues: Vlachogianni 2012: 80–5.

[37] For this chapter, I am setting aside the question of whether the statues from the Antikythera shipwreck were commissioned specifically by a consumer (or middleman) or sculpted generally for trade in an open, public market. See Harris 2015 for a discussion of Roman art within different markets.

[38] For a discussion of the general process of commoditization, see Appadurai 1986: 13–28.

[39] See Holz 2009. Definitions of *spolia* include things that pertain specifically to weapons, armor, and trophies from war as well as the general reuse and appropriation of objects (Greenhalgh 2011).

[40] See, e.g., Livy 39.6.9 and Plin. *HN* 24.5, with discussion by Carey 2003: 77, McDonnell 2006, and Miles 2008: 156.

displacement, but also by commoditization.[41] The dynamics of importation and cultural integration entailed changes in the significations of captured objects from their initial triumphal display as *spolia* in the third and second centuries BCE to their subsequent repurposing as commodities.[42]

The movement of these imported items from registries of *spolia* meant for public display to commodities that were part of private collections opened up a transitional dialogue between public magnificence and private wealth.[43] With the tension between public and private display contexts raising questions of legal ownership and audience, the objects become instrumental in negotiating identities – both of Rome as a collective entity and of individual owners. For example, when commenting on Marcellus' return with spoils from Syracuse in 211 BCE, Polybius cautions against claiming the objects of conquered foes for oneself and imitating their habits.[44] Cicero, however, would qualify Marcellus' use of spoils by stating that Marcellus limited himself to the *public* display of captured booty; Cicero structures Marcellus as a foil to Verres, who is characterized as rapaciously plundering Syracuse for his private benefit.[45] According to Cicero, Verres had plundered art that served specific purposes in public settings and violated this art by removing it to private settings for his own personal use.[46] In disparaging Verres as a *mercator* (merchant) who travels to provinces to buy and bring back statues and paintings, Cicero implies that Verres abuses statues by disregarding their social meaning and focusing only on financial gain.[47] Verres turns these objects into commodities – in

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[41] At the end of the third and beginning of the second century BCE, the volume of booty flowing into Rome from military ventures altered the commoditization of these items and the economy within which they circulated (see, e.g., Kay 2014: 21–42).

[42] The economic value of spoliated objects figured prominently in their triumphal display, with Roman authors commenting on material and numbers of paraded booty; display in turn created a demand, satisfied not only through acquisition in war, but through purchase in commercial markets (Östenberg 2009: 79–119 and Harris 2015).

[43] See discussion by Gruen 1992: 111–12. The tension had to do not only with displaying spoliated objects in private settings, but with moving spoliated statues of the gods into the house – thereby treating them as furniture, according to Cato (*ORF*⁴, fr. 98 = Cugusi *OR* 72).

[44] Polyb. 9.10.2–3, 5–6, 13. See Holliday 2002: 195–219, Miles 2008: 218–84, Östenberg 2009: 262–92, and Zarmakoupi 2014: 17–23 for the incorporation of spoils into Roman commemorative and architectural practices.

[45] Cic. *Verr.* 2.1.55, 2.2.4, 2.4.115–6, 2.120–3; see Cic. *Rep.* 1.21 for mention of Archimedes' globe, which Marcellus took for himself out of the booty from Syracuse. According to Livy (26.31.9), Marcellus recounts that he took his *spolia* in accordance with the law. For more on Marcellus' spoliation of Syracuse and Fabius Maximus' spoliation of Tarentum, see Dufallo in this volume (p.000).

[46] See Miles 2008: 154–5 for a discussion of how Verres not only wronged the objects, but also the communities in which they had been displayed.

[47] Cic. *Verr.* 2.1.22, 2.4.4; cf. Weis 2003 on Verres' role as an art dealer. For the semantics of *mercator*, see Broekert 2013: 150–3.

the manner of a *mercator* – and is criticized for displacing them into a *chaîne opératoire* in which their economic and commercial aspect is paramount.

In contrast to Verres, Cicero portrays himself as actively engaging with the social value of these objects, while still participating in the art market; he is aware of their ability to lend a particular meaning to the space in which they are displayed and to reflect upon their owner's character. Cicero's perspective on how art, space, and agents work together is evident in his own acquisition of statues. In a letter to Marcus Fadius Gallus (Cic. *Fam.* 7.23), Cicero mentions having asked Gallus to select some statues for him through a dealer, Arrianus Evander. Gallus, however, has chosen pieces that Cicero deems unworthy, an outcome for which Cicero blames his freedman and a certain Julius (a friend of Arrianus).[48] Cicero is astonished not only at the agreed-upon price, but also at Gallus' selection, namely statues of the Bacchantes and Mars. Although Gallus had defended his selection of the Bacchantes by comparing them to a group of the Muses, Cicero remarks that while the Muses would have been better suited at least for his library, there is no place in his house for Bacchantes, the frenzied followers of Dionysus. Likewise, Cicero questions why he, a supporter of peace, would want a statue of Mars, the god of war.[49] For Cicero, statues inform a viewer about the nature of the space in which they are displayed as well as about the character and status of their owner.[50] In Cicero's Verrine orations and in his private correspondence, the agency of objects inflects not only their display, but also their pathways of acquisition – routed through middlemen such as Arrianus Evander and Julius.[51]

Throughout this process, the Romans tried to control the social ramifications of incorporating foreign objects into their cultural frameworks. This incorporation was not simple or straightforward, as reflected in changes to Roman sumptuary legislation. When viewed diachronically, sumptuary laws show a loosening of restrictions on expenditure in reaction to the increasing availability of luxury items.[52] As Tacitus notes, the senate stopped attempting to formally regulate consumption in 22 CE because this legislation was disregarded so frequently.[53] However, while sumptuary legislation may have been abandoned in part because it was difficult to

[48] Cic. *Fam.* 7.23.3.   [49] Cic. *Fam.* 7.23.2.

[50] For sculptural programs in villa display, see Neudecker 1998. See also Marvin 2008 for the intricate dialogue between differing classifications of Greek and Roman sculpture.

[51] The cast of middlemen and other people involved in the acquisition of statues and other luxury objects is explored in the next section.

[52] Zanda 2011: 49–71.   [53] Tac. *Ann.* 3.52–4.

uphold, the shift from the Republic to the Principate also opened up new
frameworks for regulating imported luxuries (one of which was emulation
of the Imperial family).[54] The vogue in Corinthian bronzes during the first
centuries BCE and CE is suggestive of such a process.[55] By the end of this
period, Corinthian bronze seems to have fallen out of fashion, since few
sources still mention its elevated status. To understand why, we should
consider not formal restrictions – those emanating from the Roman
rhetoric that imports were to blame for the burgeoning expression of
luxury – but the informal constraints stemming from changes in the
availability of foreign resources and luxury goods.[56] Perhaps the market
had become oversaturated, at which point Corinthian bronze ceased to be
pursued as a marker of elite status and was replaced by other luxury
objects. Ships such as the one that wrecked at Antikythera were importing
assemblages of foreign luxury goods; these imports could lead to the
saturation of the market and of consumer demand for those imports as
markers of elite identity.

Human Agents in Distribution

Whereas Roman elites (such as Cicero) are present in the literary record as
consumers of foreign luxuries, agents of diverse statuses and backgrounds
were involved in the processes of consumption, production, and distribu-
tion. Acting across all steps of the *chaînes opératoires* of these objects, both
Roman and non-Roman agents arranged specific cargo assemblages and
moved between different regions. Our analyses of macro-level sociocultural
constructions and of micro-level formations of personal identities will need
to differentiate agents according to their geographical and temporal spheres
of action.

In Cicero's correspondence, the names of certain individual agents at
various steps of the *chaîne opératoire* are only occasionally recorded; more
often the specific identities of other agents are omitted and known merely
through references to roles or (implied) actions. When Cicero instructs his

[54] For more on integration and recreation of social order in the early Principate, see Winterling 2009:
9–33. For the role of images in the process, see Zanker 1988 and Eder 1990.

[55] The term "Corinthian bronze" may refer to a particular alloy rather than production in Corinth
(see Mattusch 2003). Roman authors suggest that Antony or Augustus included some people in
the proscriptions just to acquire their Corinthian bronzes and that its inflated price in the
marketplace had to be regulated by the Senate: e.g., Plin. *HN* 34.6 and Suet. *Aug.* 70.2, *Tib.*
34.1. For a general discussion on the Roman obsession with Corinthian bronzes, see Jacobson and
Weitzman 1999: 239.

[56] Wyetzner 2002 and Silver 2007.

friend Atticus to acquire *ornamenta* or *signa* for his villa, he suggests certain sculptural subjects, but the selection, freight, and movement of the objects are out of his control.[57] Decisions about each of these procedures are allocated to other agents in the network. Cicero is informed of the movement and arrival of the sculptures in Italy, but he does not personally receive them. When Cicero eventually confirms that the statues had arrived at Caieta, he had not yet seen them, only having had time to send a man to pay freight costs and to move the statues to his house at Formiae. In this form of private acquisition, Atticus (or perhaps one of his slaves, freedmen, or associates) selected the statues for Cicero in Athens and arranged for their transport to Italy. In the previously mentioned example of Cicero's displeasure with Gallus' choice of the Bacchantes, Gallus had selected these from an inventory belonging to a dealer, Arrianus Evander.[58] Gallus had to rely on the objects that Arrianus had previously acquired or imported. The procurement and final installation of specific objects thus fell to different agents within a logistical and communicative hierarchy: Cicero (who received the statues); Atticus or Gallus (who selected the statues); and various freedmen, art dealers (such as Arrianus Evander), and merchants who acquired, moved, or transported the statues.

The intermediaries who acquired goods for redistribution also transported them to market spaces for selection by consumers or their assistants. Within Rome, spices, statues, jewelry, and other luxury goods were sold in established markets like the *Horrea Piperataria* along the Via Sacra or in multifunctional spaces such as the Saepta Iulia in the Campus Martius.[59] By the first century CE, the Saepta had become synonymous with luxury and entertainment, with the sale of these objects regarded as its own spectacle; according to Martial, it was a place where golden Rome ostentatiously displayed her wealth.[60] Consequently, for a potential buyer who visited the Saepta, many of the prior decisions in the network had already narrowed his or her choices regarding which object could be acquired.

The many agents responsible for narrowing these choices worked at harbors, sailed aboard ships, or had an invested economic interest in

[57] Cic. *Att.* 1.3, 1.4.   [58] Cic. *Fam.* 7.23.
[59] On the *Horrea Piperataria*, see Pollard 2009: 329–36 and Holleran 2012: 246. For the spice trade, see Miller 1969.
[60] Martial 2.57, 9.59. The Saepta was first used as a place for voting (e.g., Livy 26.22) and then monumentalized and transformed (Cic. *Att.* 4.6.14, Cass. Dio 53.23.2, 55.8.5, and Suet. *Claud.* 21, *Ner.* 12): *LTUR* IV: 228–9 s.v. "Saepta Iulia." In the Campus Martius, the activities of viewing, buying, and selling luxuries occurred against the backdrop of foreign import reflected in the marble imports and paintings adorning the Saepta (Plin. *HN* 36.29) and in the adjacent Iseum Campense with its sanctuary for the Greco-Egyptian cult of Isis (Lembke 1994).

circulating cargoes. Roman law specified responsibilities for the agents who managed a ship and arranged for the cargoes: the *exercitor* (business manager), *magister* (shipmaster), *nauclerus* or *navicularius* (ship captain), and *dominus* (ship owner).[61] Those who worked aboard the ship included the *gubernator* (helmsman), *proreta* (first mate), and *nautae* (sailors).[62] Administrative duties fell to the clerks, magistrates, and tax collectors who shared bureaucratic duties once a ship reached a harbor, or even accompanied the ship during its voyage.[63] Additional agents would be involved in the offloading and loading of a cargo, such as *geruli* (stevedores) and *lenuncularii* (boatmen of smaller craft).[64] Middlemen such as *mercatores* (merchants), *negotiatores* (businessmen), and other specialized traders would link those on board the ship to those who produced the goods and transported them to harbors.[65]

As owning and operating a ship would have been expensive, merchants eased the risk and financial burdens of trade by engaging in joint ventures and seeking loans for financing cargoes.[66] In the first century BCE, social networks that connected elites and non-elites were also repositioned and rebuilt through the use of *collegia*; membership in these formal associations offered a chance to forge a social identity that was separate from a civic hierarchy, as showcased in the funerary inscriptions and honorary dedications through which members constructed and communicated their

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[61] The legal responsibilities of these roles are preserved in Justinian's *Digest*: *exercitor* (*Dig.* 14.1.1.15), *magister* (*Dig.* 14.1.1.1), *dominus* (*Dig.* 14.1.1.15). For discussions of these terms: Casson 1995: 314–21, Rauh 2003: 146–51, and Broekaert 2013: 216–22.

[62] Casson 1995: 316. The role of a *gubernator* could either be subordinate to or performed by the captain or owner, as in a Ciceronian example in which the owner of the ship is also the helmsman (*Inv. Rhet.* 2.154). For *proreta*, see Casson 1995: 319; for *nautae*, see Broekaert 2013: 175–7.

[63] On state magistrates and tax collectors in particular, see Badian 1972, Rathbone 2007, and Broekaert 2008.

[64] On these terms, see Sirks 1991: 256, Casson 1995: 369–70, Rauh 2003: 151–2, and Blackman 2008: 653. Inscriptions record several groups of *lenuncularii* at Ostia, with the largest having 258 members in 192 CE; among these members were several Roman senators (see, e.g., CIL 14.251, 341, 352 and Aldrete and Mattingly 2010: 205–6). For specialized and general roles involved in loading and off-loading cargo, see Sirks 1991: 256 and Aldrete and Mattingly 2010: 207.

[65] These roles are discussed by Rauh 2003: 135–45; for *negotiatores* and *mercatores*, see Broekaert 2013: 15–23, 150–3. On the *institores* in charge of the business side of trade arrangements, see Aubert 1994.

[66] On the risks undertaken by merchants, see Hasebroek 1933, D'Arms 1981: 48–71, 154–9, and Cartledge 1983: 2–5. Joint ventures by multiple merchants are shown by the names of multiple merchants in *tituli picti* on Spanish amphorae (Rodríguez Almeida 1989 and Remesal Rodríguez 2004). According to Plutarch, Cato the Elder entered into a *societas* of fifty people to finance a maritime trade venture (Plut. *Cat. Mai.* 21). Such a *societas* not only mitigated risks by spreading out the amount of investment, but also ensured that one person would not profit immensely, as discussed by Verboven 2002: 275–86.

personal and group identities.[67] A *collegium* could be beneficial for monitoring different steps in the process, decreasing the economic risk of losing goods, and gathering market information.[68] Not only did members of *collegia* come from diverse backgrounds, but so too did those individuals who owned, contracted, or operated a ship. There were no legal restrictions on the basis of status, gender, or freedom: roles were open to male or female, *paterfamilias* or youth, and free or slave.[69] More than working as mere operators, however, individuals in these roles were directly responsible for the cargoes being transported, as exemplified by a late second- or early third-century CE tax receipt in which a woman named Sarapias is named as the owner (*naukleros*) of a ship and as the person in charge of arranging for a cargo of wheat to be transported down the Nile.[70]

Throughout the various steps of production, distribution, and consumption in a *chaîne opératoire*, individuals of different social statuses acting in different economic markets and different geographic regions made choices that shaped patterns of distribution. In the example of the Parian marble statues from the Antikythera shipwreck, quarriers targeted specific blocks of stone with a view to the final product's integrity, sculptors selected those blocks for particular forms, merchants acquired the finished sculptures for transport, dealers and other intermediaries chose specific statues for acquisition, and members of the elite displayed these statues in their villas.[71]

The individuals making these selections belonged to different social, cultural, and economic groups – not only members of the elite such as Cicero, but also individuals (usually anonymous) whose agency is evident in traces of their actions. At the same time, individual decisions concerning acquisition, consumption, and distribution were actively being worked out in a macro-level debate over cultural norms, if the angst expressed in Cicero, Livy, and Pliny about the incorporation of foreign objects into Rome's social fabric is any guide.[72] This social discourse was mediated and

[67] Broekaert 2013, 20. For *collegia*, see Tran 2006, Verboven 2007: 872, and Liu 2009: 4–11. On constructions of identity with regards to inscriptions and dedications, see Joshel 1992 and Petersen 2006: 114–6, and e.g., for sailors at Lyon: Bérard 2012.

[68] Broekaert 2008: 232–3.   [69] *Dig.* 14.1.1.4, 14.1.1.16, 14.1.1.21, with Aubert 1994: 58–64.

[70] *P Teb.* II 370, with van Minnen 1986 and Hauben 1993.

[71] This sequence represents just one pathway: marble objects were also shipped as roughly finished goods, and some quarries were under Imperial control (Maischberger 1997 and Russell 2015). The early second-century CE Şile shipwreck provides evidence for marble objects that were transported as roughly carved objects (Beykan 1988). See Trimble 2011 for the social and economic factors underlying the production, acquisition, and display of a marble sculptural type during the second century CE.

[72] For this social tension see p.000. For discussions of acquired material within the Roman villa and creation of an elite identity, see Hölscher 1994, Neudecker 1998, and Rutledge 2012.

propelled by actions on an individual level: people initiated and main-
tained their social relationships through the manipulation and transport of
objects. By placing the transportation of objects within a broader *chaîne
opératoire*, we can observe not only the numerous conversations among
multiple interlocutors who were living and working in different eras and
across different regions, but the types of agency that are often omitted
from the discussion of appropriation.

Agency of Natural and Built Environments

Within *chaînes opératoires* of cargoes, the mobility and circulation of
humans and objects actively shape and structure appropriation. However,
mobility does not merely encompass the movement of objects across
geographical distances and between nodes; it includes movements through
landscapes that are webbed with distribution patterns.[73] For this reason,
the Mediterranean seascape and littoral landscape are more than merely
backdrops for a logistical network of exchange. The winds, currents, and
coastlines influenced the pathways of travel and routes between certain
regions, but the natural elements by no means prescribed voyages; mer-
chants and sailors weighed environmental conditions against their know-
ledge of the route and the potential economic benefits of travel.[74]
Although in antiquity it was preferable to sail from March through
November due to more predictable weather patterns and calmer seas, some
routes could have been sailed year-round or favored during different
seasons depending on shifting wind patterns and knowledge of particular
landscapes and weather patterns.[75] Sailors acquired a familiarity with
coastlines and conditions by repeating journeys between ports, as shown
by narratives in several *periploi* and by the example of Flavius Zeuxis – who
boasted on his tomb at Hierapolis that he had safely rounded Cape Malea
seventy-two times in his lifetime.[76] This boast was a testament to his
knowledge and ability as a seafarer to navigate around a dangerous part

[73] On mobility and transit as features of appropriation, see Sponsler 2002 and Hahn & Weiss 2013.
[74] See discussions of the maritime environment by Arnaud 2011, Whitewright 2011, and Tartaron 2013.
Tim Ingold (1993) discusses the construction of landscape through repeated engagements. For an
example of the integrated nature of the natural environment with sailing routes, see the web-based
geospatial model ORBIS project (Scheidel & Meeks 2014).
[75] Arnaud 2005: 16, 26–7. For discussion of the sailing season, see Rougé 1975, 24; cf. Beresford 2013:
79–90.
[76] *Syll.*³ 1229 = *IGRR* IV 841 and Rathbone 2007: 314. These *periploi* include a fourth-century BCE
periplus by Pseudo-Scylax (Shipley 2011), the first-century CE *Periplus Maris Erythrae* (Casson 1989),
and Arrian's second-century CE *Periplus Ponti Euxini* (Liddle 2003).

of the Peloponnese; he chose to use his conquest over this landscape to permanently showcase his identity on his tomb.

Ports and harbor facilities also played an important role in connecting maritime trade to land-based distribution by furnishing ships with the necessary facilities for trade and with protection from rough weather. With the Roman invention of a hydraulic form of concrete in the late third or early second century BCE, port cities were able to provide an extensive interface – through the construction of moles, quays, and breakwaters – to protect ships from harsh winds and seas while cargoes were offloaded and reloaded.[77] If space was unavailable for a ship to dock or if conditions restricted close access, smaller boats shuttled goods between larger freighters and the shore, and buildings such as warehouses facilitated trade and the redistribution of goods.[78] These warehouses, which lined the quays in Roman harbors, served only as intermediary holding places for goods to be distributed to other markets by wagons, pack animals, or boats along paths, manufactured roadways, and rivers.[79] Although these various components of infrastructure were necessary for the movement of goods, they represent only the potential nodes in the network; sailors and merchants decided the actual routes and composition of cargoes transported around the Mediterranean.

Changes to the size and type of ships reflect alterations in the availability of cargo and harbor facilities, directly connecting types of trade and sailing routes in a *chaîne opératoire*. When traveling between two ports, ships could either travel over open water in a type of direct sailing, or they might travel along the coastline in a type of segmented sailing that moved from cape to cape.[80] In either sailing pattern, the type of trade could be coordinated in advance between merchants at two emporia; alternatively, the ship captain could engage in an opportunistic type of trade in which goods were offloaded or picked up as necessary. A ship, however, would not need to adhere to one mode of sailing or trade; actual cargoes represented a spectrum of possibilities and could connect a hierarchy of ports.[81] For a ship to engage in segmented sailing, its hull had to have an

[77] For more on the harbor installations, see Blackman 2008: 644–8, Rickman 2008: 6–7, 14–15, and Oleson *et al.* 2011.

[78] Blackman 2008: 649–50. For survey of small craft used in harbors, see Casson 1995: 335–7.

[79] On pathways of transportation, see Laurence 1999: 11–26, 95–108 and van Tilburg 2007: 68–74. Strabo (5.3.8) emphasizes the continuity of moving goods by ship and by wagon, noting that paved roads were cut through the countryside so that wagons could take on a shipload (*phortia*).

[80] See Horden & Purcell 2000: 368–72 and Wilson 2011: 53.

[81] On hierarchies of ports, see Nieto Prieto 1997, Arnaud 2011, and Boetto 2012.

appropriate draft to dock at proper facilities or be able to exchange cargoes in shallow waters.[82] These qualities were characteristic of smaller ships built for localized trade but were not as conducive to open-water voyages.[83] In contrast, larger ships would have been constructed for long-distance direct sailing, able to handle rougher seas, and equipped with space to carry survival necessities such as food and freshwater.

Whereas large ships moved goods between large ports, smaller ships were able to sail much more varied routes between both large and small ports. The cargo of a first-century BCE wreck (referred to as Fourmigue C) off Golfe-Juan, France, provides an example of trade between large distribution and redistribution centers. In addition to the one hundred Dressel 1B amphorae produced near Cosa in Italy, the ship was transporting elaborately decorated couches (*klinai*) produced at Delos and various bronze vases likely produced at Athens; the raw material for the latter is likely to have come from Cyprus.[84] Based on the ship's smaller size, the *klinai* and vases would have been shipped first to a larger trading port in Italy (such as Puteoli or Ostia), where the Fourmigue C vessel would have acquired them.[85] This smaller ship would have been more suitable for sailing on the Tyrrhenian Sea (where it could travel along the coastline and seek shelter from winds and storms), rather than across the open sea of the Mediterranean (where it would be susceptible to large swells and sudden storms). The Fourmigue C shipwreck also provides evidence that not all imported luxury items were being consumed in Italy; many luxuries were being shipped to consumers in the provinces.[86] A closer look at these networks of provincial distribution through the study of the *chaîne opératoire* of a cargo can bring into clearer focus the transformation of consumption patterns in regions outside of Rome.[87]

By considering interactions across an object's life history, we eliminate polarized models of consumer- or producer-driven systems of exchange that provide only partial views of appropriation. Instead, a biographical

[82] For the approximate tonnage of the Mahdia wreck, see Coarelli 1983: 48–9. The remains for the Mahdia suggest a ship approximately forty meters in length and fourteen meters in breadth (Höckmann 1994).

[83] For the relationship between the hull shape, construction techniques, ship size, and maneuverability of the ship, see Dell'Amico 2011 and Pomey 2011. See Steffy 1994: 8–10 for sailing mechanics.

[84] Baudoin *et al.* 1994: 13–21. For the *klinai*, vases, and bronze *situla* from Fourmigue C, see Baudoin *et al.* 1994: 50, 61–87, 123. The bronze decorations for the *klinai* were similar to those from the Mahdia shipwreck (Faust 1994).

[85] The Dressel 1B amphorae were likely acquired at Cosa; for the transport of Italian wine and Dressel 1 amphorae, see Laubenheimer 2013.

[86] See Dietler 2010: 133–8 for a discussion of shipwrecks off the southern coastline of France.

[87] See Myers in this volume for a case study that emphasizes a network focused outside of Rome.

view allows for interactions across multiple time scales, among different geographies, and throughout every stage of production, consumption, and distribution. Previous models of appropriation have used the term "contact zone" to refer to an area in which goods and appropriators interact, yet areas of contact change as an object moves through different geographical regions and different stages of appropriation.[88] For example, contact zones for a bronze statue from the Antikythera shipwreck would have encompassed public civic spaces in Greece, marketplaces or warehouses in Athens and Italy, cargo holds on board ships, and display spaces in Roman villas. At each stage and each contact zone, a statue would have meant different things to the individuals who came into contact with it. These context-dependent meanings were intertwined all throughout the *chaînes opératoires* of specific objects and collective assemblages.

Conclusions

A scalable model built around the concept of a *chaîne opératoire* links human and nonhuman agents across multiple contact zones and chronological time frames, simultaneously emphasizing the broader dynamics of trade and the role of the individual. By illuminating and differentiating various agents within circulation networks, this detailed and context-specific model replaces a homogeneous view of the processes of cultural formation and change. Agencies are not only ascribed to those people who were involved in assembling, transporting, and distributing a cargo, but also are extended to goods and landscapes. Such an approach shifts our model of appropriation away from one that is driven primarily by elite consumption and toward one that underlines the role of the intermediaries within the process of appropriation; in doing so, it gives a voice to those nameless individuals whose instrumental roles in the process are overlooked by literary testimonies. It also shifts our view of *where* appropriation occurs.

When an object changes context through appropriation, the object's semiotic ability to evoke an intended meaning also changes. In order to study these semiotic shifts, Robert Nelson has suggested that scholars look at the active agents within a particular historical context, abandoning the "privileged autonomy of the art object" in favor of a focus on the construction of an object's meaning.[89] This focus is at the heart of the *chaîne*

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[88] For discussions of "contact zone," see Hahn 2012 and Huck & Bauernschmidt 2012: 238, 245.
[89] Nelson 2003: 172.

opératoire approach. For objects such as the marble statues from the Antikythera shipwreck, the agents involved in the construction of meaning included not only the stone quarriers and sculptors working the marble into forms recognized and desired by consumers, but also the material itself, which imposed parameters on its sculpted size and shape and the decisions made concerning its transportation. On the one hand, the physical properties of the objects dictated which goods were selected for a particular transport, as heavy marble and bronze statues or bulky *klinai* would have limited the volume of other goods that a merchant could transport on board one ship.[90] On the other, the selection of goods for transport was driven by potential economic profits and social demands. Thus, both the physical properties and the social qualities of an object play a role in ultimately influencing the construction of meanings over time.

If we concentrate primarily on the conversations between objects and their final consumers (thus attributing agency only to specific individuals, the broader class of "elites," or even "Romans"), we at best can only gain a partial perspective on appropriation. Though Cicero's requests for acquiring statues from Athens are preserved through his letters and orations, he was not the only one determining which objects were to be imported. As noted earlier, the selection of specific statues occurred in different stages and was contingent upon the availability of statues, the suitability of ships, and the aesthetic and logical choices of middlemen, freedmen, and slaves. Highlighting these roles within the *chaîne opératoire* of an object opens up to scrutiny the full network of agents – middlemen, merchants, sailors, and harbor workers – responsible for an object's shifts in contexts and in meaning.

By using the notion of *chaîne opératoire* as a heuristic device for thinking through the process of appropriation, we move beyond treating shipwrecks as isolated examples of trade. Instead, these shipwrecks illuminate selective processes occurring on local and global scales within which various agents acted to determine a cargo's composition and the meanings of the objects it contained. Cargoes such as those represented in the Antikythera and Fourmigue C shipwrecks were products of entwined networks of multiscalar exchange in which people, objects, and landscapes assumed active roles. Through these networks, objects and humans circulated constantly. As cargoes underwent reconfigurations, they were instrumental in instigating, mediating, and transforming social engagements across the Mediterranean.

[90] For the special case of obelisk transport, see Parker in this volume.