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A Marxist Approach to Ptolemaic Society: Through the Lens of the Maritime Industry

By: Matthew Kerwin

Abstract: Ptolemaic Egypt has been studied by classical and archaeological perspectives but has limited its scope to Greco-Roman authors and material analysis which neglects the people. This article applies a Marxist approach created by the author to the archaeological material within the port city of Thonis-Heracleion. This review of the literary landscape of Ptolemaic Egypt suggests a Marxist approach to the archaeological material can show the underrepresented people within the maritime industry and display social groups, inequality, class relations, and modes of production. The material evidence of ships, anchors, weights, nails, faunal remains, and tools that yield evidence of the social dynamics of Thonis-Heracleion. Due to the pandemic, all of the materials are extracted from literary or online resources regarding each site. This approach was found to be stringent but worked, to an extent, within the evidence gathered. Despite, understanding the history, aspects, and application of the manufactured Marxist approach, the archaeological material can expand interpretive opportunities for future study in Ptolemaic Egypt.

Keywords: *Ptolemaic Egypt, Maritime archaeology, Marxist archaeology, Egyptology, Thonis-Heracleion*

Ptolemaic Egypt was a seaborne empire that promoted a dynastic cult and was supported by fortified strongholds held by garrisons all over the Mediterranean and the Red Sea regions.ⁱ Egypt went through a complex integration of Macedonian/Greek influence and rule. Discussing the coexistence and coevolution of the social dynamism of Egypt during the Ptolemaic period will grant this epoch the proper attentiveness it deserves. Frequently, Ptolemaic Egypt is studied in a political and economic sense through Greco-Roman sources. Still, Ptolemaic Egypt deserves a more thorough understanding of the period by looking directly at the material remains. The city of Thonis-Heracleion was a significant port city that illustrates the social groups, inequality, and modes of production within Ptolemaic society.

Ancient maritime industries, specifically within Ptolemaic Egypt, included a variety of social groups which are neglected in the study of the social environment. Ptolemaic society included shipbuilders, seafarers, merchants, city officials, and cult worshippers. This Marxist interpretation of Thonis-Heracleion will shed light on the inequalities and status of these groups and contribute to the overall narrative of the complex Egyptian society of the Ptolemaic period. Alongside a better interpretation of the archaeological material, specifically within the maritime industry, a Marxist approach can add knowledge and provide significant support in expanding Egyptian archaeology and the study of the Ptolemaic period.

Thonis-Heracleion

The site of Thonis-Heracleion is in Egypt's northwestern Nile Delta near the end of the Canopic branch of the river where it enters into the Mediterranean Sea.ⁱⁱ Port cities in Ptolemaic Egypt were integral to describing the spatial area as well as the social, economic, and political aspects of people in multiple industries. The complexity of the Mediterranean trade network and the involvement of Egypt yields information on the motivations, communication, and use of the ships and items that merchants and craftspeople worked with during the Ptolemaic period.ⁱⁱⁱ A

discussion of the people and their socio-economic status concerning the royal echelon of the Ptolemies will better illustrate the inequality of Ptolemaic Egyptians.

The ships at Thonis-Heracleion show how the merchants and manufacturers of Ptolemaic Egypt worked in a complex socio-economic landscape that yields information about interactions between people and their environment.^{iv} In Thonis-Heracleion, there is evidence to show class or societal struggle in the maritime industry through anchors, weights, and ships. These objects' locations in the different parts of the city indicate the purpose, usage, and material. More critical interpretative measures for Ptolemaic Egypt, both written and material, can benefit further from a Marxist approach.

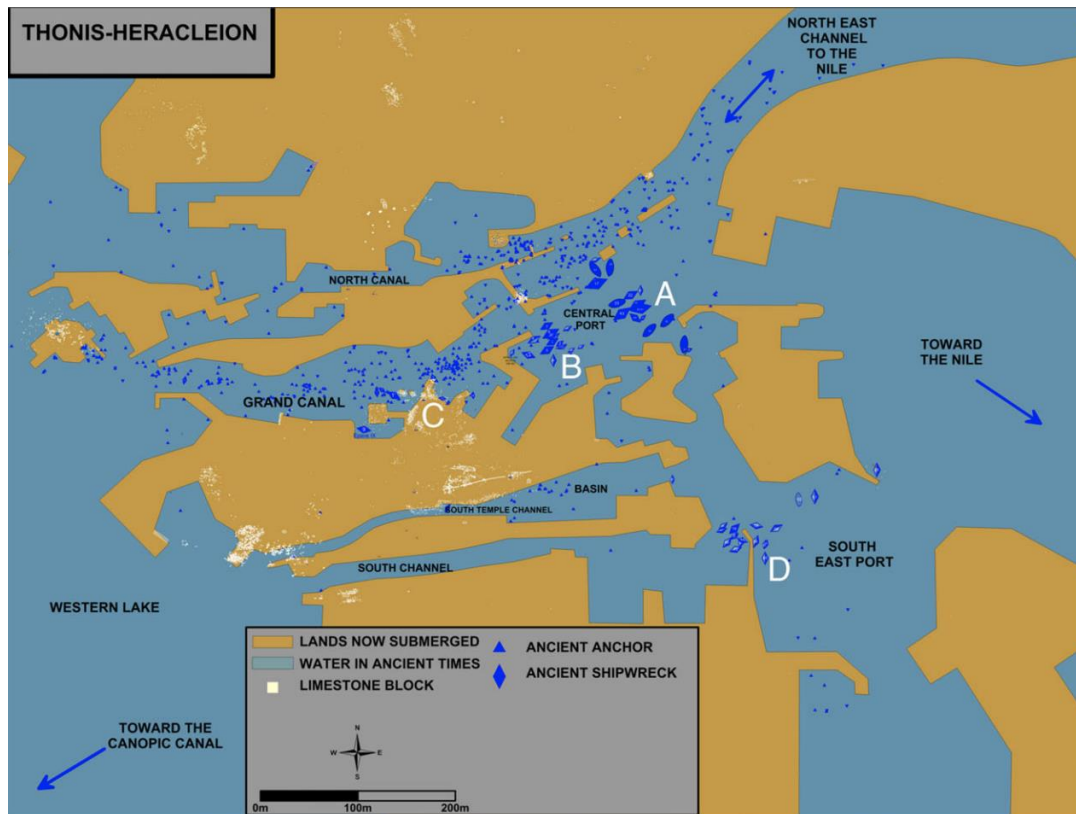


Figure 1: This map displays the placement of ancient shipwrecks, anchors, and limestone blocks from the structures of Thonis-Heracleion. The letters indicate different buildings located within the city: A, Central Port East, B, Central Port West, C, Temple of Khonsu, D, Southeast Port (Robinson 2018, 326). From Structures of the site Thonis-Heracleion in Aboukir Bay, Egypt. IEASM excavations led by Franck Goddio (Franck Goddio © Franck Goddio/IEASM)

Anchors & Weights



Figure 2: Limestone anchors found in the southeast portion of the Central Port of Thonis-Heracleion (Fabre 2015, 176). Of Thonis-Heracleion in Aboukir Bay, Egypte. IEASM excavations led by Franck Goddio (C. Gerigk; © F. Goddio/Hilti Foundation).

Thonis-Heracleion was a major port city and place of trade for Egyptians and other Mediterranean cultures because of its proximity to Naukratis and Alexandria, and it became a flourishing entrance to the Ptolemaic trade throughout the kingdom.^v During the Ptolemaic period, Naukratis and Alexandria became the central hubs of knowledge and business for the dynasty. The majority of Mediterranean shipwrecks occurred during the Ptolemaic and Roman periods.^{vi} The high number of anchors in the Grand Canal and Central Port areas indicates multiple moorings or shipwrecks from the quays.^{vii} Over 700 anchors discovered in this area show how busy Thonis-Heracleion was as a customs point for incoming and outgoing trade.^{viii} The weight system indicates the ethnic designations of 'Egyptian-style' and 'Greek-style' (See

Figure 2), but with a preference for the Greek over the Egyptian. The limestone anchors and metal weights provide information on how ships would moor and wait before space cleared up to enter the city. The concentration of the anchors (Figure 2) shows the specific areas in which ships would moor or dock to carry out merchant purchases and the exchange of goods. The docks would have been present at each landmass for cargo, markets, and tax-collecting duties. The anchor manufacturing industry would likely be large enough to produce vast amounts of anchors and limestone blocks found close to shore. The tax collectors or any administrative officials working outside of Alexandria had a court position or affiliation to the king, which was often ethnically restricted up to the second to first centuries BC.^{ix} These administrators must have been involved in the maritime operations of their respective cities, which thereby created a class hierarchy and struggle. Egypt's monetized taxation methods made collectors integral to fueling the Ptolemaic rulers' agenda and account for expansion, security, and successful economy.^x

The limestone blocks found all over the scattered islands may have provided anchor manufacturers material to sell to seafarers who needed a new anchor. Egyptians used limestone anchor technology from the third millennia BC onwards.^{xi} The sediment build-up and changing sea levels made the mouth of the Canopic region volatile. Many anchors would get stuck in the sediment and could not be removed, so crafts-people must have been employed to make new ones for the voyages home. For example, the *Kapitan Type 2* anchor that remained stuck in the sediment had foreign wood and lead inserts from the eastern Mediterranean.^{xii} The complexity of the canals made it difficult for ships to dock on the shores, so there had to be mooring and watercraft transports for cargo and people.



Figure 3: Top Left: Domed Egyptian-style weight, Bottom: Cupcake Egyptian-style weight, and Top Right: Greek-style inscribed weight from excavations at Thonis-Heracleion (Van Der Wilt 2015: 162-163). At Thonis-Heracleion in Aboukir Bay, Egypte. IEASM excavations led by Franck Goddio (E.M. van der Wilt; © F. Goddio/Hilti Foundation)

Thonis-Heracleion became a customs collection point for Naukratis and the rest of the Ptolemaic kingdom, and its local tax revenues went to temples.^{xiii} The wide range of goods imported into Thonis-Heracleion shows the city's significance as a gateway to the Egyptian Delta. The supervision of tax revenues started with the city government then was handled by the Ptolemies. Cargo shipments including *iswt nbt* - “all assets” - were inspected, weighed, and taxed accordingly by the harbor administration either through military or customs personnel.^{xiv} Both foreign seafarers/merchants and the Egyptian ports administered the weighing of trade goods.

The tax collectors and merchants that used these weights could have been Greek

themselves or worked for the pharaoh's government. Both Egyptian and Greek weights have inscriptions that show a relationship between seafarers' and merchants' weighing cargo to honor their gods to ensure safe passage to and from Thonis-Heracleion.^{xv} Egyptians had their own weight system that probably had to convert to the Greek standard, thus reflecting the Ptolemaic agenda of favoring Greek tradition. This bias is one way in which inequality systematically embeds itself into Ptolemaic society. Since the weights are primarily in the Greek style, suggesting an ethnic preference for Greek trends in the tax-collecting and merchant operations of the city. The locations of the weights show that the Ptolemaic tax collectors and merchants were operating in scattered areas of Thonis-Heracleion due to the layout and volume of ingoing and outgoing ships. These ships are crucial to revealing information about the Ptolemaic landscape, even more so than the weights and anchors.

Ship Remains of Thonis-Heracleion

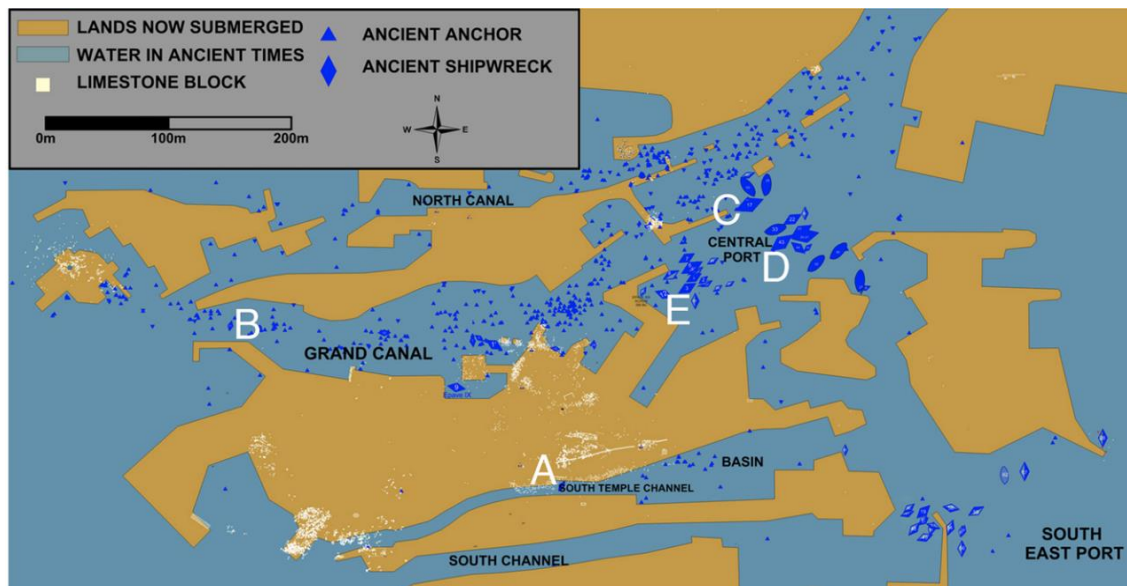


Figure 4: This is a close-up of Thonis-Heracleion that shows the Central Port and Grand Canal indicating the anchors, limestone blocks, and ships. A: ship 61; B: ship 11; C: ship 17; D: ship 43; E: western ship graveyard; the ship that was radiocarbon-dated more accurately to the Ptolemaic period is Ships 61. While Ships 11, 17, and 43 have been dated to earlier than the Ptolemaic period, possibly mid to late fourth or fifth centuries BC, their usage could have reached into the Ptolemaic period (Robinson 2018: 327). IEASM Excavations led by Franck Goddio in Aboukir Bay, Egypt (Franck Goddio © Franck Goddio/IEASM).

The different planking methods and the orientation of shipbuilding materials were vital in showing how the maritime industry was adapting to changing environments.^{xvi} Locally sourced acacia proves shipbuilders produced the ships in Thonis-Heracleion, which indicates that the city was a producer of *baris* vessels.^{xvii} The vessels' agency, expressed by the constructing and retrofitting boats, are products of the shipbuilders; in turn, the dockworkers position them for pontoon bridges or reinforcing the harbor to protect and connect the city. The planking and design of the ship to hold rudders supported Greco-Roman sources and made the boat more maneuverable through Thonis-Heracleion.^{xviii}

Ship 61

Understanding the underwater shipwrecks and scuttled ships will aid in interpreting the more profound human implications within deliberate acts of abandonment.^{xix} Ship 61's location in the South Temple Canal area is covered in debris from the nearby isle (See Figure 4). The pottery, coins, and rubble that flowed down from the Temple of Amun-Gereb and Sanctuary of Khonsu engulfed Ship 61, which was at the bottom of the sloping terrain of the isle.^{xx} However, the ceramic and numismatic evidence may have belonged to the seafarers due to the small amount left inside the ship. Ship 61's location near the temple suggests that seafarers would be checked and taxed when docked or unloading trading vessels. The checking was part of the security and customs entrance to Egypt. Thonis-Heracleion and the Canopic region was the access point to the rest of Egypt, and all of the routes had gateway checkpoints for taxation.^{xxi} There had to be access points for seafarers to enter markets and wait for areas if there was not enough room at the dock. These waiting areas at the canal entrances suggest a customs process used by maritime and port personnel throughout the Canopic region.^{xxii} Ship 61's usage could range from the transportation of cult worshippers or tax officials rather than cargo, or both. The cultic priests of Egypt were critical to revering the Ptolemaic ruler as a god and supporting the

government's agenda.^{xxiii} This port system indicates a higher echelon of administrators, military, and cultic priests that would help the Ptolemaic economic and political plan.

The location of Ship 61, on the southern side of this island, relates to ships 1, 9, 14, 15 on the northern side because they all show characteristics of the same destruction by limestone debris.^{xxiv} The large limestone blocks found on both the southern and northern sides of the temple island indicate that this is material used to construct the temple and surrounding monuments. The ship's location was away from most other shipwrecks, which possibly shows that the boat transported tax and cult personnel to the temple island instead of just recently unloading or receiving cargo.

Ship 11

The next ship, 11, is oriented at the mouth of the Grand Canal area of Thonis-Heracleion (See Figure 4). Ship 11, located on the northern side of the Temple of Amun-Gereb, was ritually deposited. The Temple of Amun-Gereb on the central island of Thonis-Heracleion seems to have been the epicenter of ritual ceremonies and life in the city. The boat had a keel that was made from a sycamore-fig tree and consisted of five sections that were scarf-jointed and fastened with mortise-and-tenon joints.^{xxv} Among the wreck was ritual bowls and ladles, indicating that the ship was used as part of the Osiris cult, while significant wear on the panels suggests the ship had been purposely retired.^{xxvi} The ship was scuttled at the opening near the temple as part of a ritual. Ship 11's contents suggest it served a ceremonial or cultic purpose, which involved active participants.

A ritual deposit on the northeastern corner of the island, the Temple of Amun-Gereb, included a wedjat eye, amulets, a small Harpokrates figure, and an uraeus.^{xxvii} A common trend in ancient Egypt, cultic worshippers of the nearby temple presumably buried the cache of objects.^{xxviii} Similarly, Berenike had the Temple of Serapis, which had a room dedicated to Isis

that sailors would often worship and thank her for safe journeys. The high concentration of ships and worship of Egyptian deities must suggest seafarers' involvement in the ritual deposits by giving thanks for a safe return or hoping for a safe journey on their departure. The socio-economic status of the shipbuilders and seafarers is difficult to discern, but the ships and surrounding contents suggest the identities of the social groups involved in the day-to-day interactions of Thonis-Heracleion.

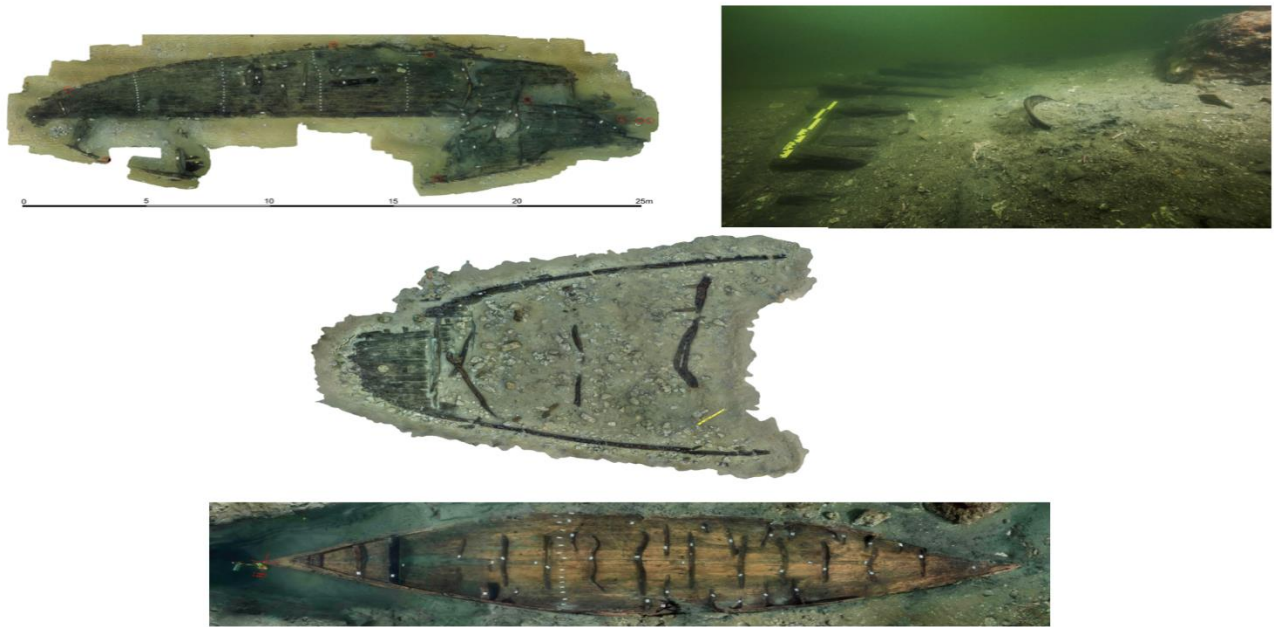


Figure 5: Top left: Ship 17, top right: Ship 61, middle: Ship 43, and bottom: Ship 11. All the images were photographed by Christoph Gerigk and © Franck Goddio/Hilti Foundation (Robinson 2018, 328-331). IEASM Excavations led by Franck Goddio in Aboukir Bay, Egypt.

Ship 17

Ship 17 relates to Herodotus' account of the Egyptian *baris* ship.^{xxix} This ship serves as an example of the structural reuse of a seafaring vessel. Ship 17 was a Nilotic freighter that could hold up to 4000 talents and was repurposed to bolster the dock area near the northern part of the Central port.^{xxx} The purpose of this reinforcement was to extend the dock to accommodate more ships and increase the capacity. The reinforcement required shipbuilders to retrofit the ship and dock-workers to navigate the ship into position, allowing tax and customs

personnel to work on larger platforms. The increase in capacity would increase trade but draw more interest for people to migrate to Thonis-Heracleion. The majority of ships discovered suggest a high rate of domestic wood use, and Ship 17 shows a coarsely worked vessel with frugally made material.^{xxxii} The material indicates that the shipbuilders were in a lower socioeconomic status and could not afford better materials, or the demand for quantity outweighed the desired quality.

Ship 43

The final vessel, Ship 43, located in the southwestern portion of the Central Port, was similarly prepared and repurposed by removing the mast and rigging to leave just a watertight hull for further use.^{xxxiii} The vessel was deliberately floated out near the mouth of the river and tethered to the clay floor with ballasts to the harbor floor in order to create a pontoon bridge that had guard houses at specific points.^{xxxiii} For example, the pontoon bridges indicate a significant city infrastructure that the pharaoh's officials would have operated. These officials would have overseen the dock-workers who would have scuttled the boats and tethered them to the seafloor.^{xxxiv} Shipbuilders must have converted the ships into the pontoon shape before being floated out into position. There would have been guard posts at certain points that would indicate different gaps, where tolls or checkpoints were in operation by a security or military force and the local government administrators.

Thonis-Heracleion and other designated Ptolemaic ports run by the government would have had a police or security force that was stationed around the city to protect vessels from pirates and bandits.^{xxxv} Thonis-Heracleion had some form of police or military force to ensure that the pharaoh's deliveries and military shipments were secure and would have protected the port cities.^{xxxvi} Thonis-Heracleion had less material data regarding military or policing force. However, another port city, Berenike, had a fort nearby that supported the overland transport of elephants, and cargo required

protection for the transfer of goods. Overall, Ship 43 was crafted and retrofitted by the shipbuilders, sailed by seafarers, protected by military or security, and used as a pontoon bridge for citizens to travel from isle to isle. The shipbuilders and dock-workers seem to have relied heavily upon the city's construction, the tax collectors and security were the active administrators of the town. The town's structure shows that there was a social stratification based on occupation.

In Conclusion: Viability of Marxist Archaeology

Applying the infrequently used Marxist approach is informative when reviewing the archaeological materials of Thonis-Heracleion. The application of Marxism was complex and can benefit from more study into its application of Ptolemaic Egypt. Shipbuilding, cults, diversity, military, merchant operations, and cargo were all analyzed through this lens. The results from the ships, weights, anchors, and tools applied to the Marxist approach did yield some insight into the dynamics of social groups that scholars and excavators of Thonis-Heracleion did not previously discuss. The questions of the production scale and capacity of the labor force were inconclusive. However, the information on social groups and inequality is significant. Objects provide the materials for historians and archaeologists to interpret questions of the past.^{xxxvii} Marxist theory is a practical framework to connect subjective and objective interpretations. Though the ideology has fragmented pieces, it is best to use those parts to build a better interpretation.^{xxxviii} Piecing together core aspects of Marxist theory can provide fluid interpretations of the past depending on the criteria. In this case, applying questions about social groups, production scale, class relations, status, and inequality to the data yielded mixed results.

The socioeconomic discussion of Thonis-Heracleion provides a wealth of evidence on the Ptolemaic and Roman periods concerning the maritime industry and operations and their involvement with Egyptian affairs. Shipbuilders, seafarers, tax collectors, cult personnel, dockworkers, and the military gave identities to the people of Thonis-Heracleion and showed a

diverse agenda within these Ptolemaic hubs of maritime activity. The Marxist approach was able to analyze them further to show possible relations among shipbuilders and dockworkers with the administrators of Thonis-Heracleion through the objects' function and orientation. Given the right circumstances, this approach could be useful when applied to material culture and historical data, but further research into the theory is needed. When Marxism is used cautiously within the realm of archaeology with an awareness of the errors within its viewpoint, then Marxist theory can complement, contribute, and combine with other approaches to yield better interpretation.^{xxxix}

The study of Ptolemaic Egypt could benefit from more archaeological interpretation instead of relying heavily on classical sources. The inequality within past societies is integral to clarifying and exploring history further. Objects give insight into the environment and how the material shapes the lives in society.^{xl} It is possible to apply this to multiple domains outside of the household. The approach to Thonis-Heracleion's ships 61, 11, 17, and 43 showed a working object life producing varying scenarios. Each boat was either destroyed by a landslide, ritually sunk, or repurposed for dock expansion or pontoon construction. The wood and technique in the manufacturing of Ship 17, for instance, was able to show lower quality building components that were the result of a lower socioeconomic status. However, it also could be that as demand rose, quality may have declined for ships. Socio-economic inequality must have been present throughout the city; the ethnic inequality and preference for Greek-style weights over Egyptian-style weights in Thonis-Heracleion suggests unequal treatment of social groups based on ethnicity and socioeconomic status. It is known from philological and administrative documents that Ptolemaic Egypt had socio-economic issues.^{xli} These documents vary from region to region in both language and content, and some papyri refer to the residents for tax reasons, while others are private or religious documents that tell us more about the culture.^{xlii} Ethnic designations were often used in administrative records and the people living in Ptolemaic Egypt must have had their

biases. Not only was Egypt receiving new immigrants, but also Egyptians were moving around to different settlements.^{xliii} Ships 61, 11, 17, and 43 were all involved in the material infrastructure and promoting the economic standing of Egypt to its allies and enemies.^{xliv} All four ships exhibit social aspects of the inequality between the government and the people.

Marxist interpretation fairly discussed social groups and production dynamics but there was not that much data on class struggle and inequality. The Marxist approach conclusively teased out information about inequality, class stratification, production, and social groups, but class struggle was harder to discern from the material alone. This Marxist approach is limited in areas that have less material. However, the approach did reinforce the scholarly work on Thonis-Heracleion and showed that a Marxist approach can benefit the study of Ptolemaic archaeology. Marxist theory can benefit from some fine-tuning of its application to produce more conclusive results. This study shows a greater understanding of social groups involved in maritime operations, providing broader implications of growth in Ptolemaic archaeological research. The misguided perspective that Greeks and Egyptians operated and grew independently during the Ptolemaic period seems unlikely but can be remedied by contextualizing data through multiple methods of analysis.^{xlv} Much of the archaeological interpretation combined with classical sources focuses on object orientation, but Marxist theory can help tease out information about social groups within Ptolemaic Egyptian communities.

Further investigation into the social dynamics of Ptolemaic Egypt and international trade routes from its port cities can produce more connections and relations in other regions. Inquiring further will add to the intricacy of Ptolemaic Egyptian study, which is often ignored or glossed over. Ptolemaic Egypt is an intricate period with social, economic, political aspects that influenced the Mediterranean and West Asian world. Ptolemaic society has more to offer than just what classical literary authors say about Egypt. The Marxist material approach can be a tool

to harvest more information about class relations and social dynamics. This Marxist approach identified social groups, inequality, and socio-economic status, while information on class struggle and class relations based on the material from the Ptolemaic maritime industry was inconclusive. However, the inconclusive interpretation still yielded possibilities of further study into the material and written sources regarding Ptolemaic Egypt. Hopefully, further exploration of both the people in Ptolemaic Egypt and Marxist archaeology will provide new ideas and applications for discerning class struggle and social relations in the future.

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Endnotes

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- ^{xxiii} Stefan Pfeiffer, "The Imperial Cult in Egypt," In: *The Oxford Handbook of Roman Egypt* (ed.) C. Riggs (Oxford: Oxford University Press, 2012) 96.
- ^{xxiv} Robinson 2018, 328.
- ^{xxv} Robinson 2018, 328; The keel is the backbone that runs the length of a hull, and mortise-and-tenon joints are used to hold together scarf-jointed planks on a ship. The decision to sink ships for ritual purposes was usually made by the owner who also chose to scrap it in the ship graveyard or to salvage the wood and reuse it for another purpose (Richards 2008, 61; Richards 2013, 8).
- ^{xxvi} Robinson 2018, 329.
- ^{xxvii} Von Bomhard 2014, 340; The wedjat eye is a symbol of the living king and praises the work of Ptolemaic rule while Harpocrates was a Ptolemaic god and sign of hope (Skinner 2016, 115; Benedick 2014, 9).
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- ^{xxx} Belov 2015, 207; Robinson 2018, 330; Herodotus *Historiae* 2.9.
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