Evidence, Theories and the Ancient Economy:
A Critical Survey of Recent Work*

Sadao Ito

I

There is no doubt that M. I. Finley’s *The Ancient Economy* (1973) caused the well-known controversies on the ancient economy that continued unceasingly since the end of the nineteenth century to take a remarkable turn. Finley contributed greatly to the lively discussion, producing fertile work by Euro-American specialists in this field. The intention to overcome the Finleyan theory encouraged studies of Greek and Roman economy in various ways. I want to take a critical overview of this trend as a Japanese student of ancient Greek history, who has been concerned with Finley’s work since the publication of *Studies in Land and Credit in Ancient Athens, 500-200B.C.* (1952), very nearly the first and technically the best achievement in his academic career.

I think the cornerstone of Finley’s view of ancient economic history is his seminal opinion on slavery. What is the distinguishing feature of this opinion? How does it match the evidence, literary and epigraphical, in particular, of ancient Greece? How is it related to, and to what extent does it have significance in, his economic history? Making mention of these points briefly, I examine the vigorous investigations by Euro-American scholars into the Finleyan view of ancient economic history, and suggest that it is still alive as an undercurrent among studies of Greek and Roman economy.

II

Slavery is one of the most important problems in ancient history, concerning which an accumulated knowledge has been shared among common intellectuals as well as specialists on the ancient economy. Finley’s theory on this matter in particular attracts my attention because it has a final goal of identifying the historical position of Greek and Roman society in the ancient world.1

* This paper is a revised and abbreviated version of an article by the same author published in *The Transactions of the Japan Academy* 64, 2010, pp.109-140 (pp.109-136 in Japanese). I am much...
Finley certainly holds the common view about Spartan helotage and pre-Solian serfdom. He also takes note of some evidence of debt-bondage in various areas including Crete. Bondmen as well as typical slaves come within the range of his study. It is, moreover, remarkable that he constructs the socio-economic framework of the Greek and Roman world on the basis of slavery in a way of his own. ‘True slaves’, bought and sold, were extensively forced to work in almost all fields of daily life in classical antiquity. Slavery was the basis of Greek and Roman society. That is a generally accepted view of classical antiquity, and the historical materialist concept of ‘slave society’ was based on such an idea. Finley emphasizes, however, that mass employment of typical slaves was limited to the expressly developed economies, for example, those of classical Athens, Italy and Sicily from the late republican to the early imperial periods. He states that taking a general view of classical antiquity, serfdom was the main current of workforce geographically and historically. His opinion depends on two presuppositions. The first is ‘the spectrum of statuses’ which implies both clear differentiation and subtle proximity of social position among inhabitants, for example, from a landed citizen through a foreign merchant to a slave employed in a bank, in classical Athens. In the whole of ancient Greece, there are helots and debt-bondmen. The second is his interest in relevant materials of the ancient Near East. This invites him to compare servile circumstances in classical antiquity with those in Oriental states. On these methodological premises, Finley attempts relatively to allocate some socio-economically developed areas and periods in the whole span of Greek and Roman history and the classical antiquity in the ancient world inclusive of the Near East.

Although it is undeniable that Finley’s comparative method is intrinsically static, it hides the possibility of relating the historical dynamics of classical antiquity and

---


2 Two types of intermediate servile status, the serfdom originating from conquest (woikeus) and another from debt-bondage (nenikamenos, katakeimenos), are corroborated in Fifth-Century BC Gortyn (IC IV 72). In classical Greece outside Athens, the custom of debt-bondage remained extensive. The fact is indicated by the geographical diffusion of relevant inscriptions (Halicarnassus: Buck 2 Il.32-41; Crete: IC IV 72, I 56-II 2, VI 46-55, IX 40-43; Heraclea: Buck 79 II.154-156) as well as the description of *Lysias* XII 98.
the position of its own in world history. Making Greek history a reference point of his story, Finley states that in pre-Solonian Athens even a citizen, when he could not repay a debt and was reduced to a bondman with his family, must have paid to creditors one-sixths of his harvests every year in the grip of fear of being sold abroad (hektemoroi). This sort of risk was related to the custom of debt-bondage. The great significance of Solon’s social reform is found, Finley discusses, in the emancipation of hektemoroi and the prohibition of debt-bondage thenceforth (seisachtheia). Although he follows the common interpretation of relevant descriptions of Aristotle’s Athenaiion Politeia, Finley argues that in Athens, when wealthy citizens could no longer compel poor fellows to work as debt-bondmen through the institutional change based on Solonian reform, there arose a need to import non-Greek slaves from surrounding regions. He finds the structural root of developed slavery in the constitutional change of the citizen body. The economic development requiring mass employment of typical slaves and the existence of fitting areas to supply these slaves might be naturally supposed as other motives. But Finley’s opinion is to be highly assessed as a hypothesis attempting logically to interpret the relationship between the freedom of citizens and the development of slavery.

Moreover, taking a general view of Roman history, where slaves have been deemed to have performed massive work throughout the empire, Finley cherishes his own opinion, which seems to be partially influenced by P. Garnsey’s legal and social studies of the Roman empire. He insists that historical materials show the mass employment of slaves just in prosperous Italy and Sicily, and that in the early republic clientes and debt-bondmen worked for wealthy elites. In the later empire, he further asserts, lower ‘Roman citizens’ could latently supply servile manpower for large-scale farming of elites. If it is permissible to reiterate, according to Finley,

---

3 Aristot. *Ath.Pol.* II 2-3, IV 5, V 1-3, VI 1-2, IX 1, XII 4. P. J. Rhodes and E. M. Harris most distinctly criticize the common interpretation. P. J. Rhodes, *A Commentary on the Aristotelian Athenaiion Politeia.* Oxford, 1981, pp.90-97, 126; E.M. Harris, Did Solon abolish Debt-Bondage? *CQ* 52, 2002, pp.415-430 (=id., *Democracy and the Rule of Law in Classical Athens. Essays on Law, Society, and Politics.* Cambridge, 2006, pp.249-269). Both suggest the existence of debt-bondage in classical Athens. Harris’ speculation that the aim of Solonian reform was to emancipate the victims of factional struggles is, however, no more well-grounded than A. Andrewes’ theory (essentially followed by Rhodes) that hektemoroi were originally hereditary serfs. If some sources appear to tell us that debt-bondage survived in classical Athens, they do not prove authorized survival as a system. I suggest that it would be possible for a debtor to offer himself as a servile laborer under the circumstances that he no longer has any prospect of repaying. Two rather convincing instances of debt-bondage (Menandros, *Heros* 20-38; Terentius, *Heautontimorumenos* 600-606, 790-796) might be related to non-citizens.

serfdom was the main current of labor force in the Roman world as well as in the Hellenic world.

Finley’s opinion of ancient slavery is closely related to his historical theory of the ancient world from a socio-economic point of view. He explores the origin of ‘true slaves’ in the social and economic development of sixth century BC Athens and describes the declining phases of slavery in the social transformation of the later Roman empire. The crux of Finleyan theory is found in the relationship between the socio-political freedom of citizens and the mass employment of typical slaves.

The point of the argument is clear and the idea is far-reaching. Therefore, Finley’s theory has been a conspicuous subject of reference and criticism both methodologically and empirically. While specialists of Greek history attempt to criticize Finley’s opinion of ancient slavery through their studies of Solonian reform⁵, those of Roman history are rather inclined to be concerned with the Finleyan theory of ancient economy based on that controversy dating from the end of the nineteenth century, explaining in particular the economic development of the early Roman empire richly endowed by historical materials.⁶

Finley’s socio-economic view of the ancient world, described in The Ancient Economy⁷, gave impetus to studies of the Greek and Roman economies and has


⁷ This book was republished in 1985 with an addendum by the author (Chap. VII Further Thoughts (1984)) and in 1999 with a foreword by I. Morris. In the added chapter, Finley does not prima facie agree with Hopkins (pp.182-183). But referring to W. Sombart’s theory, he says that chief contributors to the foundation of cities were not merchants and craftsmen but wealthy landowners extracting wealth from the countryside through taxes and rents (pp.192-195). This might signify his acceptance of Hopkins’ revision in view of the trends of Roman economic history. It is remarkable in the foreword to the updated edition that Morris proposes as a starting point for the studies of ancient socio-economic history the relationship between the freedom of citizens and the development of slavery. His article published in 2002 (cited above in note 5) may be an attempt of his own. But in general, slavery is not fully discussed in terms of the Finleyan theory, with the exception of R. Zelnick-Abramowitz, Not Wholly Free. The Concept of Manumission and the Status of Manumitted Slaves in the Ancient Greek World. Leiden, 2005. The author, affirmatively referring
subsequently been an axis of economic and social research on ancient history. Finleyan theory owes much to M. Weber’s historical view comparing Greek and Roman economies with those of early modern Europe and is influenced by K. Polanyi’s concept of the social ‘embeddedness’ of the ancient economy. Many scholars in the field of Greek history as well as Roman studies have made attacks against such a view as negatively evaluating the ancient economy. Notwithstanding being roundly criticized, the Finleyan theory has still a far-reaching influence on studies of the ancient economy. I survey the situation and evaluate the significance of Finley’s opinion of ancient slavery in socio-economic studies of the Greek and Roman world in the future.

III

Recent work on the ancient economies generally refers to Finley’s theory, if it keeps a broad awareness of the issues. Among many articles and books, the following three groups, in particular, attracted my attention: (1) work on Solonian reform by many scholars; (2) M. H. Hansen’s work based upon *Copenhagen Polis* to Finley’s model of the spectrum of statuses, describes exhaustively the problem of Greek manumission.


Centre’s exhaustive studies of Greek city-states\(^{10}\); (3) several collections of relevant articles that are the result of organic collaborations concerning ancient economies\(^{11}\). My review will be focused on Hansen’s opinion and the collection of articles published by the Stanford group\(^{12}\), because both criticize Finleyan theory squarely. While the former is concerned with Finley’s theoretical position in relation to Weber’s, the latter makes an attempt to overcome Finleyan theory and explore new methodologies.

Hansen, one of the most eminent scholars of Greek institutional history, organized the Copenhagen Polis Centre on the occasion of the 250th Anniversary of the Royal Danish Academy in 1992, which sought to conduct exhaustive case studies of ancient Greek states, both poleis and ethne. The result of research has been published in fourteen collections of relevant articles\(^{13}\) and was richly realized in a tome published in 2004\(^{14}\). Having published many articles in the collections mentioned above, Hansen finally summed up the result in the huge opening essay of *An Inventory*\(^{15}\) and another handy book published two years later\(^{16}\).

---


12 Manning-Morris (eds.), *Stanford AE* (vid. n.11).

13 These collections are classified respectively into seven *Acts* (Copenhagen, 1993-2005) and *Papers* (Stuttgart, 1994-2004) of the *Copenhagen Polis Centre*. The result of the research is summarized in M. H. Hansen, 95 Theses about the Greek *Polis* in the Archaic and Classical Periods. *Historia* 52, 2003, pp.257-282.


As studies of *poleis* by the Copenhagen group led by Hansen attach importance to the institutions of *poleis*, they are short of references to slavery. But Hansen’s articles show that he is not a little concerned with the economic basis of the Greek city-state. He pays attention to the aforementioned controversy, and examining literary and archaeological materials in detail, emphasizes the importance of commerce in Greek economies naturally including those of classical Athens and other prosperous cities. Appraising highly Weber’s concept of the ‘consumer city’, Hansen criticizes Finley’s theory which interprets negatively the role of Greek and Roman trade. I do not agree with Hansen. Although Weber refers to the importance of trading activities, his studies of ancient economic history are focused on agriculture. Weber’s position in the controversy is rather close to K. Bücher’s. Moreover, Finley is deeply influenced by Weber’s theory that the consciousness of Greek and Roman citizens as political and social elites restricted their economic activities. Hansen’s criticism of Finleyan theory is off the mark.

Hansen’s opinion of the so-called primitivism is also simplistic, because he does not refer to the fact that various revisionary theories have been published since Hopkins’ epoch-making article. Having analyzed and synthesized the results of some recent archaeological and numismatic studies, Hopkins devised his own views on the economy of the Roman empire. He admits that ‘modest, though significant, economic growth’ occurred in the Roman world from the late republican to the early imperial periods, revising Finley’s rather static view. As a methodological contribution, his appreciation of institutional or developmental economics should be mentioned. It offers the prospect of comparing the Roman economy with those of early modern Europe and pre-modern Asia. The best result of using Hopkins’ methodology is P. F. Bang’s work. Bang compared the Roman empire with, in particular, the Mughal in India and found similarities in the economic structures of their tributary systems with trading networks operated on the stable domination of both empires. He makes much of agriculture as a common economic foundation of these empires. Bang’s theory is considered to originate from those of Hopkins, Finley and Weber.

---

While the collection of the Cambridge-Bari group aims at synthesizing ‘primitivism’ and ‘modernism’ under the influence of Hopkins’ theory\(^{20}\) and the Cambridge collection often shows intimacy with Finley’s theory, particularly in terms of the social transformation in late antiquity\(^{21}\), the common purpose of the Stanford collaborators is, though a revisionist article such as Saller’s is contained in the collection\(^{22}\), to get the better of Finley’s theory. This group considers not just

enumenates the following as characteristics of trading activities in the bazaar, namely, diversified investment, mixed quality of commodities, speculative enterprise exploiting price differences between regions, practical use of social and religious connections, all of which are fit for underdeveloped information and transport technologies. He also discusses the conflict between imperial powers and local landed interests, in particular, in the Roman Empire. Bang’s interest in Weber’s theory is shown in *P&P* 195, pp.9, 33, 45; *The Roman Bazaar*, pp.3-4, 7, 20-21, 23, 27, 32-33, 63-65, 67, 122. Bang is mainly concerned with the Weberian concepts of comparative history and ‘political capitalism’. As another interesting example of Hopkins’ influence on an article published in a learned journal, should be mentioned P. P. M. Erdkamp, Beyond the Limits of the ‘Consumer City’: A Model of the Urban and Rural Economy in the Roman World. *Historia* 50, 2001, pp.332-356, which, referring to modern Spanish cities, attempts to adjust the Weber-Finley’s model of the ancient ‘consumer city’ to the Hopkins’ model of ‘economic growth’ of the Roman empire. J.F. Drinkwater is sceptical of following Hopkins’ revisionary theory too far. His argument in Leister-Nottingham *AE* (vid. n.11) seems to be a recurrence to Weber-Finley’s theory of ‘political capitalism’. J.F. Drinkwater, The Gallo-Roman Wollen Industry and the Great Debate. The Igel Column Revisited. *ibid.*, pp.297-308, esp. pp.302-304. Osborne also supposes the relationship between the political engagement of the local elite and the economic growth in late antiquity. R. Osborne, Economic Growth and the Politics of Entitlement. *The Cambridge Classical Journal* 55, 2009, pp.119-121.

\(^{20}\) Though contributors of Bari *AE* (vid. n.11) respectively consider their own subjects, the following appear to constitute remarkable features of their collection. (1) They generally evaluate the recent results of archaeology, but often have doubts about giving them absolute priority. (2) Accepting the theory of institutional economics, they emphasize the significance of Roman imperial government, in particular, the relationship between tax and trade. (3) Recognizing the economic growth of Roman world, they use the yearly products *per capita* as a criterion for judging. (4) They assert the difference between the ancient world and Europe after the Industrial Revolution and are concerned with the comparison between Roman world and pre-modern China, India and other non-European countries. (5) References to slavery, though found here and there, are regrettably scanty. N. Morley’s criticism that the Finleyan theory is static (vid. n.52) seems to be linked to this sort of leaning.

\(^{21}\) While Stanford *AE* (vid. n.11) leans toward the methodological researching and presentation of a tentative vision, Cambridge *AE* (vid. n.11) is a comprehensive description of ancient economic history that includes in part the Near East. This massive work is composed of 28 chapters, among which five chapters in Part I discuss broadly ecology, demography, family, institutions and technology in the Greco-Roman world as the ‘determinants of economic performance’. Each chapter summarizing the result of recent research is useful for the general readership concerned with ancient history as well as for relevant specialists.

\(^{22}\) R. Saller, Framing the Debate over Growth in the Ancient Economy. Stanford *AE* (vid. n.11), pp.223-238 (=Scheidel- von Reden (eds.), *The Ancient Economy* (vid. n.6). pp.251-269). Relying on theories of Hopkins and the developmental economics, Saller estimates the growth *per capita* of the Roman economy during the 300 years from 200 BC to AD 100 at 25% in total, from which is concluded an annualized rate of 0.1% or less. He compares this result with the average growth rate
Greek and Roman world, but also the ancient Near East, and declares an idea of unified ancient Mediterranean world. Whether the result of this collaboration is sufficiently valuable or not, it might indicate an advisable way of future research at least.

The Stanford collection is composed of a methodological introduction by coeditors, eight articles by ancient historians, and three comments by social scientists. Articles are classified into four parts, the Near East, the Aegean, Egypt and the Roman Mediterranean. Specialists of sociology and economics are invited as participants to intensify the discussion exclusive of Egypt. The trend of collaboration leans against Finley. They regard Finleyan theory as dichotomizing the ancient world between Greco-Roman city-states and Oriental monarchies and explore a way to describe the ancient Mediterranean world by uniting the Occident and the Orient from an economic view, based upon recent results of archaeology, papyrology and numismatics. Articles in this collection are, on the whole, inclined to recognize economic growth in the ancient world.

Each article narrates theories and materials in its own field, which is useful for specialists of different fields. It is interesting that Saller compares Finley’s text with M. Rostovtzeff’s and criticizes such a view as asserting the fundamental difference between their opinions of ancient economic history. The participation of social

of English economy in the nineteenth century, namely, 1.2%, and agrees with Hopkins’ interpreting the Roman case as one of ‘modest, though significant, economic growth’. Saller considers the controversy between primitivism and modernism to be insignificant and explains the bases of Roman economic growth from four points of view. As for the gross national product of the Roman empire, refer to Bang, The Roman Bazaar (vid. n.19), pp.86-93. This argument also originates from Hopkins.


M. Granovetter, Comment on Liverani and Bedford. In: Stanford AE, pp.84-88; T. Amemiya, Comment on Davies. ibid., pp.157-160; A. Greif, Comment on Hitchner and Saller. ibid., pp.239-242.

Three contributors, Liverani, Granovetter and Saller, however, appear basically to agree with the Finleyan theory. As for Saller’s revisionist opinion originating from Hopkins’, refer to n.22.

Saller, op.cit. (vid. n.22), pp.223-228. In the argumentation, Saller calls Bang by name as a young Danish scholar showing a warm interest in the comparison with pre-modern Asia (p.228).
scientists reflects the increasing attention paid by historians to methods and results of neighboring sciences. So-called modernism, a theory typically critical of Finley’s, seems to be methodologically related to the mainstream of economics, which supposes a trend toward rationality in all economic actions by individuals. According to this theory, the market should be the frame of reference.31

In the collaboration by the Stanford group, orientalists including specialists of Hellenistic and Roman Egypt play an important role. They are, on the whole, positive in constructing a Mediterranean world that unifies classical antiquity and ancient Near East. It is in marked contrast to the fact that specialists of classical antiquity, who are mainly concerned with Greece around the Aegean, Italy and western provinces of the Roman empire, discuss the problem more cautiously.32 Whereas orientalists are constrained to cope with massive materials on clay tablets and papyri, classicists are fully equipped with a system of publication of texts, literary and epigraphical. Though classicists share a long-held tradition of revision and interpretation for each text and enjoy favorable conditions deeply to consider individual problems on the basis of such a tradition, they are prevented from conceiving unrestrained ideas. Orientalists seem to be placed in different circumstances from those of classicists.33

However, Greek and Roman history has also been transfigured, particularly by the accelerating increase of archaeological materials. In economic history, it is appropriate to quantify excavated sites and artifacts and to make the result a basis of arguments. The best example in the Stanford collection is Morris’ investigation of standards of living in archaic and classical Greece by classifying the archaeological data on house sizes from 800 to 300 BC.34 Research on Greek and Roman amphoras

---


32 Davies’ article (vid. n.25) is a prominent exception, which has a wide field of vision and makes free use of abundant data. Amemiya’s comment on Davies (vid. n.28), agreeing with Davies’ criticism of Finleyan theory, is sceptical about his excessively mathematical method. T. Amemiya, Economy and Economics of Ancient Greece. London, 2007 is an attempt to quantify, if at all possible, economic activities, public and private. The author, while also feeling empathy with primitivism, accepts the recent trend of the controversy and recognizes the existence of the market in classical Athens. In spite of being a laborious work, there are regrettably more than a few misprints and other errors in this book.

33 Liverani, op.cit. (vid. n.24), p.47.

34 Morris, op.cit. (vid. n.25). Morris concludes that notwithstanding an increase in population, a durable improvement in living standards at all social levels is recognized in ancient Greece from
is representative of these investigations, because this sort of relic, used for storing wine and olive oil for the most part, is largely useful to find traces of production and distribution of the daily living necessaries around the Mediterranean and Black Seas through the quantitative data based on their massive volumes. They play an important role in showing, for example, the chronological changes in trade between Hellenistic Egypt and Rhodes. Quantification of excavated amphoras is also helpful in indicating the remarkable growth of olive production in Roman North Africa and vicissitudes of wine production in prosperous Italy.

800 BC to 300 BC. He aims at coordinating the primitivism with the economic growth in archaic and classical Greece from an archaeological viewpoint, taking production and consumption per capita into account. The best example in the field of Roman history is Hopkins’ article published in JRS 70 (vid. n.6), in which the author suggests the economic prosperity of the Roman world from 200 BC to AD 200 on the basis of A. J. Parker’s underwater archaeological research of shipwreck sites in the western Mediterranean. Hopkins, op.cit. pp.105-106. This archaeological result is referred to in some articles of Cambridge AE (vid. n.11) too. W. V. Harris, The Late Republic. ibid., pp.533-535; N. Morley, The Early Roman Empire: Distribution. ibid., p.572; W. M. Jongman, The Early Roman Empire: Consumption. ibid., p.612. A. Wilson, Approaches to Quantifying Roman Trade. In: Oxford AE (vid. n.11), pp.219-229, however, acutely discusses the points at issue of shipwrecks as historical materials.

35 Y. Garlan, Greek Amphorae and Trade. In: Garnsey et al. (eds.), Trade in the Ancient Economy (vid. n.6), pp.27-35 is useful because of indicating amphoras’ value as historical materials and the points at issue. While Garlan’s argument is based on the case of classical Thasos, Lawall’s study focuses on amphoras produced in Chios from the end of the sixth century to the end of the fifth century BC. M. Lawall, Ceramics and Positivism revisited: Greek Transport Amphoras and History. In: H. Parkins-C. Smith (eds.), Trade, Traders and the Ancient City. London, 1998, pp.75-101. Referring to the relationship between the modal transition of amphoras and the political fluctuation of contemporary Chios, Lawall puts confidence in the contribution of archaeology to the political and economic history. Whereas Garlan leans toward primitivism, Lawall shows intimacy with modernism. However, it is interesting that both of them pay attention to the relationship between elite landowners and the production of amphoras as well as their distribution. As for Hellenistic amphoras, refer to the elaborate work of M. Lawall, Amphoras and Hellenistic Economies: Addressing the (Over)emphasis on Stamped Amphora Handles. In: Liverpool AE 2 (vid. n.11), pp.188-232. Regarding Roman amphoras, refer to the following articles in Cambridge AE for the nonce. Harris, The Late Republic. ibid., pp.532&535; D. P. Kehoe, The Early Empire: Production. ibid., pp.546, 554-556, 560, 562; Morley, The Early Roman Empire: Distribution. ibid., pp.573, 580-581, 590; E. Lo Cascio, The Early Roman Empire: The State and the Economy. ibid., pp.638&641. As for the Roman amphoras as historical materials, A. Wislon’s critical opinion is naturally to be referred to. Wilson, op.cit. (vid. n.34), pp.229-237.


Although these investigations based on amphoras offer evidence against Finley’s rather static view of economic history, there are some drawbacks to the quantification of archaeological materials, not to speak of the contingency of discoveries. Texts, literary and epigraphical, also have their own flaws. Classics survive the selection in Roman and Byzantine times, and inscriptions have accumulated more rigorous experiences than the classics, for example, utilization as architectural stones, weathering with lapse of time, missing transcribed texts, as well as the contingency of discoveries. However, there has recently been growing interest in archaeological materials, and they should be handled with greater circumspection. It would not do to make an exception in the case of amphoras alone, even though they were representative goods for daily living in the Greek and Roman world and have been so extensively discovered that the quantification seems to be meaningful. Most of archaeological materials happen to be discovered unexpectedly under specific conditions. Though they often prove fruitful in interpreting individual problems, therefore, in the cases of major problems such as the growth and decline of the Roman economy, it is not only necessary to conduct an exact quantification of the data, but they must be integrated with the results of investigating related sources, literary or epigraphical.

Nonetheless, there is every reason to expect that archaeology will greatly contribute to the discussion on economic growth, because it is helpful in confirming, for example, standards of living and the level of technology. Archaeologists as

\[\text{Panella-A. Tchernia, Agricultural Products transported in Amphorae: Oil and Wine.} \text{ibid., pp.173-189. Giving attention to amphoras excavated at Rome and Ostia as well as remains in producing areas, both articles infer the growth of Roman economy. Their attitude implies modernism.}\]

\[\text{38 From this viewpoint, Hitchner and Suto criticize Finleyan theory. Hitchner, op.cit. (vid. n.37), pp.71-72, 76, 80-81; Suto, Greek Civilization (vid. n.36), pp.340-342.}\]

\[\text{39 Combining extant fragments into an epigraphical text also occasionally shakes the reliability as historical material. R. S. Stroud illustrates the fact by two examples regarding the Delian League, IG I^3 259-272, 273-280 (the tribute lists) and IG I^3 1453 (the coinage decree). R. S. Stroud, The Athenian Empire on Stone. David M. Lewis Memorial Lecture Oxford 2006. Athens, 2006. The vulnerability of both texts originates in the discovery of new fragments kept idle respectively in the Acropolis Museum and the Archaeological Museum of Thessalonika. ibid., p.15n.7&p.22. It suggests that the history of the Delian League as well as the texts themselves might be revised in the future.}\]

\[\text{40 Garlan, op.cit. (vid. n.35), pp.28-32. In terms of Greek amphoras, Garlan suggests their limits as historical material in detail.}\]

\[\text{41 The following articles in Bari AE (vid. n.11) take a sceptical view of the recent trend giving archaeology absolute priority. Bang et al., Introduction. ibid., pp.14-15; K. Greene, Archaeological Data and Economic Interpretation. ibid., pp.109-136, esp. pp.112, 117, 130-131; H. G. Ziche, Integrating Late Roman Cities, Countryside and Trade. ibid., p.272.}\]

\[\text{42 Morris, op.cit. (vid. n.25&34).}\]
well as historians are expected to evaluate the quantification of excavated artifacts and sites, integrating with such sources as the classics, documentary papyri, inscriptions and coins. That is one of the most important problems for research on the ancient economy.\footnote{44}

\footnote{43} K. Greene, Technological Innovation and Economic Progress in the Ancient World: M. I. Finley Re-considered. EcHR 53, 2000, pp.29-59. Greene criticized seriatim Finley’s arguments developed in the same journal thirty five years earlier (M. I. Finley, Technical Innovation and Economic Progress in the Ancient World. In: id., Economy and Society in Ancient Greece. London, 1981, pp.176-195) on the basis of recent archaeological research. Greene insists that slavery was not the decisive factor of the technological stagnation, and that the development of ancient technology is to be discussed on the model of the Roman economy. He emphasizes the imperial government as a firm foundation of such economically effective constructions as aqueducts, roads and various sorts of public edifices. One of A. Wilson’s articles, which is concerned with mining and agricultural devices, also thinks much of the role of Ptolemaic dynasty or Roman empire. A. Wilson, Machines, Power and the Ancient Economy. JRS 92, 2002, pp.1-32. In Part I of Cambridge AE (vid. n.11&21), H. Schneider, Technology. ibid., pp.144-171 gives a useful overview of technological improvements in Hellenistic and Roman times. Remarking on agriculture as well as production \textit{per capita}, Schneider leans toward primitivism. Contributors in Parts V, VI and VIII appear to be intimate with primitivism (Harris, op.cit. (vid. n.34), p.538; Kehoe, op.cit. (vid. n.35), pp.547-549, 551-553, 559; Morley, op.cit. (vid. n. 34), p.589; A. Giardina, The Transition to Late Antiquity. ibid., pp.764-765) or quasi-modernism (Lo Cascio, op.cit. (vid. n.35), pp.625&647) from their respective points of view on ancient technology.

\footnote{44} Besides Morris’ article in Stanford AE (vid. n.25&34) paying attention to the neighboring disciplines too, work of Copenhagen Polis Centre should be mentioned as an imposing example. Hansen-Nielsen (eds.), An Inventory of Archaic and Classical Poleis (vid. n.14); M. H. Hansen, The Shotgun Method. The Demography of the Ancient Greek City-State Culture. Columbia (Missouri), 2006; Hansen, Polis. An Introduction (vid. n.16), esp. Chap. 11-13 (pp.67-84). Integrating the results of surface surveys of about one thousand poleis with other evidence, Hansen concludes that in Fourth-Century BC Greece half of the total population lived within the town walls. Hansen’s demographic study is naturally related to modernism. In Cambridge AE (vid. n.11) the following articles exemplify the significance of surface survey. Osborne, op.cit. (vid. n.9), p.287: Davies, op.cit. (vid. n.9), pp.334&349; Harris, op.cit. (vid. n.34), p.525. As an individual study of a surface survey in Bari AE (vid. n.11), taking note of integrating the result with other materials, I would like to mention M. Ikeguchi, A Method for Interpreting and Comparing Field Survey Data. ibid., pp.137-158, which discusses the structure and chronological fluctuations of agriculture at six areas of central Italy through quantifying the result of previous field surveys. The author refers to the so-called agricultural crisis in the first century Italy. His archaeological investigations of Roman Italy were later developed in a dissertation submitted to the University of Cambridge. vid. n.52.


As a recent example collating archaeological materials with documentary papyri, A. Bowman-A. Wilson, Quantifying the Roman Economy: Integration, Growth, Decline? In: Oxford AE (vid. n.11),
IV

Studies of Hellenistic and Roman economies particularly stress the result of archaeological research, because in both fields relevant materials have been increasing recently. Historiography is always based on extant materials. For Finley, a historian of archaic and classical Greece, primary sources were the classics, and inscriptions. What is more, he was under the influence of M. Weber. Taking part in the aforesaid controversy, Weber analyzes two ergasteria of Demosthenes’ father described in Demosthenes XXVII. They are both devoid of their own workshops. These factories are virtually composed of fifty two or three slaves producing knives and beds. Being unorganized as a cooperative system depending on specialization, they are arbitrarily divided and sold by their owner. Moreover, an Athenian manufactory is usually just a part of the property, when the owner is a wealthy citizen or metic.45 According to Weber, ancient Greek states were communities of warriors, whose lives were based on the ownership of lands and slaves. Politai, full members of poleis, therefore, fundamentally had no consciousness as producers or entrepreneurs but rather depended on returns their slaves brought in. They were, Weber concludes, intrinsically consumers relying on the income from interests (‘Rentner’). On the methodology of the ‘ideal type’, Weber formulates early republican Rome as well as archaic and classical Greece as a world of city-states, based on a rigorous status system dividing inhabitants between landed citizens and non-citizens including slaves as the lowest social stratum. He contrasts Greek and

Roman cities with European medieval cities where merchants and craftsmen took the initiative in civic activities, both political and economic.46

Finley describes the socio-economic framework of classical antiquity composed of city-states under the influence of Weber’s theory, using classics and inscriptions as the main sources. It was more significant for him to show the features of Greek and Roman societies by a methodological concept of the spectrum of statuses than quantifying production and distribution in the ancient world and comparing its ‘growth’ with that of early modern Europe. His view of the ancient economy is naturally related to the study of slavery.

On reflection, it is also natural that the Stanford collaborators are generally not interested in slavery, because they pay attention to the synchronical features of the economy and stress the significance of quantification. Throughout the collection only two contributors mention the significance of slavery. While Bedford, an orientalist, refers to bondmen caused by debt or conquest with a mind to Finley’s theory47, Bagnall, a specialist on Roman Egypt, discusses the decline of slavery in late antiquity. The latter, however, is not concerned with Finley’s dynamic interpretation of late antiquity that polarization of Roman citizens into honestiores and humiliores made the mass employment of slaves unhelpful.48

48 Bagnall, op.cit. (vid. n.26), pp.195-196. Considering servile statuses in Roman Egypt with both coloni and slaves in mind, Bagnall rather focuses on the latter and indicates the following facts. First, though Egyptian slaves were usually employed in urban households, there was a custom in countryside that peasants fostered deserted infants and sold them to urban families as workers. As for the relationship between deserted children and slavery, R. Motomura, The Exposure of Infants and Slavery in the Roman World. Tokyo, 1993 (in Japanese) has previously discussed in detail, depending on relevant materials inclusive of documentary papyri. Second, in terms of the decline of Egyptian slavery in late antiquity, Bagnall refrains from expressing his opinion, because of unknowability of economic fluctuations resulting in inefficiency of slave employment.

It should be further mentioned that there is a radical difference between Finley’s attitude toward the ancient world and that of the Stanford group. While the Stanford group is inclined to attempt quantifying distributions of resources and artifacts and considering both the Orient and classical antiquity as a unified world, Finley overlooks them from his own viewpoint based upon comparative research on serfdom. Finley’s theory of ancient economy is not a dichotomy. It comprises both Greco-Roman and Oriental worlds under his methodological concept of the ‘spectrum of servile statuses’. Reconsidering the position of prosperous regions in classical antiquity from the viewpoint of labor force, he concludes that the Orient and the underdeveloped regions of Greco-Roman world were the mainstream of ancient economic history.

It is noteworthy that Euro-American specialists of ancient history have recently been interested in the history of pre-modern Asia, particularly China. The Stanford collection gives us a glimpse of this trend. Its introduction by I. Morris-J. Manning suggests the influence of globalization on historians. The coeditors highly value P. Horden-N. Purcell’s ambitious work, which describes a universal history of the Mediterranean Sea as developing with the mutual exchange between small areas around the sea, and explain the significance of comparing the economy of classical antiquity with that of England before the Industrial Revolution or that of pre-modern China, in particular, the Song dynasty. They assume a positive attitude toward exo-eurocentrism. Exo-eurocentrism per se is persuasive and the end of Cold War as well as the drastic development of information technology have certainly promoted the recent prosperity of ‘Global History’. But I do not agree with Morris-Manning...

159, 161-162. The aim shared in common by four articles cited above is to give the economy of Greco-Roman Egypt an appropriate position in the ancient history, going into details based on the recent result of papyrology. Manning’s comprehensive description in Cambridge AE (vid. n.11), stimulated by Finlyean theory, shows the influence of Hopkins’ model. J. G. Manning, Hellenistic Egypt. ibid., pp.434-459. As for basilikoi georgoi, vid. pp.451-453.

49 Morris-Manning, op.cit. (vid. n.23), pp.19-25.


51 In Japan two books have been published (both in Japanese) on comparative studies of the East and West. T. Mizushima (ed.), Challenges of Global History. Tokyo, 2008; O. Saito, A Comparative Study of Economic Growth in the East and the West. A Historical Approach. Tokyo, 2008. While the former is a compact collection of articles surveying recent trends of global history with various viewpoints and methods, the latter aims at going deep into the comparative study of economic growth in Japan and England, keeping in mind the circumstances of other European and Asian countries too. The former includes K. L. Pomeranz’s essay, and the author of the latter, Saito, has published many articles in English hitherto. As for the research of Chinese economic history, K. G. Deng discusses in detail, asking the question why pre-modern China, despite having constructed a firm system of imperial government with the highest level of technology, was outdone by European countries in modern times. K. G. Deng, A Critical Survey of Recent Research in Chinese Economic
on their denying the Weberian and Finleyan theories as Eurocentric. The final aim of historiographers is to interpret the true nature of their own society. It is therefore a matter of course that Weber and Finley turn their attention to the origin of modern Europe, in which they have the foundation of existence. Weber’s sociology of religion should be recognized as a kind of global history notwithstanding being a torso, and Finley’s economic history also has the seeds of worldwide history for reasons to be given later.

Though the Stanford collection is remarkable as a cooperative attempt to engage in a constructive criticism on the Finleyan theory, the collaborators still remain at the threshold of research. It is most impressive in comparison with Finley that they do not succeed in proposing a useful framework to describe the historical dynamics of the ancient world. The Finleyan theory has incessantly been criticized by specialists of Greek and Roman economies. The ancient economy can no longer be narrated without referring to this trend. It seems rather to imply that a coherent opinion offered by a prominent historian has still the potential to make sure of the way to take for research on the ancient economy.52

---

52 In a methodological essay, Morley criticizes Finleyan theory because of its lack of the viewpoint of historical development. N. Morley, Narrative Economy. In: Bari AE (vid. n.11), pp.41-42. But as aforesaid, Finley discusses not only the decline of slavery in late antiquity but its formation with reference to Solonian reform. In view of the position of slavery in Finleyan theory, he is considered to pay attention to the historical dynamics of the ancient economy in a non-narrative framework of his own. Two recent articles, long and short, seem to show paradoxically the continual influence of Finley’s theory. M. Ikeguchi, The Dynamics of Agricultural Locations in Roman Italy. Diss. Cambridge, 2008, pp.4-5; J. Osgood, a book review on Cambridge AE (vid. n.11). CJ 105, 2010, pp.370-374. They refer both to the Finleyan theory, of course critically, at the outset of their arguments.

Moreover, his theory appears to permeate into recent descriptions of ancient economic history, particularly those of late antiquity. In Bari AE (vid. n.11) Jongman emphasizes the poverty of lower citizens and the fall of their legal position, in particular, as a result of the Antonine edict. W. Jongman, The Rise and Fall of the Roman Economy: Population, Rents and Entitlement. ibid., pp.247, 252 n.42. In the same collection Ziche also discusses the affluence of central and local elites in connection with their dependence on the colonate. Ziche, op.cit. (vid. n.41), pp.260-261, 267-268.

This fact is more obvious in Cambridge AE (vid. n.11). Jongman argues under the shadow of Finley that in late antiquity the extreme concentration of wealth in imperial elites overwhelmed Roman citizens and so notwithstanding the decrease of population the former could get hold of the latter’s manpower at a reduced cost. Jongman, op.cit. (vid. n.34), pp.602, 616-618. Giardina’s
The Finleyan theory has the advantage of centering on his own opinion about slavery in a broad sense, within which various types of serfs are included as well as chattel slaves. It should be emphasized that the methodological concept of ‘spectrum of servile statuses’, giving the people ranked between freemen and slaves a definite position in each society, is able to propose a socio-economic framework for worldwide history. Servile people, chattel slaves or various kinds of serfs, are universally corroborated in all times and regions before the modernization. Their names, origins, forms of employment and legal positions respectively have great variety. The conditions, in which these people were situated, are related to fundamentals of pre-modern world. The relationship between servile people and freemen, in particular the lowest stratum of the latter, for example, the ratio among the total population, the social mobility, the roles in production and distribution, are all indispensable matters for historians to understand the feature of each society concerned. If they further reflect upon the comparison with other societies, it will be a helpful means to make sure of the historical position of that society. Slavery in a broad sense is a subject related to almost all fields of world history. The comparative history of slavery is therefore significant and the result is anticipated because of the abundance of relevant studies in respective countries.53

opinion gets closer to Finley’s theory of slavery. Emphasizing the significance of colonate and referring to the stratified structure of labor force with slaves at the bottom, Giardina explains that the criminal systems with differentiation based on social strata, originating from the Hadrian age, were the legal and ethical background of oppression over lower citizens. Giardina, op.cit. (vid. n.43), pp. 748-753, 761-762. Bang also touches on the fact that since the second century the differentiation between honestiores and humiliores began to replace the distinction between Roman citizens and free foreigners. Bang, The Roman Bazaar (vid. n.19), p.124. This sort of social differentiation is more recently remarked by R. Osborne referring to P. Garnsey’s study (vid. n.4). Osborne, op.cit. (vid. n.19), p.119. In Leister-Nottingham AE (vid. n.11), two archaeological researches on North African sites minutely criticize Finleyan theory, but the Introduction by the coeditors seems fundamentally to agree with Finley. D.J. Mattingly-D.Stone-L.Stirling-N.B. Lazreg, Leptiminus (Tunisia). A ‘Producer’ City?; A. Wilson, Timgad and Textile Production; D.J. Mattingly-J. Salmon, The Productive Past. Economies beyond Agriculture. ibid., pp. 3-14, 66-89, 271-296.

53 In Japan after the Second World War, particularly during the third quarter of the twentieth century, ancient slavery was one of the most important subjects for historians. Their research yielded rich harvests both methodologically and empirically. I would like to propose again to review the work Japanese historians provided for comparison. The Finleyan concept of spectrum of servile statuses will find useful witnesses in pre-modern Japan and China. S. Ito, The Greek Slavery in Ancient History: Finley’s Theories Revisited. Legal History Review (Tokyo) 55, 2006, pp.121-154 (in Japanese with English summary pp.10-11). In addition to the standard works cited in my review article above (p.151n.70), an exciting article may be suitable to be mentioned here: B. Tsunoda, Servile People of a Temple in Ancient Japan: A Case of Manumission. In: id., Development of
If it is permissible to add a remark, the first to be ready for use in worldwide comparative history is to select the most suitable periods and regions from the East and West under specific criteria and to clarify the scope of the problems. Bang’s work 54 and a book written and edited by W. Scheidel 55 are both persuasive methodologically and suggestive for empirical research in the future. The comparison of economic growth between the Roman empire and modern Europe 56 is also meaningful in spite of criticism by A. Bowman-A. Wilson 57. Hopkins-Saller’s theory is a hypothesis for the revision of Finleyan theory. It has been playing an active part in intensifying studies of the ancient economy. The collection edited by Bowman and Wilson is itself proof of this.

While appreciating the revisionists’ work originating from Hopkins, I suggest the following as a student of ancient Greece. First, recent trends in ancient economic history lean toward trade and finance rather than the production of artifacts. Within this current, it is relevant that economic historians seem not to be very interested in slavery. I think that slavery should be more ardently discussed among economic historians, not least because the Finleyan model’s ‘spectrum of servile statuses’ is effective for examining comparative history even from a worldwide viewpoint. 58

---

54 Bang, The Roman Bazaar (vid. n.19).
55 Scheidel (ed.), Rome and China (vid. n.51).
56 Saller, op.cit. (vid. n.22), pp.228-231.
57 Bowman-Wilson, op.cit. (vid. n.44), pp.28-30, 36-41, 44-46.
58 Nevertheless extensive studies in Greek and Roman slavery by the Mainz group is worthy of attention. Ito, op.cit. (vid. n.53), pp.123&136 n.8-11; p.150 n.69 (I. Weiler’s work). My question raised in note 69 about slavery in late antiquity is now solved by some articles cited above (vid. n.52). The Mainz group has been publishing a colossal corpus of Roman legal materials concerning slavery. e.g. G. Klingenberg, Juristisch speziell definierte Sklavengruppen 6: Servus Fugitivus. Corpus der römischen Rechtsquellen zur antiken Sklaverei Teil X. Stuttgart, 2005. A research project centered at Trier University about the servile labor force from the viewpoint of world history was also launched. Sklaverei • Knechtschaft • Zwangsarbeit. Untersuchungen zur Sozial-, Rechts- und Kulturgeschichte. Band 1: E. Herrmann-Otto (ed.), Unfreie Arbeits- und Lebensverhältnisse von der Antike bis in die Gegenwart. Eine Einführung; Band 2: S. Knoch, Sklavenfürsorge im römischen Reich. Hildesheim, 2005. In Band 1 are included two review articles. W. Nippel, Marx, Weber und die Sklaverei; H. Heinen, Das Mainzer Akademieprojekt „Forschungen zur antiken Sklaverei“: Geschichte und Bilanz, Perspektiven und Desiderate. ibid., pp.317-356, 371-387. I
Second, in terms of Athenian manufacturing and banking, the stability of prosperous shops may have been restricted by, for example, the public burden imposed on wealthy citizens and metics (leiturgia), as well as by the legal system which mandated partible inheritance. Although the ancient economy was certainly expect K. Bradley-P. Cartledge (eds.), *The Cambridge World History of Slavery I The Ancient Mediterranean World*. Cambridge (forthcoming) to attempt a comprehensive description accompanied with prospects for the future research.


I have investigated individual cases of Athenian manufacturing, mining and trading enterprises on the basis of forensic speeches and inscriptions, though sporadically, in detail. Ito, *Polis Society in Classical Greece* (vid. n.45), Part I Chap. 1-7 (pp.3-248). Despite the rule of partible inheritance, a sort of concentricity is often perceived among wealthy households concerning the main source of earnings. Polemarchos and Lysias, wealthy metics, were joint owners of the largest shield factory composed of over one hundred slaves, which they had inherited from their father Kephalos, though later seized by the Thirty Tyrants (Lysias XII). Athenian wealthy citizens had the desire to keep their households as intact as possible particularly in terms of hereditary immovables. *ibid.*, pp.303-350 in comparison with Hellenistic Tenos.

In Cambridge *AE* (vid. n.11&21), refer to W. Scheidel, Demography. *ibid.*, pp.70-73; Davies, op.cit. (vid. n. 9), pp.347, 349-350. While Scheidel considers the Greco-Roman household to be inclined often to form such an extended family as one of Eastern or Southern Europe, Davies seems to suppose the nuclear family to be a typical type in ancient Greece. I agree with both Scheidel and Davies in emphasizing the significance of household as the basic unit of economic activities. Bang also describes the function of extended household in the Roman commerce and finance comparing with the case of the Mughal empire. Bang, *The Roman Bazaar* (vid. n.19), pp.268-286. Saller’s view is much the same as Davies’. Saller says that though Greco-Roman households were often extended through their life cycle by including widowed mothers or unmarried relatives, they never adopted the extended household as a normative form. R.P. Saller, Household and Gender. Cambridge *AE* (vid. n.11), pp.90-92. Hansen seems to be of the same opinion as Saller’s. Hansen, *The Shotgun Method* (vid. n.44), pp.52-60. But I think that the significance of extended households should be approved even in classical Athens, because in addition to the evidence Saller and Hansen give, there are such cases as Pericles’ household with two adult sons (at least one of whom, Xanthippos, was married. Ito, op.cit. (vid. n.45) p.267 n.14. vid. Plut. Pericles 16&36) as well as not a few examples in the eastern provinces of the Roman empire or in the early modern Southern and Eastern Europe, which are recognized by the scholars of ancient Roman history or of historical
protected by the public authority, the activities of individual entrepreneurs were often controlled by legal and customary regulations.

The University of Tokyo, The Japan Academy

demography. S. Ito, An Introduction to Comparative Study of Ancient Greek Family. In: S. Ito-K. Kabayama (eds.), *A History of the Mediterranean World*. Tokyo, 2002 (in Japanese), pp.56-70. The Athenian families with their surrounding social groups from *anchisteis*, the close relatives, to *polis*, the citizen body, which respectively had ambiguous influences upon entrepreneurs in various ways, will continue to be interesting subjects for students of ancient social and economic history.