Chapter 2.3.1

Leagues and kingdoms. Beyond the city-state.

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JG Manning

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ed. Alain Bresson, Elio Lo Cascio and François Velde

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Leagues and kingdoms. Beyond the city-state[1]

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"The Hellenistic state never was an Hellenic state."

Ehrenberg 1969:138

This chapter examines Hellenistic states (305-30 BC) as economic actors. States do two primary, related, things. They (1) establish a "cognitive framework" (Greif 2006), as part of state making, and they (2) extract revenue. While Tilly (1992) emphasized four activities: statemaking, warmaking, protection, extraction, I subsume the first three under "statemaking." Rulers and elites did more than that of course, including acting in their own interest in areas such as trade (Gabrielsen 2001). There was a wide variety of state types in the Hellenistic world, and state equilibria were shaken by war, changing alliances and the rise of Rome. All Hellenistic states, some more than others, established new cognitive frameworks and extracted revenue through new institutional structures. I take an institutional approach and I argue that inter-state competition, mainly in the form of war, was the key driver in shaping these new institutions.

There were two basic state types, territorial monarchies, and, on the Greek mainland and the Aegean, cities, frequently joined in cooperation to achieve some territorial economies of scale in goods provisions. These states were systems of networks.

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The kings and their small courts were linked to each other by temporary political agreements, by correspondence, by marriages and by trade. These “shared cultural networks” and local identities extended beyond the political boundaries of a single state (Feinman 1998:101-02). The formation of “horizontal” cultural networks, a development from and extension of Greek *polis* culture, dialect and common cults, and the related phenomenon of cities connected to each other in formal legal arrangements known as “leagues,” can be understood as a political and cultural reaction to the dominant downward pressure of the Hellenistic Leviathans (Ma 2003:36).

Alexander's conquest in the late fourth century BC changed the Mediterranean world. New states were formed, older states, especially the Greek cities, made major adjustments in how they operated, and the institutional bases of societies around the Mediterranean world were altered. States competed fiercely with each other for resources. The immediate framework was the fourth century- the collapse of two dominant imperial frameworks, Athens and Persia, and the rise of Makedon on the Greek periphery. Political equilibria were difficult to establish, the immediate concerns revolved around the creation of what Eisenstadt (1993) called "free-floating resources," i.e. revenue.

The new territorial monarchies were "radically" (Chamoux 2003:250) different from the ancient Greek concept of city-state. Alexander did not merely open up the Persian empire to the Greek world; new states arose. The relative size of each Hellenistic state was, in turn, was determined by the level of military technology, the productivity of its resource base and its administrative costs. The size of Hellenistic states was an important *endogenous* factor in the economic history of the period (explored in Alesina and Spolaore 2003).

The spread of the Greek language among elites in the Near East and in Egypt created new identities and new social networks. In terms of economic institutions, much was old by the time Alexander reached Egypt and Mesopotamia. Political change happened at different rates, and was dependent on prior Greek settlement and political bargains with local society. Geography, war, and luck, to name three variables, all played their part in state building processes. As the new Hellenistic states emerged, they had profound effects not only in the public/royal sphere, but also in private economic activity through taxation demands and the circulation of coinage.

The three Leviathans, the Antigonid, Seleukid and Ptolemaic kingdoms, all continued imperial forms of state with a royal dynasty as their framework, while on the Greek mainland (primarily) cities grouped into larger cooperative units to scale resource mobilization primarily. The nature of monarchy in the Ptolemaic and Seleukids system differed substantially from the Antigonids in that the former two states were newer, personal regimes as opposed to the Macedonian tradition of "national kingship" (Ehrenberg 1969:141).

A range of things are difficult to calculate, from estimation problems (calculating secure population figures and revenue), the physical geography and complex eco-zones, the degree of economic integration between the states, the inter-annual variability of water (or rainfall in the northern Mediterranean, of the annual flood of the rivers in Mesopotamia and in Egypt) and hence of productivity of the land, the impact of the movement of population between regions (e.g. Celts/"Gauls" into the Hellenistic world, to internal colonization on new land as well as new population centers established by the kings; Cohen 1983, Reger 2003, Gauls: Strobel 1996, Cunliffe 1997, Mitchell 2003. But an appreciation of all these factors is essential for understanding state dynamics (expansion/contraction) (Turchin et al. 2006).

The Leviathans affected all other state actors, and directly and indirectly confronted each other on several occasions. Some cities in Greece, especially the smaller ones, associated themselves into "Leagues." Such state forms, while not new and certainly couched in Greek political terms, arose in response to the scale of the big three territorial, multi-ethnic imperial states. Scale mattered, but it was not just territorial size and the resources a king could mobilize. Chamoux (2003) rightly emphasized that there was no basis of citizenship in these new states. The Ptolemaic and Seleukid monarchies were personal regimes. That is clear from the wills in which Hellenistic kings left their kingdoms to Rome (Braund 1983), the court systems that were developed, and from the dynastic marriages that were an important feature of inter-state relations and frequently used as an alternative to war for acquiring territory. Boundaries between ethnic groups within the large states were more sharply defined by the fiscal regimes (Clarysse and Thompson 2006 for the Ptolemies).

The financing of Greek cities also changed. In some cases the financing came from wealthy citizens, and in other cases banks and local shrines (Delos is the most famous example) operated as creditors in virtual bond markets, underwriting long-term credit to other cities (Gabrielsen 2005). Underlying societies were little changed, local languages and religious practices continued. The increasing dominance of the Greek culture and the Greek language, vital in the administration of the kingdoms, and of Greek culture, on the other hand, created new identities, some of which, as famously in the Maccabean revolt, had destructive local consequences. Greek cities continued, and new ones with dynastic names sprang up. Ancient territories were thus re-inscribed in the ideology of the new Greek dynasties. Some older settlements, Rhodes for example, took advantage of the new economic realities of the last three centuries BC.

Institutions and governance and the NIE model

War made Hellenistic states, and Hellenistic states made war, to paraphrase the famous phrase of Tilly. Without question this fact shaped institutions and governance in the Hellenistic world, from Sicily and North Africa to Bactria and India. As Hannestad (2011) recently stressed, war did not always destroy territory, although there is very good evidence that it sometimes did (Chaniotis 2011:127-29). Others factors also shaped governance. The institutional basis of society was path dependent on fourth century institutions. Everywhere, religion provided both "access to local society" (Crone 1989:79) as well as a means of local populations to resist state demands. Hellenistic economies have been especially difficult to characterize because they were heterogeneous, reflecting the past history of a diverse eastern Mediterranean world dominated, or at least influenced, by two very different imperial regimes, Athens and Persia.

In the case of the Ptolemaic and Seleukid core territories, Greeks were generally in the minority of the population. Greek *poleis* within the territories were important sources of revenue for the kings. The Greek mainland, Ionia and the Aegean were, in contrast, subject to quite different political economies. That heterogeneity increased with the addition of near eastern economies and their diverse institutional and organizational structures. In that one sense, I think, unity in diversity, Hellenistic states may be said to exhibit “a unity in the form of state” (Ehrenberg 1969:142). Finley (1999:183) was right, for the wrong reasons, not to identify a distinctive “Hellenistic economy.” His division into an "ancient" and an "Oriental" sector in the world of the last three centuries BC is too schematic. There are many examples of the hybridization of institutions, of joining fourth century Greek institutions and ancient social practice of the Near East. Tax farming is one important example. But more generally, economies of the last three centuries BC were simply institutionally too heterogeneous, too regional and too fragmented to describe economic activity constrained by artificial periodization (Davies 1984:270).

The idea of kingship was hardly new to the Greeks, being the object of much political theorizing in the fourth century BC, but Hellenistic monarchy had new features shaped both by historical experience and contemporary needs. The concept of "Victory" and the image of the king as charismatic war leader can be traced back to Homer (and further in the Egyptian and the Near Eastern traditions) but it took on more immediate meaning in the Hellenistic context of royal ideology and image making galvanized by Alexander. Military settlements were an important aspect of state making especially in the Ptolemaic and Seleukid kingdoms. Other kinds of settlements, organized into *politeumata*, or ethnic communities, and *katoikiai*, were important in establishing a political framework for administering the state. This was largely a Greek military framework, but some Jews were also so organized (Honigman 2003). Hellenistic societies were particularly complex in the Ptolemaic and Seleukid kingdoms. Taking states as equilibria, political agreements, required in part by asymmetric information between kings and local society, occurred by royal "signaling" (through military victory, royal decrees, tax exemptions, festivals) and local response, had to be made between local societies and the kings. In this case the dynamics, top down, was the opposite of Michael Spence's signaling model (2002).

New Institutional Economics offers an important set of tools by which to analyze the relationship between institutions and economic performance (North 1990:3, Aoki 2001:10, Scott 2001, Greif 2006, Clark 2007, Ogilvie 2007, Ogilvie 2011). While there remains great difference in opinion about both the origins of institutions and how they affect growth, it is certainly important to consider why institutions matter (Engerman and Sokoloff 2008). I follow Ogilvie (2007) in understanding institutions as "the structure of humanly devised rules and practices constraining economic decisions." More recently though Ogilvie (2011) has argued that institutions, because they survive over time, were not necessarily efficient or supportive of real economic growth. Rather, institutions can be the result of political economy and the conflict between constituent groups over the allocation of resources. The governance structure of the state, the institutions of the economy, the structure and enforcement of property rights, the predictability of bargaining and legal enforcement, "protection services," as illustrated by Byzantion's protection of trade (Gabrielsen 2007) and lowered transaction cost (e.g. contract enforcement) environment offered by states all must be a part of assessing the economic performance. We must consider not just state aims, however, but also institutions and legal rules but also social norms, beliefs (to the extent we can get at them), rent-seeking behavior, and external shocks. Contrary to the usual explanation that institutions exist and persist because they are efficient solutions that solved a particular problem, Ogilvie reminds us, that in fact they need not be "efficient" --transaction cost reducing mechanisms leading to an optimum distribution of resources-- and institutional change need not be path dependent.

Ogilvie suggests other things that are pertinent in understanding economic and fiscal developments in the Hellenistic period, among them the broader effects of institutions on society, the exclusion of people from an institution that leads to “black markets,” a consideration of the overall “framework of institutions,” and a balance between beliefs and rules. Certain features of local Hellenistic economic behavior illustrate important institutional change. Hellenistic political economies lowered transaction costs to private transactions in several important ways, but above all in contract enforcement. Increasingly the state is found as third party guarantors in private transactions. That is documented in Ptolemaic Egypt with the new *agoranomos* contracts, and in slave sales on Delphi and elsewhere.

Ancient states and the political determinants of economic growth: Revenue versus reinvestment

Mancur Olson’s famous “roving/stationary state model (McGuire and Olson 1996, Olson 2000) provides a useful way of thinking about the role of incentives and the provision of public goods (explicit inter alia in the Canopos Decree, 238 BC, from Ptolemaic Egypt: care for animal cults, defense of the state, food supply in time of crisis) in Hellenistic states. Roving bandits did not stimulate production. In contrast, a stationary bandit (i.e. a king), by sending signals that a certain, sustainable, level of taxation was demanded, and by protecting the territory (providing a legal framework), and creating the expectation of a long time horizon (a dynasty), generated an incentive to produce and a longer term capacity both for taxation and for wealth creation. Demetrios Poliorketes (and to a certain extent the Seleukid kings) is a good example of a roving bandit, and Ptolemy provides the contrast as a stationary bandit. In return, by monopolizing tax revenue, the ruler had an incentive to provide public goods. The "invisible hand" of constraint or "commitment" is caused by (1) the potential dead weight loss of overtaxing society and (2) the incentive of providing public goods increases revenue capture by the ruler (Haber et al. 2003). There is a happy medium in which "intermediate levels of taxes that both encourage investment by citizens and leave enough surplus for the ruler to entice him to invest in public goods" produce "good economic outcomes" (Acemoglu 2005:1203).

The challenge for Hellenistic states was in the selection of the taxation rate in a world of imperfect information, erratic tax collection and rent-maximizing attitudes of the Leviathans. The Ptolemies fell in the category of high taxers/high public goods providers, and come perhaps close to Acemoglu's (2005) "consensually strong state." States that taxed at higher rates probably had more influence over their economies than "weaker" states (Acemoglu 2005). Other states were lower taxers/lower public goods providers. Shorter time horizons (driven by political insecurity) could lead rulers to less constrained tax policies (Monson forthcoming). It is therefore not the fiscal system *per se*, as Turner (1984) argued, but rather the dynamic, changing political landscape that caused strain on, but also produced incentives in, political systems. Political economies, in turn, might have led to higher tax rates and greater official abuse.

For democracies or "open access" societies (North et al. 2009), where there is an even greater "encompassing interest" (McGuire and Olson 1996:73) in the society, the majority benefits from distributing income widely. Olson's conclusions are that self-interested stationary bandit states can produce good economic outcomes by being constrained by society and the potential for "social loss" by either not distributing income across society or by having confiscatory tax rates.

The ability of a state to extract resources, and the social organization established for this purpose, defines a state's economic power (Mann 1986:24). On one end of the spectrum, "strong" states are able to tax without constraints, and thus are prone to tax at too high a level, skimming off the benefits of production that create growth. "Weak" states, on the other hand, are unable to control (or "monopolize" violence) and to raise taxes over the long run and thus do not invest in public goods (Acemoglu 2005). State size, taxation rates and the relative monetization of the economy as well as the structure of governance dictated the level of influence of a state over economic activity in its territory. Monarchies may have tended to intervene more often and more directly than did "aristocracies" but even in the kingdoms the evidence is clear that there was an opening up of private economic activity and organizations, increased market exchange aided by monetization of local economies and a continuation of ancient land tenure conditions that allowed for private ownership (Lo Cascio and Rathbone 2000:3; Manning 2003).

There was a variety of possible equilibria, including what Acemoglu refers to as a "consensually strong state" equilibrium, in which, by consensus, the state taxed at a higher rate. Equilibria and growth, however, can be reached both by autocratic and democratic states, but constraints on the ability of states to tax, or weakness to control its population, can also inhibit economic growth (North 1981). All of these equilibria are documented in our period, and war was one of the main drivers.

Structural drivers of Hellenistic Economies I: War without end

The Hellenistic period was a time of nearly relentless war, in some ways merely a continuation of the fourth century Greek world played out on a larger stage. The military machinery of the state and the revenue to sustain it was the main concern of Hellenistic rulers, although state revenue (including that not taken by the king) was spent on things other than waging war (contra Serrati 2007:479). It was above all else war that shaped the economies of Hellenistic states and gave them their new character (Austin 1986, Chaniotis 2005, Fischer-Bovet 2008:137-56). This was true of the Leviathans as well as the cities whose fiscal institutions differed sharply from those of the territorial monarchies (Chaniotis 2011). Military fixed costs (salaries, machinery) and the prosecution of war (surely co-variable) occupied a considerable portion of state income and budgets (Fischer-Bovet 2008). The acquisition of booty (Préaux 1978:366-70, Austin 1986, Chaniotis 2005:129-36), as well as dynastic politics, were important factors in decisions to fight (Austin 1986, de Callataÿ 2000, Chaniotis 2005, Serrati 2007, Fischer-Bovet 2008)..

War was a "defining element of the Hellenistic world" (Serrati 2007:461). City-states without a tradition of direct taxation perhaps bore a greater burden, levying armies, building defensive structure, paying off kings for protection, than did the major states (Chaniotis 2005:115-21). The Leviathan's had more resources in land that could be used to settle soldiers in their territory. The minting of coinage is strongly correlated to war (de Callataÿ 1997). The "rules of war" were different in the Hellenistic period, and, as Heinen (1984:420) puts it well, "there was no policy of equilibrium in the sense of a mutually accepted principle." In contrast to the more orderly rules of war in classical

Greece (overview in Laani 2008), armies were larger and more expensive. War could produce far more destruction and often lasted far longer. Witness, for example, the six Syrian wars between the Seleukids and the Ptolemies fought between 274 and 168 BC, lasting a total of twenty-six years. But battles did not always determine the course of the conflict. There were other issues that created feedback loops, namely the dynastic marriages and offspring from them that brought together, in a volatile mix of territory, legitimate claims to rule and war.

There was a connection between war and establishing legitimate claims to rule. So, for example, the Third Syrian or "Laodikean" war (246-241 BC), fought between Ptolemy III and Seleukid forces for the succession of the Seleukid throne to which the son of Ptolemy's sister Berenike, the wife of Antiochos II, had a claim Heinen 1984:420-21, Serrati 2007:480). In the case of Telmessos in the 280's BC, the legal conveyance, the *deditio in fidem* (Eckstein 1995), and the subsequent protection of the territory by Ptolemy, preempted war in this part of Asia Minor. Nevertheless, the personal relationship between the king and his territory was intimate, and despite developments of more impersonal institutions in the Hellenistic states, this remained true. These personal connections between territory and sovereignty had "much to do with the continuous wars of the Hellenistic period" (Mileta 2002:164).

Structural drivers of Hellenistic Economies II: Circulation of coinage, open or closed

Coinage and the circulation of coinage was another important driver of Hellenistic economies, in which the large states played the most important role (Mørkholm 1991). Coinage was a symbol of state sovereignty, and unsurprisingly the iconography on

Hellenistic coinage in many cases was explicitly linked to war. But coinage also played the key role in state finance and in the creation of state revenues to pay for war, festivals, palaces, public buildings and other projects (Bresson 2005). States, therefore, controlled output of coinage and interest rates. The process of monetization created opportunities in the fiscal arena (e.g. in tax farming and banking) and in trade. Hellenistic states show a variety in how coinage was issued, all of them had an interest in issuing high quality coins with very high percentage of silver or gold unless they had reached a major crisis, as the Ptolemies had by the mid-second century BC (Bresson 2005:65).

Some Hellenistic states (the Ptolemies, Rhodes, the Attalids) attempted closed currency systems. The Ptolemies, with its mint at Alexandria, were the most famous case, forbidding the circulation of non-Ptolemaic issues within Ptolemaic territory. Ptolemaic coinage was minted on a lighter standard the Attic "international standard," and did to a certain extent circulate outside of the Ptolemaic sphere. Closed currency regimes were a mechanism of state fiscal control and also a necessary one given Egypt's lack of silver and an unstable money supply (Bresson 2005:63, Von Reden 2007). The use of coinage in the taxation system was new. In southern Egypt at least, the issuance of tax receipts, issued through royal banks is also a new feature of the state fiscal structure although receipts issued by temples are known from earlier periods.

The Seleukids had several mints, located mainly in the Persian satrapal capitals (Aperghis 2004). The high number of mints is probably due to the size and complexity of Seleukid territory and a reminder that the ancient Near East under the Persians was more heavily monetized than other places (Vargyas 2004). It has been argued that, as with the Antigonids, the Seleukid policy was simply to replace the Attic standard coinage in circulation except in case of need caused by military campaign (Aperghis 2004:236).

Unlike the Ptolemies, the Antigonid kings did not attempt to impose a monopoly on its own coinage within its territory, but allowed "international" Greek coinage on the Attic standard to freely circulate (Panagapoulou 2001). Both the Seleukids and the Antigonids, it has been argued, issued comparatively a small number of coins, primarily for replacing coins that had gone out of circulation (Bresson 2005:57-58).

The mobilization of labor was probably a heterogeneous and traditional system everywhere, a combination of traditional service levies by town or village, slave labor, and contract. In Egypt where practices are best documented, there is evidence for forced labor in mining and there was a market for domestic slaves. On land, free labor dominated and there is little evidence for forced labor in agricultural production. In general the relationship between the state and labor was contract, a continuation of the Persian period.

Structural drivers of Hellenistic economies III: Variability of revenue

Book II of pseudo-Aristotle's *Oikonomika*, probably to be dated to between 325 and 270 BC, provides insight into the fiscal structures of Hellenistic states and the basic template for state revenue for the Leviathans (Aperghis 2004, Briant 2002:388-90, Brodersen 2006). They were as follows: revenue from land (called either *ekphorion* or *dekatē*), revenue from natural resources, market transactions, sale taxes, revenue from animals, revenue from capitation taxes, and, finally, "extraordinary" revenue (war booty and the like). The book, probably a guide for a Seleukid state agent, begins with a brief theoretical description of four economic spheres: royal, satrapal, city-state and private. There follows a collection of stories about various methods of collecting revenue.

Broadly speaking, Hellenistic rulers were revenue optimizers ands rent maximizers. But to make an overall assessment of a Ptolemaic or Seleukid tax rate is, I think, likely to mislead. Collection would have varied from year to year, perhaps significantly. Variables include climate and political unrest. It is not easy to assess early Hellenistic fiscal structure and revenue. The evidence, as slight as it is, is consistent with the view that early on plundering of Persian treasuries and other booty was a major source until fiscal systems were in operation in the 270's BC in the aftermath of the wars between the *Diadochoi* (Serrati 2007:465-69). Booty, of course, was rather more a regular part of privateering within the Aetolian League, which was too weak to regulate it (Scholten 2000). Those lucky enough to be able to exploit grain resources such as Ptolemy I were surely establishing economic patterns for the future. Assessing the structure of state revenue is easier than assessing amounts collected dynamically, almost all of our information about total state revenues come from literary sources, or from often vaguely datable tax receipts.

The fiscal structure is extensively documented for the Ptolemaic state, less so for the others. We may assume general continuity with earlier structures. The Seleukids probably also taxed land proportionate to production. The Antigonid fiscal system is the least well known, certain features appear similar to Ptolemaic and Seleukid ones--billeting of soldiers, tributary payments in coin and in kind from cities. In all these cases we can at best give estimates of revenues but we cannot assess collection of revenues over time. For the Ptolemies, our meager sources leave us largely in the dark on the fiscal system of Ptolemy I. The documentary evidence is consistent with the view that it was established around 270 BC. In the south, the fiscal system appears in the documents a little later, but certain by the 220's BC (Manning 2003). There were new features of the state fiscal system of the Ptolemies, including the use of tax receipts that provide valuable information of types of taxes in Upper Egypt (Muhs 2005). On the basis of these receipts, and from registration and sale tax receipts on property transfer documents, taxes appear highly localized or targeted, and extensive. The traditional payments in kind from ancient times were continued, and taxes traditional collected by temples were taken over by the state. Taxes paid in coin were a new feature of the system. Temple finances appear to have centralized with the payment of the *syntaxis* by the state.

The main form of revenue came from the taxation of agricultural production in kind. Such harvest taxes were an ancient feature of the Near Eastern and Egyptian economies, the temples in both regions played key economic and managerial roles. The tax on land was not *sensu stricto* a "tithe" (Serrati 2007: 470, presumable from *dekatē* of the *Oik.* 2.4), but was either a share of the harvest or a "fixed amount" (Packman 1968; Vandorpe 2000). On royal land in some years it could be as high as 50% of the production, and in some cases a little more than that. On other categories of land (kleruchic, temple land), the tax collected was a fixed amount per surface area. The harvest tax was paid into royal banks in installments and receipts were issued. Other agricultural taxes such as that collected from vineyards, were demanded in cash. Auctions were used by the Ptolemies to an unknown extent to sell land that had become unproductive.

Successful rulers created an equilibrium by bargains with local society. Justice or protection was exchanged for taxes (Furubotn and Richter 2000). The Leviathans were authoritarian, militaristic, and were held together by a small ruling coalition consisting of the king, his court circle and the army. Beneath the small elite circle there was great variety in state institutions. The Seleukids and the Ptolemies inherited the Persian tributary system that was much older than the Persian empire (Briant 2002: 388-471). It has been common for historians to view Hellenistic states as "efficient" or "planned" without much concern for exactly what this means. There certainly was planning by the ruler, as well as control of certain aspects of the economy, notably with the royal mints and the minting of coins. But bargaining with local society also occurred and, with the Seleukids for example who controlled an enormous, if unstable, territory with multiple traditions of language and administrative culture, centralizing proved difficult. Assymetric information flow must have been the rule, and the king, as a result, was required to be highly mobile.

Bargaining between the king and society was also typical. Such bargaining often involved "signaling" by the ruler or political leader. In this case the political economy of a state, and the goal of a political equilibrium, shared a basic feature of modern market activity. Both the ruler and constituent groups desired to communicate and required information. This two-way communication occurred a number of ways. The clearest occurred between rulers and local temples and, in the Greek world especially, cities. Local temples, and cities such as Egyptian Thebes and Babylon, continued to function much as before, and remained vital economic centers and conduits through which important information flowed. From honorific decrees from Labraunda in Karia in southwest Anatolia, to the priestly decrees in Egypt, despite the Greek language and political culture behind these decrees, it is clear that local temples and priesthoods continued to function in their traditional ways. Only the trilingual nature of the Egyptian decrees makes this fact plain to see (Manning 2010).

The "core" Hellenistic states as economic units

The period from the death of Alexander the Great in 323 BC until 280 BC was a politically unstable period throughout the eastern Mediterranean and western Asia. The successors of Alexander, the so-called *Diadochoi*, established the political and economic framework for the eastern Mediterranean. Lysimachos and Antigonos the one-eyed, the perfect image of a roving bandit if ever there was, were symbolic of the age. Three new kingdoms emerged from the ashes of forty years of war. By 280 BC, however, the Hellenistic world had been formed, with three territorial states, the Ptolemies, the Seleukids and the Antigonids, with contested inter-state "zones" (Ehrenberg 1969:138) and Greek cities many of which formed cooperative leagues for certain economic and political activities. Asia Minor was a major proving ground (and battle ground) for the Macedonian *Diadochoi* to establish themselves as dynasts (Billows 1995).

This was a world of increasing connectivity and yet it was a fragmented world politically, as rulers attempted to carve out defendable and exploitable territories in the political vacuum created at Alexander's death. The creation of a wider Greek *oikoumenē*, or "trade *diaspora*" (neither the first nor the last ethno-economic *diaspora* in Mediterranean history) and the shift eastward of the Greek cultural "center" was an important aspect of the economy of the new post-Alexander world (Shipley 1993:282). There were important developments in economic institutions, including the extension of banks and the monetization of economies that was begun effectively by Alexander's conversion of Persian stored wealth into coinage to pay for soldiers (de Callataÿ 1989), new trade patterns, internal social developments, and the founding of new cities and other settlements.

The spread of the Greek language among elites in the Near East and in Egypt created new identities and new social networks. How this mattered to economic development and performance is not easy to measure. In terms of economic institutions, much was old by the time Alexander reached Egypt and Mesopotamia. For Egypt, we would really need to begin in the seventh century BC, the period of major state recentralization by the Saite kings, and have a different quality of evidence, to trace trends across seven centuries in order to measure effects of state building. For other parts of the Hellenistic world, political change happened at different rates. Geography, war and luck, to name three variables, all played their part in state building processes. As the new Hellenistic states emerged, they had profound effects not only in the public/royal sphere, but also in private economic activity through taxation demands and the circulation of coinage.

The rise, growth and sustenance of urban centers such as Alexandria and Antioch must have played a major role in economic developments, including in the specialization of labor, a key factor in real economic growth. These new urban centers of empires played a new role in the state, Greek *poleis* within an imperial territory (Ehrenberg 1969: 147). Much may be supposed, but little direct evidence survives of these developments until the early Roman period. Trade activity, for much of the first millennium BC seemingly underestimated by earlier scholars, effected economic activity at all levels from the large cities to smaller "gateways" though which trade flowed and was taxed.

While this new social environment did not create a "fused" Hellenistic culture as was once the fashion to think, beneath elite literary production, certain rituals, and public art there was a great deal of inter-ethnic interaction, including marriages (the bilingual family archives from southern Egypt are the best evidence), and there was a wide variety of private economic exchange between ethnic groups.

That is not an idle observation; trade diasporas an important pathway of economic change (Curtin 1985; Trivellato 2009:14-15). The movement of people created new settlements, altered landscapes, also created tension. At the same time, coinage may have reinforced status dissonances between Greek, and those who adopted Greek culture, and non-Greek populations. Monson's (forthcoming) use of a "structural-demographic" social model that links political instability to population pressure, elite competition for rents and state fiscal crisis is suggestive. We might conclude, with Monson, that in the third century BC, rising population met with falling wages and increasing rents, although certitude on this point is not possible given the current state of the evidence, especially in the realm of demography. The issue of revolts in the Hellenistic world is important in this respect. While religion surely played some role in events such as the Maccabean revolt in Judaea, in general unrest was a reaction to fiscal demands. While it is impossible to properly assess the extent of most revolts and the disruption they caused, the great Theban revolt (205-186 BC), during which the whole of Upper Egypt (the town of Aswan may have remained under Ptolemaic control, as the river appears to have) followed common pool resource incentives and exited the state, which clearly affected state revenues for twenty years (Veisse 2004).

The study of the relationship between the Persian economic system and that of its successors, the Ptolemaic and Seleukid kingdoms, is crucial in understanding institutional and economic change from the fifth century (a period of extensive and complex trade patterns which in some ways evokes trading patterns of 15th century Genoa [Purcell 2005]), to the third century BC (Briant 1990, 2008). And yet much is uncertain. Being more specific, and teasing out differences between Saite Egyptian, Neo-Babylonian, Achaemenid and Athenian institutions is not always as easy as it might appear (Fox 2007), stressing Alexander's break from Persian institutions. A *conscious* policy of continuity between Achaemenid and Seleukid structures is debated by Aperghis and Tuplin (Darbandi and Zournatzi 2008).

The Leviathans all continued imperial forms of state with a royal dynasty as the organizational principle of the state, while on the Greek mainland (primarily) cities grouped into larger cooperative units to fulfill some central needs continued Greek political habits. The nature of monarchy in the Ptolemaic and Seleukids system differed substantially from the Antigonids in that the former two states were newer, personal regimes as opposed to the Macedonian tradition of "national kingship" (Ehrenberg 1969:141). Beyond definitional issues come estimation problems (secure population figures, certain annual revenue of the states), the physical geography and the complex eco-zones that Hellenistic states incorporated, the degree of economic integration between the states, the inter-annual variability of water (or rainfall in the northern Mediterranean, of the annual flood of the rivers in Mesopotamia and in Egypt) and hence of production, the impact of the movement of population between regions (e.g. Celts/"Gauls" into the Hellenistic world, internal colonization on new land as well as new population centers) and the transference of population from one region to another (1983, Cunliffe 1997, Mitchell 2003, Reger 2003). Assessing changes in the use and productivity of land within a region over time is difficult, but the subject is important for state dynamics (expansion/contraction) (Turchin et al. 2006).

The Ptolemies

The Ptolemaic offshoot of the Achaemenid empire was the first of the Hellenistic successor states to establish an equilibrium in its core territory (and therefore also the first to experience difficulties). It reached a peak territorial size ca. 300 BC of 1 million km^2 (60,000 $miles^2$ or 155,340 km^2 excluding the deserts: Ehrenberg 1969:144), with a population in Egypt between 3 and 5.5 million, of which perhaps as much as 10% were ethnically Greek (Habicht 1958). I follow Hassan (1994:170) estimate, low by other calculations, of 3.23 million at the height of the Ptolemaic period. The theoretical maximum arable in Egypt was, 24,800 km^2, a figure that comes from a temple inscription. The size/time integral of the Ptolemaic state (Taagepera 1978:133-34 with Table 5) was the largest of any Hellenistic state, which included Cyrenaica, Cyprus, the most stable parts of the imperial territory, and parts of the Aegean, Karia certainly provided an important "source of energy" (Heinen 1984:415), as did Koile Syria in the third century BC (Bagnall 1976, Will 1979). The territory was comparatively large but also comparatively expensive to control, and subject to fluctuations in agrarian production because of dependence there on the Nile flood. On one famous occasion (recorded in the Canopos decree, 238 BC, for which see Austin 2006, text 271).

Ptolemy III records that he had imported from external possessions ("Syria, Phoenicia and Cyprus and many other places") at great personal expense to save Egypt from severe famine.

The core territory of Egypt was the most homogenous and self-contained geographic unit in the Hellenistic world, offering advantages as well as disadvantages. Naval power was a crucial aspect of the empire, which the Ptolemies effectively lost in the course of third century BC events. Despite the often-made claim of total ownership of agricultural land by the king, this was hardly the case either in theory or in practice. Much land had been and continued to be owned and managed by temples. The series of priestly decrees concentrated in the last third of the third century and in the early second century BC can be understood as a bargaining mechanism, reflecting the power of the temples and their resources in the context of Ptolemaic war mobilization.

Individuals too, especially in the south could own and convey land privately even if it was classed as “royal” or “temple” land. The king did control “royal” land, an historic feature in Egypt, and made inroads new areas. The reclamation of land, and the subsequent trebling of the arable in the mid third century Fayyum, was an impressive state intervention in production and new settlements (Manning 2003). Greek soldiers and well as Egyptian were settled in this new territory that become in a real way a living monument to state economic power. The two new *poleis* (Alexandria and Ptolemais) formed the Greek-speaking core of the state. Many new, smaller, settlements were founded along the Red Sea coast to foster and sustain trade (Mueller 2007).

The mobilization of resources followed ancient lines. The Nile river basin offered the most perfect taxation zone in the Mediterranean basin. But it was also probably the most extensive of the Hellenistic states in the reach of its institutions. Censuses of people and animals, although with what frequency it is not easy to be certain, certainly aided taxation. Regions were linked to Alexandria by a network of regional and local Ptolemaic officials and by garrisons (Heinen 1984:442). The external imperial territory functioned as both defensive “fence” (Polyb. 5.34.2-9) around which Egypt could be protected and economic zones of exploitation, in part following political and social patterns of Egyptian political history and in part taking advantage of the political situation and the misadventures or distractions of the other successors of Alexander. A navy held Aegean territory under Ptolemaic sway during the third century but not without challenge or serious setbacks. The Ptolemaic imperial territories, and the Greek mainland, provided manpower and resources as well as markets for Egyptian grain (Buraselis 1993).

Alexandria itself, which grew to be the largest city of the Hellenistic world (best guesses 2-300,000), must have altered consumption and distribution patterns significantly (Högemann 1991, Empereur 1999, Bowman 2009). Circulation of Ptolemaic coinage permitted only within the imperial territory. In the third century BC, the principal rival were the Seleukids, but the Ptolemies also faced a serious rival to their south from the increasingly powerful Meroitic state (Török 1997). There were only two serious invasions of Egypt during the period, both by Antiochos IV in 170-168 BC, but there were internal revolts, at least one of which had serious implications for state revenue (Veïsse 2004).

Ptolemaic tax farming provides a good example. The Ptolemaic system, at least as specified in the key Greek text (*P.Rev*. 1-22, Bingen 1978), and the related institutions of money, banking and public auction, all immediately derived from fourth century BC

Greek, especially Athenian, experience, while the basic economic structure (scribal practice, land survey and registration, harvest taxes, local tax collection) was ancient. The ancient system appears to have survived into the early Ptolemaic period at least (Depauw 2000:70-74). The Ptolemaic system was a hybrid institution, like so much else in the Ptolemaic system, in which certain taxes were farmed but collected, at least in the "mature" Ptolemaic system, by state agents (*logeutai*, cf. Polyb. 22.13.2 discussing Cyprus). The early kings needed to attract Greeks familiar with the monetary economy in order for them to extract the required revenue that the kings needed to maintain their power base. Tax farming created an incentive structure that aligned the interest of individuals with the ruler's and, at the same time, aided the ruler in maintaining a monopoly on political power in the capital. A large state, and the realities of Greek agents of the king throughout the countryside mobilized "wherever they were and for whatever need presented itself" (Bingen 1978:168) shaped the system.

The Seleukids

The Seleukid state (Capdetrey 2007) was centered in the core of the Median-Persian-Alexandrian Iranian empire, reached a peak territorial size of 3.9 million km^2 (1.5 million miles^2) ca. 300 BC but by 100 BC only a Syrian coastal "residue" remained (Ehrenberg 1969:143; Taagepera 1978). Taagepera's growth/decline curves shows that Seleukid territory was both far larger but also less stable than the Ptolemies'. It was the most complex of the Hellenistic territories, less centralized than the Ptolemaic state. The kings faced severe problems integration territory given the complexities of western Asian topography, culture and languages. Some estimates place the total population between fourteen and eighteen million (Aperghis 2004:261). In some cases, Koile Syria for example, archaeological works suggests economic growth after annexation by Antiochos III (Hannestad 2011).

Like the Ptolemies, the Seleukid kings were constrained both by ancient cities and temples that owned land and by an irrigated landscape in their core area, Mesopotamia (Van der Spek 2000). The Seleukids kings stressed the historical relationship with the Achaemenid dynasty as the Ptolemies did with the pharaohs, but they lived in a rougher neighborhood (e.g. the war of Antigonos, 310-308 BC). On all of its flanks there was secondary state formation (in Asia Minor, Judaea, Baktria, Parthia, the Indus river valley) or contested territory (Koile Syria). Seleukos I, the founder of the dynasty, very clearly established his core in the heart of the Persian empire-Babylonia (Briant 1990: 47; Boiy 2004). Emphasis recently on this near eastern core has corrected the modern bias, driven by Greek and Jewish literary sources, toward the western areas of the empire (Burstein 1997: 48-49). With the acquisition of territory in Syria, new Greek *poleis* were established primarily to exploit rich hinterlands (Aperghis 2004: 91-92). These cities, Antioch, Seleukeia in Pieria, Apameia, and Laodikeia, each contained a population of roughly 20-50,000. There is some evidence that the kings also directly intervened in agricultural production in Mesopotamia, not in creating new royal spheres, as was the case in the Fayyum, as much as further exploiting temple lands to increase production (Van der Spek 2000:31-31). Antiochos III, it appears, was more active in land reclamation and re-settlement (Van der Spek 2000:33)

The Antigonids

The Antigonid kings were the successors of the Macedonian state built by Philip II and retained considerable hold over many regions of Greece, "struggling with (or against) the process of creating regional identities and governmental institutions (Scholten 2003: 134). Its territorial peak amounted to 103,560 km^2 (40,000 $miles^2$, Ehrenberg 1969:144). It is the least well documented of the major three states. Macedonia was rich in natural resources, especially some of the most productive land in the Greek world, timber, pitch and silver (Jardé 1925, Rostovtzeff 1941:251-53). The most important ruler of the dynasty was technically its third, Antigonos Gonatas. He consolidated control of Macedon and extended its influence into the Greek world. An important treaty with Antiochos I established an equilibrium between the Antigonids and Selukids in 270. Thessaly was an important region for its port at Demetrias and for its agriculture. Macedon controlled the "fetters of Greece" (Acrocorinth, Chalchis, Demetrias) that allowed it to dominate southern Greece. Already by the 250's however, the rise of the Achaean League in the Peloponnese, and Ptolemaic activity elsewhere, undermined Antigonid control of Greece. It was the first to fall to Roman expansion with the defeat and death of its last ruler Perseus in 168 BC.

Rhodes

The island state of Rhodes, with its powerful navy, formed strategic alliances with larger states, most notably the Ptolemies (Gabrielsen 1997). It offered protection to merchants, a major port that profited enormously from the transit trade and the collection of customs dues on goods entering the port. It was a major center of export as well, Rhodian amphorae are found throughout the Mediterranean testifies to the extent of it. It had a closed currency policy (Bresson 1993), which contributed to its stable politics and enhanced its reputation for "trust" and for cheap credit markets (Bresson 2005:64).

City-state Leagues

Many cities of the old Greek world continued to thrive in the Hellenistic period. Some cities that were insignificant in the past came into prominence in the period for a variety of reasons, including the shifting political ground in Greece, and the rise of Rome. But political relationships were drastically altered by the formation of the large kingdoms, and Greek cities, in order to survive, sought protection. One such solution was offered by an old Greek political idea-the alliance of cities into *koina*, variously translated as "league," "commonwealth," "federal state," or "regional state" (Mackil forthcoming). Such leagues, a continuation and extension of an earlier form of Greek city-state cooperation, had a variety of forms and sizes, and took on new prominence as a means of asserting diplomatic relationships with the Hellenistic kingdoms. Smaller cities were more commonly associated in leagues, and other areas were united for a time in new leagues. One such important one was the Kykladic "Leagues of Islanders" that was dominated by the Ptolemies (Meadows forthcoming B). Also prominent were the Achaean League, also supported by the Ptolemies, and the Aitolian League (Scholten 2000). These states were a response by some cities to the insecurities of the highly competitive Greek world, combining a shared sense of history and ethnic identity reinforced by cult practice were underlying factors in the formation of these states. New Leagues also emerged for a time, one was the Cyrenean League in the time of Ptolemy III (Laronde 1987:382-415).

Leagues were minimalist states by the standards of the kingdoms, preserving a balance between centralized and regional governance much as modern federal states do (Weingast 2008). The central state took on coordinating role in the mobilization and protection of resources, in defense, in dispute resolution, diplomacy and in the collection of taxes. An equilibrium between independent city-state political organization and a larger territory that took advantage of scale for trade and military mobilization, personal mobility and dispute resolution while avoiding predatory behavior of a central authority. "Cooperative coinage," minted by various cities but on the same weight standard, was issued by the leagues to fund inter-city trade and common military expenses (Mackil and van Alfen 2006). Military power, at least in the larger and more important leagues, was a key mechanism to keep the larger kingdoms at bay. Members were required to send men to fight; states could exit a league if it was felt that the benefits of cooperation were less than the costs. The leagues came to an end with Roman intervention in Greece during the second century BC.

Subsequent state development

On the periphery of, or in between the main states, new states emerged (Heinen 1984), e.g. the Mauryan empire in India and the Attalids, a state that arose from what was originally Seleukid territory in western Asia Minor. The latter was a wealthy state, in possession of excellent land and tribute-paying cities. Attalos I's defeat of the invading Gauls ca. 237 BC established the kingdom's political legitimacy as an independent state. But given their actual illegitimacy as rulers, the Attalid kings spend a great deal of effort, and cash no doubt, on building their image as legitimate successors, indeed directly linked, to Philip II and his son Alexander the great, and as beneficent rulers and great builders (Kosmetatou 2003). Sitting between a rising Rome and a greedy Seleukid empire often put the Attalids in a serious game of political survival, but it did not discourage ambitions of imperial expansion in the west, including into Macedon. The kingdom became closely allied with Rome and played an important role in Roman expansion into the Greek world. Coinage and its circulation within the kingdom played a key role in the public economy. Attalid imperial culture, and its capital at Pergamon, was very impressive, and it included the building and support of a major library.

Conclusion

New territorial states arose in the late fourth century BC, and Greek cities, and territorial states such as Makedon, continued to be important players. The three Leviathans dominated the eastern Mediterranean in the third century BC. War and the mobilization for war shaped state economies and state institutions. Traditional agricultural economies and extraction of surpluses was joined with the increased use and circulation of coinage and, concomitantly, an increase in market, trade and banking activity. There were other fiscal innovations, and states attempted measures that would reduce transaction costs in several areas, including private contracting, and in trade (Gabrielsen 2011). This was an age of great imperial cities, in which dynastic and military power was displayed, and of monuments built to impress the world. Many new settlements were established, particularly in the Ptolemaic and Seleukid kingdoms, and Greek trading diasporas were more widespread. Trade, buoyed by inter-state treaties, also increased in volume and in intensity. Yet Hellenistic states present an economic paradox. On one hand, it is clear that they promoted trade and reduced transaction costs, built cities and bolstered transportation networks. On the other hand it appears equally clear that war, institutional structures and rent-seeking severely constrained any possibility for real economic growth.

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