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Going with the Grain: Athenian State Formation and the Question of Subsistence in the 5<sup>th</sup> and 4<sup>th</sup> Centuries BCE

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Abstract: In this paper, I address the role of Athenian grain trade policy as a driving factor of the city's growing power in the 5<sup>th</sup> and 4<sup>th</sup> centuries. Recent explanations of increasing Athenian hegemony and dominance over other *poleis* during this time period have focused on the role of warfare. I present an equally important, yet often-overlooked factor: food supply. Athens was dependent on grain imports throughout the Classical Period. Through examination of the ancient sources, I demonstrate that the increasing need to secure subsistence goods for Athens significantly propelled its ambition for power, causing a fundamental shift from a non-interventionist government policy to one of heavy intervention between the 5<sup>th</sup> and the 4<sup>th</sup> centuries BCE. This shift corresponded to an increasing complexity within the mechanisms of the city's politics. It helped propel Athenian state formation and affected the dynamic of power and politics in the ancient Mediterranean world.

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#### Introduction

In his recent book *Against the Grain*, Richard Manning argues that most apparently fundamental forces that have shaped the world, such as trade, wealth, disease, slavery, imperialism, and colonialism, are based on agricultural production. While Manning does offer a description of agriculture throughout human history, his main focus is on contemporary politics, specifically the US agribusiness. Manning may go a bit far in his ultimate conclusion – calling, among other things, for a return to hunting for subsistence - but he makes a salient point. Because of its role as a staple subsistence crop, grain has shaped the history of politics, of nation-building, and of society in a significant way. This is true for both the more recent and the more distant past: as Garnsey asserts, even in "...antiquity, food was power". 2

The questions I intend to ask in this paper focus on this very issue. My case study is 5<sup>th</sup> century BCE Athens. During this period, the so-called "Athenian Empire", Athens experienced military growth, geographic expansion of its hegemony, and further population increase. The Persian War was won and Greece moved into the disastrous Peloponnesian War. Athens required grain imports to feed its growing number of inhabitants. How was the supply of this grain secured?

Most ancient decrees, laws, and court speeches that indicate Athenian interest in the control of grain imports date to the 4<sup>th</sup> century BCE. On the other hand, sources from the 5<sup>th</sup> century display a conspicuous lack of references to Athenian politicians interfering in, or trying to control, the grain trade. As I hope to demonstrate, this implies that there were few, if any, governmental policies in Athens to control the grain trade through laws. Trade was left largely in private, not public, hands.<sup>4</sup> A distinct difference exists, therefore, in the way in which grain trade to Athens was controlled between the 5<sup>th</sup> and the 4<sup>th</sup> century. Why this discrepancy? How did Athens secure enough food for its growing number of inhabitants? When viewed in context of the increasing military power Athens enjoyed at this time, these questions inevitably lead to another: to what extent did the need for grain shape the political developments of Athens, or vice versa, specifically in regard to state-formation? I argue that grain supply and state formation are connected, and this can be demonstrated in the case of Athens.

The first part of this paper explores the grain supply and how it changes between the 5<sup>th</sup> and the 4<sup>th</sup> centuries BCE. I then make the link to the process of Athenian state formation. The conclusion I reach can be summed up as follows: Even though formal interventionist governmental control of the grain trade is undetectable in the written sources of the 5<sup>th</sup> century, the increasing demand for grain propelled Athenian state formation by creating both the necessity for a strong currency through greater wealth, and increased control of the sea routes through a stronger navy. By the 4<sup>th</sup> century, Athens gradually began to control grain trade through laws, decrees, and taxes.

In the second part of this paper I will argue that this can be explained in a cultural evolutionist framework of state formation. Following Flannery, this change in Athens was, in effect, a linearization of lower-order by higher-order powers. According to his model, higher-order processes bypass smaller-scale organizations after the latter become insufficient to provide the necessary goods or services. I argue that this shift towards a more interventionist policy corresponds to an increasing complexity within the mechanisms of Athenian politics, contributing to Athenian state formation. This increase in control and infrastructure did not necessarily lead to a stronger, more successful, or longer-lived state, however. In Flannery's model, an increase in higher-order powers can lead to hypercoherence, a process in which the centralization of power results in the breakdown of the infrastructure of lower-order mechanisms, leading to eventual collapse of the state. In the case of Athens, the state had also weakened by the end of the 4<sup>th</sup> century BCE, but this was not the result of hypercoherence. On the contrary, a series of external military events contributed to the decreased power of the state over its institutions.

#### **Grain Supply**

Garnsey's generally accepted demographic calculations for Attica will be used for the purposes of this paper. He determined that the population grew to around 250,000-350,000 people in the 430s. This equals ca. 100-150 people per square kilometer, a number that exceeds, by far, the agricultural carrying capacity of the land. Even if the highest estimate of agricultural product is assumed, it could hardly feed the residents of  $5^{th}$ -century Attica. Athens would have had to import  $\frac{1}{2}$  -  $\frac{3}{4}$  of its grain even in good years.

The earliest evidence for a control of Attic agricultural resources is from the time of Solon, who reportedly forbade the export of any agricultural product with the exception of olive oil.<sup>10</sup> As the population grew, grain consumption increased, and the demand reached a new high point in the 5<sup>th</sup> century.

A number of mechanisms helped assure that the grain supply did not come under serious threat for a while. For one, Athens' hegemony over the Delian League gave her control over sea routes. This helped secure the safe passage of merchant ships into Piraeus. The tribute paid by member states eventually made its way into the Athenian economy, paying for rowers and craftsmen. Additionally, Attica's more agriculturally productive neighbors, such as Euboea, supplied Athens with grain for some time. The output of the silver mines at Laurium provided the city with incentive for merchants to dock at Piraeus: presumably, Athens' great wealth would have secured a good price for grain. For some time, the grain market was left largely out of the political realm, instead being conducted by private merchants and dealers.

The turning point for Athens was at the end of the Peloponnesian War. The control of her own territory in Attica was lost; domination of the sea routes was eventually wrested from her. As a result, the production of grain from Attica and its availability as an import through Piraeus declined. Many factors contributed to this. For one, Euboea revolted and left the League in 411, effectively cutting off the supply of their grain. <sup>12</sup> In addition, the Spartan general Lysander took the Hellespont, cutting off trade routes to the Black Sea. The combination of these circumstances contributed to the first known "famine" in Athens in 405/4 BCE.

## **Evidence for the 5<sup>th</sup> century Grain Control**

In the 5<sup>th</sup> century BCE, the evidence that indicates Athenian concern with issues related to the grain trade is mostly *indirect*. Examples of this type of evidence include a concern over ultimate naval power (to control the maritime trade routes); and an increased focus on areas that were prolific sources of grain (such as Sicily, the Black Sea region, and Egypt). The question I ask here is: what do the sources tell us about the actions Athens' governing bodies took that resulted in a constant supply of grain?

I begin with the historians' accounts, examining them for evidence on  $5^{th}$  – century Athenian attitudes on grain import and military growth. I then proceed to other literary sources, and finally come to a selective examination of the epigraphic data such as it is for the  $5^{th}$  century.

Following the Persian war, Athens suffered two bad harvests. The need to import food increased. One of Athens' first actions was to send a fleet to the Hellespont. The Athenians took the city of Sestos, which lies on the route of the merchant ships bringing grain from the Black Sea region to Athens: it was therefore a city of not only military, but economic importance for Athens.<sup>13</sup>

Several other passages in Thucydides demonstrate Athens' concern with the security of merchant routes. Six ships were sent to Caria and Lycia. One of their purposes being to protect merchant ships in those waters from pirates; another was the collection of tribute. <sup>14</sup> Changes geared toward increasing protection were happening closer to home, as well. Once the merchant ships reached the Piraeus, Athens wanted to ensure that the goods would be safe. Both Piraeus

and Athens were first secured with massive walls, <sup>15</sup> and soon the "long walls" were constructed, connecting the two fortified cities and securing an artery – not only between the city and its fleet, but also between the citizens and the maritime trade markets. <sup>16</sup>

Athens also attempted to use its power to cut off rival *poleis*' trade abilities. The Megarian Decree is the most obvious example: When Athens formally excluded Megara from all Athenian ports and markets it was such a significant event that Thucydides cites it as one of the main reasons for the outbreak of the Peloponnesian War.<sup>17</sup> For our purposes, this episode serves as a reminder that it was not, in fact, unusual for Athens to secure the primacy of its own market by cutting off other city-states it viewed as a threat. Aegina's strained relationship with Athens, as a powerful *polis* in the immediate vicinity of Athens that also relied on imports for subsistence, is another example. This island was so much a threat that it eventually was obliterated and resettled with Athenian cleruchs.<sup>18</sup>

Although security improved at home, Athens was beginning to have worse luck abroad. The following episodes describe the failures of Athens in conflict over areas which are traditionally known as "grain baskets" of the ancient world. The first disaster to the Athenian fleet occurred in Egypt, where it was completely destroyed by Megazabus. 19 Diodorus writes about this event that part of the incentive came from a promise by Inarus, who presumably offered Athens joint rule over Egypt if they helped remove the Persians. 20 Such control over one of the most productive exporters of grain in the Mediterranean might have been part of the reason Athens was convinced to embark on this ill-fated campaign. Having been evacuated through their defeat from trade – and all other relations – with Egypt, however, Athens turned west for its next expedition. Athens sent its first ill-fated expedition to Sicily<sup>21</sup> in 427 under the claim to assist Leontini.<sup>22</sup> The second Sicilian campaign, in 413, also ended in decisive disaster for the Athenians, and the city consequently focused on protecting its imports by securing the Cape of Sunium in 413/2.<sup>23</sup> The final blow to Athens' control of the sea came at the Battle of Aegospotamai in 405 BCE.<sup>24</sup> With this defeat of the Athenian fleet and Sparta's ensuing cutoff of the trade routes, the tap was shut off. Without grain, the city could not function and was forced to admit defeat.<sup>25</sup>

### 5<sup>th</sup>-Century Sources: Inscriptions

Inscriptions from this century also show how Athens tried to exert some control over markets. The most obvious record of how much money was flowing into Athens is contained in the "Tribute Lists", the first of which dates from 454/3.<sup>26</sup> While this revenue was explicitly intended for the maintenance of an army and a fleet with which to fight the Persians, it cannot be contested that increased revenue and demand for labor in Athens would have fueled the market and the economy of this city. The removal of the League's treasury from Delos to Athens in 454 BCE was another way in which the city brought more cash under its control, even if this money was earmarked for military actions against Persia.

The 5<sup>th</sup> century "Coinage Decree", distributed to member cities throughout the Greek world, enforces the use of the Athenian coins, weights, and measures in those *poleis*. Whether or not this decree was respected and carried out by all the allies cannot be reconstructed, but the intention, not the effect, is what is significant here. This standardization would have made market exchange within the league – and with Athens, in particular – much easier. Put in modern terms, it lowered transaction costs.

Another significant recent discovery implying Athenian control of the northern grain trade route through the Hellespont comes from Rubel's recent re-examination of inscription *IG* I<sup>3</sup> 61, the second of the so-called "Methone Decrees".<sup>27</sup> The decree instructs the *Hellespontophylakes* to let ships bearing grain to Methone – an important Athenian ally – to pass the Bosphoran Straits untaxed. Rubel concludes that the *Hellespontophylakes* were not merely

military guardians, but were also in charge of exacting taxes from the merchants passing through. Assuming that the 410 BCE measure was the result of severe financial duress caused by the war, Rubel concludes that a tax had been in place significantly earlier than 410, and that the *Hellespontophylakes*' duties were both in the military and the bureaucratic realm. Rubel's new reading of the second Methone Decree undoubtedly provides a strong argument for a much tighter control of trade by Athens through the Hellespont earlier than previously assumed perhaps even as early as the 470's.

### The 4<sup>th</sup> Century

Even though Athens' population declined significantly in the 4<sup>th</sup> century, the majority of grain must still have been imported in order to secure subsistence level for the inhabitants, <sup>29</sup> a need mentioned most famously by Demosthenes. <sup>30</sup> After the Battle of Aegospotamai and the loss of the entire Athenian fleet, however, Athens would not have been able to secure the maritime trade routes as it had during the majority of the 5<sup>th</sup> century. If the supply of grain was to remain, Athens had to adopt a different way of procuring it. Garnsey sees the development of successive new strategies to ensure grain supply in the 4<sup>th</sup> century: <sup>31</sup> first through diplomacy, then incentive, followed by regulation and finally force. Despite all the decrees, taxes, and laws passed, a selection of which are presented below, Athens slipped into an increasingly precarious situation, suffering from no fewer than five food crises between 338 and 322 BCE. <sup>32</sup>

# 4<sup>th</sup> -Century Sources

The source situation for 4th century Athens is such that I must focus on applicability, not comprehensiveness. Rather than attempting to list as many sources as I can, I will provide examples of different types of evidence demonstrating Athens' increasing intervention in the grain trade. These include evidence for political offices that were concerned primarily with trade relations, as well as the first mention of the so-called "bottomry loans". Numerous court speeches show that the market had moved very much into a legal sphere, becoming the business of the city and the courts. The regions from which the grain was being imported also increased. While we have little indication of the origin of Athenian grain for the 5th century beyond the region of the Hellespont, the later sources indicate grain imports from Egypt and Sicily as well.

This type of focused and direct evidence about Athenian governmental intervention into the grain trade is not visible in material from the 5<sup>th</sup> century. While I do not suggest that these institutions did not exist or that these concerns were not also valid ones *prior* to 405 BCE, the significant shift in the material of the sources should not be underestimated. For this century, the sources can tell us in greater detail what exactly these changes were.

First, we know much more about actual offices relating to the grain trade, especially from the latter half of the 4th century. Aristotle, in his *Athenian Constitution*, describes the election by lot of officials for trade affairs, which include 10 *agoranomoi* (5 for Piraeus & 5 for Athens); 10 *metronomoi* (who regulate the weights & measures), and a total of 35 *sitophylakes*, 20 for Piraeus and 15 for Athens, who were in charge if monitoring grain sales and supplies. Aristotle mentions that this is an increase over the previous number of *sitophylakes* (10). In addition, 10 commissioners are selected by lot to supervise trading activities and to make sure that 2/3 of all grain that came to Piraeus went directly to the city.<sup>33</sup>

In addition to creating official positions to regulate how and where the grain that came to Piraeus went, we also have the first indications of Athens' concern with the price of grain. When the price of grain rose, Demosthenes praises gifts of grain to the city in his speeches.<sup>34</sup> Another instance of a reward given for cheap grain sales to Athens comes from the inscription *SIG*<sup>3</sup> 304

from ca. 330-329 BCE. Here, a certain Heraclides is rewarded for selling 3,000 *medimnoi* of grain to Athens for the low price of 5 drachmae per *medimnoi*. He also contributed 3,000 drachmae to the grain purchase fund. In order to prevent monopoly of the market, Athens also instituted a measure to prevent any individual from purchasing too much grain.<sup>35</sup>

The 4<sup>th</sup> century is also the time we first hear of the so-called "bottomry loan". Several of Demosthenes' court speeches, including *Against Aphobus*, *Against Apaturius*, *Against Lacritus*, and *Against Phormio* are concerned with disputes over this type of loan. These loans were usually a contract between a creditor and a *naukleros* or an *emporos* and covered a ship and its designated cargo on a certain route, either round-trip or one-way. Should the voyage be carried out successfully, the lender would get his money back in addition to a certain amount of interest, sometimes as much as 33%.

Even though Demosthenes primarily mentions the Hellespont,<sup>36</sup> we have some information that the grain trade was extended beyond this region in the 4th century. Both Egypt and Sicily were a possible place of origin, and the grain often came to Athens by way of Cyprus or Rhodes.<sup>37</sup> This extension of possible trading partners obviously increased the chance of Athenians getting as much grain as was available into their harbor.

In sum, the new governmental measures to control grain trade in the 4<sup>th</sup> century, including new offices, decrees, the increasing mention of trade in grain in the courts, and an increased geographical area of procurement, demonstrate clearly that Athens was looking for new methods to ensure its subsistence.

#### Questions of "State-formation" and "Empire"

What do these changes have to do with state-formation and empire? First these terms must be defined. The description of 5<sup>th</sup>- century Athens as an "empire" is misleading, as Morris has shown.<sup>38</sup> A better description might be to understand Athens in the process of expanding its state, i.e. its central power.<sup>39</sup> Therefore, the underlying assumption here is that state-formation is not static, but an evolving, changing process, propelled by a number of events. For one, 5<sup>th</sup> century Athens established control over the member states of the naval confederacy through coercion, exacting tribute from the member poleis and punishing them in case of revolt. In addition, the collection of tribute and the increasing hegemony of Athens over sea routes also led to an economic expansion of Athens' power. Athens' political institutions were moving from a loosely-formed state to a more centrally organized one, and this phenomenon requires explanation. While Morris argues that the driving force for Athenian state formation was war and the preparation for it, I have highlighted another, perhaps more basic reason for Athenian expansion: the need for food. 40 Taking Garnsey's assertion - that grain is "the material base of a brilliant civilization"<sup>41</sup> - one step further: grain was also the impetus for state expansion and the increasing complexity of state institutions, which can be seen in Athens after the loss of the Peloponnesian War: the security provided by the protection of the sea routes and military coercive power was no longer viable.

Flannery has described this type of shift within a state with an evolutionary model of linearization. Independently, the free market forces were unable to secure sufficient grain supply to Athens after the city lost its power over the sea. The government subsequently came up with regulations and laws to control the market in grain. In Flannery's terms, this can be interpreted as the absorption of a "lower-order control" by a "higher-order control". In this case, the "lower-order control" – meaning the market in Piraeus backed by the Athenian fleet's control of the trade routes – proved unable to maintain its function; the "higher-order control" – the central government – took over the control of the grain supply. If we take this one step further, we can see how it affects the state. According to Flannery, one effect of linearization is the simplification of the subsystem that is stripped of its control. The higher-order control, then, is

required to institute more management strategies to regulate its new "job". This centralization of power implies an increasing existence of the state, 44 which corresponds directly with Morris' assertion that an increasing centralization of power leads to a more complex and sophisticated form of the state. 45

As discussed above, a more complex state did not necessarily lead to increased success. In some cases, the breakdown of the autonomy of the former lower-order subsystems or institutions can lead to hypercoherence, in which the integration is undermined by meddling or usurpation and the formerly existing internal structure collapses, leaving the higher-order power without a base.<sup>46</sup>

#### **Discussion**

To sum up, the increasing need to secure subsistence goods for Athens propelled Athenian state-formation and resulted in a shift from a non-interventionist policy to heavy governmental intervention; leading to a higher complexity in state political institutions and therefore, if we follow Morris' definition of state formation, to a more fully-formed state. Athens was dependent on trade even during the 5<sup>th</sup> century, even if the sources are not explicit about this. The reason we do not hear about governmental control earlier is that the grain supply was never threatened to the extent it was after 405. Even though the grain routes were de facto in private hands, the Athenian *polis* took enough care to secure its subsistence that it not only made decisions in war strategy and general policy to secure the grain supply, but it also went so far as to subdue any states that threatened the flow of grain into Piraeus. The increasing control of grain was, of course, not the *only* factor driving Athenian state-formation, but its significance in relationship to the development of more complex political institutions has often been overlooked. The need for subsistence can be seen as one of several variables that resulted in an increasingly complex state.<sup>47</sup>

What emerges here as particularly interesting is that, in effect, the extension of the reach of state institutions after 404 to try to control grain corresponds with the Athenian state's declining power, but in a different sense than Flannery suggests. In the 5th century Athens left the grain trade in private hands because state power guaranteed free trade in the Aegean, and private wealth in Athens made the Piraeus an attractive market for grain. After 405, with the realignment of the market, Athenians couldn't ascertain the reception of enough grain. Loss of revenue had weakened Athenians' ability to pay for it, and the state increasingly intervened to compensate for this market "failure". Clearly, this is only one of the many differences between the Athenian democracies of the 4<sup>th</sup> century as opposed to that of the 5<sup>th</sup>. The increasing emergence of institutions and regulations to monitor and control grain trade can be seen as one more piece of evidence for Athens' transformation.

In the end, Athens fell out of the trajectory of state formation. This was less a result of hypercoherence, however, and more a result of a growing, external, military threat. In the end, the process of Athenian state formation had ended by the Battle of Chaeronea, <sup>49</sup> and with the increasing dominance of Macedonia in the later 4<sup>th</sup> century the city became a subject of that larger, expansionist state. Even lacking this external threat to Athenian government, however, the state might have eventually collapsed as a result of meddling or usurpation. While Morris is correct to see warfare as a driving factor of state formation, I hope to have demonstrated with this examination of the evidence for 5<sup>th</sup> and 4<sup>th</sup> century policies.

<sup>&</sup>lt;sup>1</sup> R. Manning, Against the Grain (2004).

<sup>&</sup>lt;sup>2</sup> P. Garnsey, *Food and Society in Classical Antiquity* (1999) 33.

others, I. See. among Morris, **Empire** (478-404 BC(2001),http://www.stanford.edu/group/sshi/empires2/morris.pdf.

<sup>&</sup>lt;sup>4</sup> P. Garnsey, (1999) 22-23.

<sup>&</sup>lt;sup>5</sup> K. Flannery, "The Cultural Evolutions of Civilizations" in *Annual Review of Ecology and Systematics* 3 (1972) 399-425.

<sup>&</sup>lt;sup>6</sup> Flannery (1972) 420.

Garnsey, (1999) 23-33. The cultivated land of Attica dedicated to grain has most recently been determined as being between 10% and 17.5% of the entire area of Attica. The output was at most 650 kg of grain per hectare, more likely between 400 and 500 kg/ha. See W. Scheidel's "Addendum" in P. Garnsey, Cities, Peasants and Food in Classical Antiquity (1998) 195-200.

<sup>&</sup>lt;sup>8</sup> Although population figures vary widely, see Garnsey (1998) 197-8.

<sup>&</sup>lt;sup>9</sup> Morris (2001) 26; Garnsey (1998) 199. In spite of the raging debate on exactly how much Attica produced, consumed, and was required to import, the source situation create "...margins of error too wide to make possible anything other than very crude estimates of the average level of Athenian self-sufficiently in any given period" - Scheidel in Garnsey (1998) 200.

<sup>&</sup>lt;sup>10</sup> Plutarch, *Solon*, 24.1.

<sup>&</sup>lt;sup>11</sup> P. Garnsey, Famine and Food Supply in the Graeco-Roman World: Responses to Risk and Crisis (1988).

<sup>&</sup>lt;sup>12</sup> Garnsey (1988) 119 ff.

<sup>&</sup>lt;sup>13</sup> Thuc. 1.89.

<sup>&</sup>lt;sup>14</sup> Thuc., 2.69.

<sup>&</sup>lt;sup>15</sup> Thuc., 1.93.

<sup>&</sup>lt;sup>16</sup> Thuc., 1.97.

<sup>&</sup>lt;sup>17</sup> Thuc., 1.67.

<sup>&</sup>lt;sup>18</sup> Plut., Pericles, 8.5; T. J. Figueira, Aegina: Society and Politics (1981) 4.; Herodotus records numerous conflicts between Aegina and Athens (Hdt. 5.81; Hdt., 6.87). In 464 BCE, Aegina revolted from Athens (Diod. Sic., 11.70.2). It was plausibly largely a result of its military actions against Athens that the latter eventually razed the island completely, settling it with Athenian cleruchs (Thuc., 1.108.; Thuc., 2.27).

<sup>&</sup>lt;sup>19</sup> Thuc., 1.109.

<sup>&</sup>lt;sup>20</sup> Dio. Sic., 11.71.4.

<sup>&</sup>lt;sup>21</sup> H. Knorringa, Emporos: Data and Trade and Trader in Greek Literature from Homer to Aristotle (1987)

<sup>&</sup>lt;sup>22</sup> Thuc., 3.86. Thucydides states, however, that that *The Athenians sent it upon the plea of their common* descent, but in reality to prevent the export of Sicilian grain to the Peloponnesus ... . - Athens did not want the Peloponnesus to get this grain. In effect, Athens was not interested in getting Sicilian grain in 427, only that she would have liked to disrupt Peloponnesian imports of Sicilian grain not direct bid from Athens for grain.

<sup>&</sup>lt;sup>3</sup> Thuc., 8.4.

As described by Pausanias 9.32.7-9, Xenophon *Hellenica* 2.1.25-27; Plutarch, *Lycurgus*.

<sup>&</sup>lt;sup>25</sup> Morris (2001) 26, 62, 85.

 $<sup>^{26}</sup>$  IG  $I^2$  , 191+.

<sup>&</sup>lt;sup>27</sup> Rubel, Alexander, "Hellespontophylakes – Zöllner am Bosporos? Überlegungen zur Fiskalpolitik des attischen Seebundes (IG I<sup>3</sup> 61)", in *KLIO* 83.1 (2001) 39-51.

Rubel (2001) 49. He guesses that the "regular" tax must have amounted to 1-2 % of the total goods. Byzantium had been under Athenian control since 476 BCE; and the 426 BCE inscription, according to Rubel, was worded in a way that assumed the previous institution of a tax; not the initial imposition of one.

<sup>&</sup>lt;sup>29</sup> Morris (2001) 26.

<sup>&</sup>lt;sup>30</sup> Demosth., Against Leptines 31.: In his time, Athens imported more grain than any other city.

<sup>&</sup>lt;sup>31</sup> Garnsey (1988) 120 ff.

<sup>&</sup>lt;sup>32</sup> Garnsey (1988) 120 ff.

<sup>&</sup>lt;sup>33</sup> Aristotle, *Athenian Constitution*, 51.1.

<sup>&</sup>lt;sup>34</sup> Demosth., Against Phormio, 39.

<sup>35</sup> Lysias, Against the Grain-Dealers, 6-7.

<sup>&</sup>lt;sup>36</sup> For example in Demosthenes, *Against Leptines* 31-2.

<sup>&</sup>lt;sup>37</sup> Egypt: Demosthenes, *Against Dionysodorus* 7; from Sicily over Cyprus in Demosthenes, *Against Dionysodorus*, 9-11 and Andodices, 2.20-21.

<sup>&</sup>lt;sup>38</sup> Morris (2001).

<sup>&</sup>lt;sup>39</sup> Morris (2001) 3, 20. This implies that the "state" is defined as a geographically distinct community of people possessing sufficient political institutions that would be capable of expansion. In this case, the "central power" is Athens and its political mechanisms; and the expansion occurs in two separate spheres: the physical and the institutional. How is this different from "imperial" expansion? Morris sets up a spectrum of "territorially extensive coercion-wielding organizations". One distinguishing characteristic is that an empire, at one end of this spectrum, would require a much stronger sense of foreign-ness between ruler and ruled than a state (at the opposing end of the spectrum). The Athenian "empire", however, controlled other city-states within the Aegean with a similar cultural and social *koine*.<sup>39</sup> Athens could, therefore, hardly be thought of as being on the "empire" side of this spectrum

<sup>&</sup>lt;sup>40</sup> Morris (2001). Carneiro also states that while warfare may be a prime mover of state formation, it can't be the only factor (R. L. Carneiro, "A Theory of the Origin of the State" in *Science* 169 (1970) 734).

<sup>&</sup>lt;sup>41</sup> Garnsey (1998) 183.

<sup>&</sup>lt;sup>42</sup>Flannery (1972) 399-425.

<sup>&</sup>lt;sup>43</sup> See Flannery (1972) 399-425.

<sup>&</sup>lt;sup>44</sup> Flannery (1972) 423.

<sup>&</sup>lt;sup>45</sup> Morris (2001).

<sup>&</sup>lt;sup>46</sup> For examples see Flannery (1972) 420-421.

<sup>&</sup>lt;sup>47</sup> This is following Adams' model of "multivariant causality", as described in Flannery (1972) 407-8.

<sup>&</sup>lt;sup>48</sup> M. H. Hansen, *The Athenian Democracy in the Age of Demosthenes* (1999) 322.

<sup>&</sup>lt;sup>49</sup> For more possibilities on the trajectory of Athenian state formation see Morris (2001) 85 ff.