CHAPTER VII

SECURING GRAIN IMPORTS

Why did Athens, the site of what was maybe the first city market in history, her famous agora, herself never become a pioneer of market trade? Why did her extreme dependence on imported grain, combined with her pioneering experience in the use of food markets, not make her take the lead in the establishment of an international grain market which, so one would think, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative in setting up such a market? One need not share an unhistorical prejudice in favor of commercial methods to see the problem of Athenian grain trade in these common-sense terms.

Accordingly, our points of enquiry are: To what extent did the conditions of the grain trade in classical Greece permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of grain?

The answer, we submit, lay in the geographical and political configuration of the regions in which grain supplies and routes of communication were situated. These conditions, under which military and diplomatic means had to be employed to ensure the forthcoming of the supplies, as well as the safety of the trade routes themselves, determined the methods and organization

of the grain trade.

Nine-tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious about the provenance of her daily bread from overseas, and made her eventually seek out as a source of supply the Black Sea, Egypt, and Sicily, in succession. The rest may be summed up in the recognition that while Athenian foreign policy was first and foremost grain policy, it was hardly ever affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the grain trade.

I

Greece as a whole lacks agricultural land and especially Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in the foreign policies of most of continental Greece, it would unquestionably be that area's dependence on grain imports for its food supply.

Greek social and political thought may well have reflected this unalterable circumstance. The Greeks, one is tempted to conclude, never developed a concept of economics because at no time could the country rely for its food supply on the market which is the true subject of that discipline. Instead it

turned to political theory, which almost to this day has retained the cast of the mould of the Attican polis. Her ever unassuaged need for an adequate food supply made the principle of self-sufficiency the basic postulate of her existence and therefor of her theory of the state. Autarchy became for the Greek mind the rationale of the polis. On this point Aristotle agreed with Plato - they shared the conviction that the citizen population of the polis ought to consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of Greek antiquity over this extreme dependence on grain imports. Rostovtzeff has shown that as late as the third century, this inadequacy was still so pronounced that not a trace of commercial rivalry could be found between the two greatest grain producers, Egypt and the Crimea. [1] Grundy insists that every Greek mainland state, with the possible exception of Thessaly, was to a greater or lesser extent dependent on imports. [2] Of Attica Jardé has asserted that she could always absorb any amount of the available imports without their causing a failure of domestic prices. [3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. There is a striking fluctuation of the total as well as of the parts. He estimates the total population in 431 B.C. as 315,500; of which 172,000 were citizens,

28,500 metics, and 115,000 slaves. Six years later, after the plague, the total had fallen to 218,000 with 116,000 citizens. In 323, the total is back to 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves.[4] The population therefore, may have said to have ranged between 200,000 and 300,000, the latter figure being surpassed before the ravages of the plague, in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production is for the late fourth century. An Eleusinian inscription of 329 B.C. allows Attic production to be calculated at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten.[5] While this may have been a bad year, Gomme estimates the top rate of production at 410,000 medimns,[6] Tod at 450,000.[7] On the basis of Beloch's estimate of an average per head annual consumption of six medimns, at the most 75,000 people could be supported from the domestic crop. With a population range of two to three hundred thousand, imports of one to one and a half million medimns would be required, or two to three times the domestic crop. Home production must have been insufficient by far to feed the agrarian population. As late as 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian embassadors at Rome claimed that Athens "supported even the farmers on imported grain."[8]

Yet the dependence on foreign grain was even greater than this statistical guess would indicate. While the population as a whole needed imports for a large part of its food, the

citizenry depended on them almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneering at the democratic grain distributions, reminds his audience that the gift of five medimns in 424 B.C. was mere barley.[9] A speaker in the Deinosophists says:

> We have no interest in...barley since the town is full of wheat bread.[10]

While wheat was considered the citizens' staple, it constituted no more than one-tenth of the home crop - enough to feed perhaps eight or nine thousand citizens. For Attica imports thus quite generally meant wheat imports. A good part of the slaves could probably be fed on home barley; the citizens depended entirely on imports.[11] According to Naum Jasny wheat "dominated the international grain trade of the classical era almost to the exclusion of the other grains."[12]

This state of affairs is specifically confirmed by a speech of Demosthenes, in which he observes that 400,000 medimns of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he added, could be checked by a glance at the books of the inspectors at the emporium. This would amount to total wheat imports of 800,000 medimns for that year. Kočevalov, a Russian philologist, argues that the figure of 400,000 referred only to Panticapeum, "the home port," not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of

1,600,000 medimns. Including the home crop of 400,000 this would amount to about 2,800,000 medimns - considerably more than the traditionally accepted requirement. Incidentally, this would raise the rate of imported to home grown grain to 6:1.

But there is no need to stress the point further. There is widespread agreement to-day that the concern about grain supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy was food policy.[15] So does Glotz.[16] Francotte, still the authority in the field, declared "la première des questions économiques pour les Grecs était celle du pain."[17]

The question is by what methods was the grain acquired? To what extent could Attica rely on price inducements to ensure supply and why were the actual ways of procurement almost exclusively those of diplomacy, civil and military politics?

Three instances come to mind of powers which largely imported their food supply: the city-states of Athens and Rome in antiquity and Britain since about 1770. In each case - differing according to circumstances - significant consequences followed.

Free-trade England represents the classic instance of reliance for organic raw materials on a world market. In principle, she sacrificed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself had depended on Britain's financial, military, or

political control of the organization of world trade. Having lost that control, Britain is faced with the treacherous mechanism of an unregulated world market. Accordingly, she is trying to free herself from such a dependence through long-term arrangements, and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on "world grain market" which had been established in the late fourth century B.C. in the eastern Mediterranean, Rome deliberately smashed this market and brought the chief grain producing territories under her direct control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough grain to feed Rome for four months and Africa enough for eight months; [18] this probably amounted to 2,900,000 and 5,800,000 modii respectively. [19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome - the army and the imperial household also had to be fed - methods of administered trade were employed. Rostovtzeff, when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is compelled to admit the primacy of administered trade:

> It must be admitted, ... that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army....the imperial annona was the chief moving

> force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital. 20/

Athens never achieved the imperial splendor of Rome. During a memorable half century hers was a successful thalassocracy which ruled directly the trade routes and controlled by direct political means the sources of supply in the Eastern seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply. Those methods were eminently suited to taking advantage of the market elements now introduced by coastal states into the grain trades of the Hellenic world without subjecting the Attican supply to the control of those states.

II

But let us begin at the beginning.

The Solonic embargo on the export of grain is the first instance of grain supply being brought within the realm of public policy; it never left it.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and <u>to consider the supply of grain</u> and the defence of the country. 21/

Grain supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once in every prytany of the

Assembly. Grain supply is prominent on a list of subjects the prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines.[22]

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation.[23] No sea-loan could be made on any ship or cargo unless it was ensured that a return cargo of grain or certain other legally specified commodities would be brought to Athens.[24] We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only grain is mentioned in the sources. Since, as we have said above, the petty emporos could hardly put to sea without the help of a sea-loan, this regulation must have been of great importance.

As can be inferred from these passages, the organization of grain imports was an instance of administered trade. The safety of the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods were mostly fixed by treaty or other diplomatic arrangements, usually through personal privileges as a counter part of trade preferences, the actual trading taking place as a rule in a port of trade. The extent to which this involved the administering of trade is suggested by a revealing passage in Aristotle's Rhetoric. In pointing out the matters a statesman must be conversant with he sums

up siccinctly the administrative features of Attican food procurement methods.

> ...in regard to food, he /the statesman/ should know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. 25/

The great grain producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. 26/ But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the southeast, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some grain from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly Crimea's hinterland, situated on both shores of the so-called Cimmerian Bosporus - thus served as the chief granary of Athens in the classical period.

III

Peisistratus was the first to make a sustained effort to extend Athenian power towards the northeast, Thrace and the Black Sea region. He regained Sigeum on the southern shore of the entrance to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese. The grain of this region may have been partly paid for by the black-figured Attic vases and Athenian gold and bronze-work dating from this period, which have been found there in numbers. The

trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[27] Persian expansion into Europe during the last two decades of the sixth century must have cut-off this trade, which was resumed however on a grand scale after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. The early colonies were mere farmers' settlements, not trading stations. A number of such settlements, mostly under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. But not until the fifth century were these brought under Athenian influence or control. In this development Attica's need for grain was the sole mover.

Up to the middle of the fifth century the products of the Black Sea were not as a rule carried all the way by ship to Greece. The sea-route was the cheapest route, but often it was too risky, too arduous and too slow to be practicable on a smaller scale portage by way of the isthmic routes that crossed the Chersonese caused a similar rivalry between the ports of trade on the sea route as against the transshipment ports of the land route. The powerful and treacherous currents of the Thracian Bosporus were greatly feared, as indeed, they are even today.[28] Polybius' description of them has become famous. This was particularly true before the striking progress in navigation and shipbuilding set in which resulted from the Persian Wars.[29] The early sea-farers never braved the open sea if it was at all possible to coast along; also they were in mortal fear of turning a cape and preferred, if practicable, to portage

their tiny boats or to transload to an overland route. The early Pontic traders avoided turning the cape that guarded the Thracian Bosporus. Instead of sailing into and across the Sea of Marmora, the Propontis of the ancients, and emerging by the Dardanelles, they landed their goods on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland by the natives to the Hebrus Valley, thence rafting them downriver to the emporium of Ainos, on the Aegean outlet of the river. 30/ This city, although situated in the most barren part of Thrace, was one of the wealthiest in that regions, 31/ occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium. 32/ The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route, will disclose in concrete terms the military and political conditions of the grain trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, less than twenty years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries. 33/ Both were founded by colonists from Megara. Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later.

Herodotus, writing in the middle of the fifth century, when Byzantium's trading advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. [34] But this only proves how unimportant the route from the Pontus had been before. For the perfect location of Byzantium could not possibly have been overlooked if in the early seventh century trade had moved through the straits, since the currents force every ship that comes from the Black Sea to halt in the Bosporus. Certainly some Propontic grain reached the Aegean Sea: Herodotus describes Xerxes watching grain ships pass through the Hellespont on their way to Aegina and the Peloponnese. [35] And, Herodotus even tells that, when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Pontus itself. [36] No mention is made of Athens receiving Crimean grain at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned [37] and was not resettled until its recapture from the Persians in 479. [38] During more than a lifetime Persian influence and control extended through most of Thrace; Ainos and the other Greek cities of the Chersonese began to issue coins on the Persian standard. [39] Greece must have been now cut off from her Black Sea grain supply, and even from the Propontis.

479 B.C., the year of the Persian retreat from Europe, finds Ainos' swing towards the height of her glory and wealth,

which can be traced through her coins and through the Athenian tribute lists. In 474 she began to strike tetra-drachms that for beauty and workmanship are not surpassed by those of any other Greek city. 40/ She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward. 41/ From this time on, the city was in a reduced condition. 43/

Byzantium's rise was as meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425. 44/

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire

extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea, [45] and including as its subjects the Thracian tribes, the formidable Getae [46] and "the other hordes" around the Danube bordering on Scythia. [47] Under his successors, Sitalces and Seuthes, the empire was consolidated and made into a great and wealthy power. In 431, two years after Teres' death, the Athenians sought an alliance with Sitalces, and Thucydides observed that his kingdom was

> very powerful and in revenue and general prosperity exceeded all the nations of Europe which lie between the Ionian Sea and the Euxine; in the size and strength of their army being second only, though far inferior, to the Scythians. For if the Scythians were united, there is no nation which could compare with them...[48]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction," [49] according to Gasson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time, [50] we may assume similar interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years" [51] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus

River to the Sea of Marmora was exiled, and this territory became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys.[52] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its highest level of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries. These raids made settled agriculture impossible;[53] the city was thus forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an emporium. Not the gradual growth of economic forces but a political cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica,[54] which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the city was resettled.[55] But some two years later, when Pausanias, showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon.[56] Pausanias' dealings with the Persian emperor were imperiling the

Black Sea grain supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea. 51/ During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast, was a member of the League. The Egyptian expedition, intended to outflank Persia, ended in disaster in 455/4.

IV

As the power of Persia blocked Athenian ambitions in the south, the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly, the middle of the century saw an important shift in Athenian foreign policy.

Pericles made Athenian endeavors to vear from the north, south, and west of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled. 58/

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests," 59/ and special officials, called "warders of the Hellespont," were stationed at Sestos to control passing ships. 60/ Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus," 61/ guards the exit from the Hellespont. Therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy with a thousand men, and built a wall across the isthmus between the Aegean and the Propontis, which protected the isthmus against Thracian incursions. 62/ Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there. 63/

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont grain was not carried directly to the Piraeus, since that would have entailed turning the sinister cape of Sunium at the southern tip of Attica. (This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus. 64/ Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea.

From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelea. 65/ The Euboean revolt in 447/6 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated leniently, with the one exception of Histiaea. Its citizens were removed as a body and Athenians were settled in their place, because they had dared to interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. 66/

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sunium, "at great cost." 67/

In 448/7 or thereabouts, a cleruchy with two thousand men or more was established also on the isle of Lemnos, and about five years later one of perhaps a thousand men on Imbros: - the island commanding the approach to the Hellespont from the Aegean. Pericles brought the Greek cities of the Black Sea region under the sway of Athens. 68/ In 437/6, he led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. 69/

The Spartocid dynasty in the Crimea, which was to remain friendly

to Athens for at least a century, was established in 438/7 with Athenian aid, along with the setting up of an Athenian clerouchy at nearby Nymphaeum. [70] The Spartocid kingdom of Crimean Bosporus had as its capital Penticapeum, and later included Theodosia, the two principal ports-of-trade for the Crimean and Scythian grain. For unknown reasons Athens was unable to gain a foothold in Olbia, a key city on the northwestern shore; the grain had therefore to move right across the Black Sea and then along the southwestern shore on its way to the Bosporan straits. [71] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus. [72]

Thus Athenian military control of the grain trade was complete. To ensure her supremacy, Athens forbade any but Athenian ships, i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of including the Athenian "allies." [73] Byzantium was the focal point of the system; other states could buy grain at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a decree dated 426/5 relating to Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of grain in Byzantium. For each purchase, written notice had to be given to the Athenian officials at Byzantium, and no Methonian ship was allowed to proceed past Byzantium. [74]

In the nature of things under such conditions grain would be bought and sold at proclaimed equivalencies; the persistence, for several centuries, of the belief that the just price for wheat was five drachmas per medimn, [75] in the face of what appears a secular rise in prices, probably had its roots in such treaty prices. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices, from the fourth to the second century, despite the violent fluctuations in the price of grain in general. [76] The modernizing notion that a grain market, once established, could have secured the same degree of stability of prices, appears unrealistic.

Thus grain moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The grain was bought at the great emporium of Panticapeum: Rostovtzeff infers a sort of oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the grain purchased from the Scythian tribes of the interior. [77] Herodotus tells, not without amazement, that the Scythians grow grain "not for their own use but for sale." [78] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which due to its superior harbor facilities soon supplanted Panticapeum. [79] These emporia could not have in their organization differed much from the early European factories and ports of trade as we find them established on the Pepper, Tooth, Gold and Slave Coasts of West Africa. From Panticapeum, the grain crossed the

Black Sea and moved along the southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds - a fourth-century regulation, which may have existed even earlier - had to be carried on to Athens. 80/ That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause, Aristophanes' picture of the starving Megarian peasant in the Acharnians cannot have been altogether off the truth. Aristophanes, of course, gives this as the cause of the war in order to denounce what he regarded as its triviality. The Old Oligarch also explains the crucial role of Athenian sea power in maintaining her empire:

> ...since there is no state in existence which does not depend upon imports and exports, and these she will forfeit if she does not lend a willing ear to those who are masters by sea. 81/

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the grain trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "great numbers of grain-ships sailing in to Piraeus," and decided that Athens could not be defeated unless her grain supply were cut off. He therefore sent the son of Byzantine Proxenos at Sparta to Byzantium in an effort to win over that city as well

as Calchedon from Athens.[82] This occurred after the Spartan capture of Decelea - half way between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off grain shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

V.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the ruler of the Bosporan kingdom.[83] But the administered trade of the fourth century differed much from that of the fifth as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly, since the Bosporan cities were under her rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea.[84] The Bosporan kings were chieftain traders whose wealth derived from the grain trade which they appropriated; Athens in turn needed the Bosporan grain. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[85]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (c. 388 to 348 B.C.) have been preserved in several speeches of Demosthenes. Leucon, "who

controls the trade," granted priority of lading to any merchant carrying grain to Athens and exempted such merchants from the customs dues of a thirtieth.[86] These rights traditionally applied to Panticapeum, the port of trade for grain. But Leucon also opened another emporium, as Demosthenes himself calls it,[87] at Theodosia and applied the same privileges there. Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role.[88] Leucon's conquests restored Theodosia as an emporium. In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.[89] In 347, the year following Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus[90] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and an Athenian orator credits him with a renewal of the privileges.[91]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that she had in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of grain at an

export duty of only 1 1/9%; on exports above that amount, a dity of 1 2/3 was charged, in itself a saving of half the normal export tax. 92/

King Leucon also made gifts of grain to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a tamkar-type official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the treasury after disposing of the grain. 93/ This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems more likely in this case. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia. 94/ This may refer to the same gift or to another, or it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek perceived that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial advantages, but with the supply of grain and other indispensable commodities, including materials for defence and for shipbuilding." 95/ Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining

advantages in transportation; full or partial exemption from dues; safety from seizure; and priority in lading [96] - i.e., the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Clazomenae on the Asia Minor coast, granted that city permission to buy grain in certain specified cities. [97] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with more than eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens. [98] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian grain supply. According to Demosthenes, King Philip

> observing that we consume more imported grain than any other nation...advanced towards Thrace, and the first thing he did was to claim the help of the Byzantines as his allies in a war against you. [99]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. About 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there. [100] Instances of seizures of grain ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338. [101] Two years later Alexander succeeded his father

on the throne; as soon as his great campaigns in the east were launched, the grain supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an and. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonic times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian grain trade with the Black Sea. He was a master of Realpolitik: he was governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Plutarch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again upon Egypt and molest the realms of the King (i.e., of Persia) which lay along the sea. Many also were possessed already with that inordinate and inauspicious passion for Sicily which was afterwards kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage....
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won...That he was right in seeking to confine the power of the Athenians within lesser Greece, was amply proved by what came to pass. 102/

Pericles, in short, developed the Black Sea grain supply as an alternative to the Egyptian and the Sicilian, which were blocked

by the powers of Persia and Syracuse, respectively. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and very nearly ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

VI.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support. 103/ Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia; 104/ it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Grain clearly was the means of persuading Athens to take a hand in Egyptian-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is inconclusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant upon the breakdown of the Mycenaean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then to Cyprus, and thence to Greece. 105/ After a three-hundred-year lapse trade was resumed in the seventh century, maybe because of increased mastery of the sea, since it

was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor.[106] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded, it appears, at the end of the seventh century by the Egyptian king Amasis.[107] There is no mention of Athens in connection with Naucratis in this early period.

Although most writers[108] assume that grain was one of the principal exports from Naucratis, a list of Egyptian exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[109] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connection with Egypt, brought from there to Athens a great supply of grain" during a famine and thereby became king.[110]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect. However much wheat Athens did or did not obtain from Egypt, she certainly did not control the trade. Sparta apparently drew some grain from Egypt, too, since during the Pelponnesian War Athens attacked the Spartan island of Cythera, off the southern tip of Laconia, where

> the merchant vessels coming from Egypt and Lybia commonly put in.[113]

At the same time, Athenian imports from Egypt are mentioned about

408 B.C. Andocides persuaded Cyprus to lift the embargo on grain exports to Athens. Fourteen ships were about to enter the Piraeus, with more on their way.[114] Since the coasting route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,[115] we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech shows. Thus Rostovtzeff points to "the prevalence of Athenian influences in Naucratis in the late fifth and fourth centuries," shown by the pottery and coinage finds.[116] In the middle of the fourth century, the Athenians passed a decree in honor of a Naucratis citizen, Theogenes, a man

> kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately.[117]

We may assume that the "public business" included the purchase of grain.

VII

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian grain crop can be gauged by the offer made by Gelo, tyrant of Syracuse, to supply grain "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief either of the Greek army or of the Greek fleet.[118] While there is no positive evidence of Sicilian wheat exports to

Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece in no other way.[119] While the volume of the trade during the fifth century cannot be accurately judged, it was of a regular character.[120] The Peloponnesus was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic, gave her dominance over trade with the west.[121] The Athenian break with Corinth about 460, at the time of the expedition to Egypt, can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[122] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara, and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it."[123] Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse,

> professedly on the ground of relationship, but in reality because they did not wish the Peloponnesians to obtain corn from Sicily. Moreover they wanted to try what prospect they had of getting the affairs of Sicily into their hands.[124]

It was this threat to the food supplies of the Peloponnesus that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril to Sparta and her allies; Sparta and Corinth were thus

drawn together by the common danger. The Peloponnesian War was the outcome of the Athenian aim of controlling the western grain supply.

We have concentrated on the grain trade both on account of its crucial importance to Attica and because the bulk of the evidence on Greek trade naturally refers to it. Historians recognize today that grain imports ruled Athenian foreign policy and largely determined the course of its history. While this has been recognized as a fact, economic historians failed to give full weight to it as the force shaping the organization of that trade. It was administered trade carried on through ports of trade and treaties, closely adjusted to naval policy. No other means would have met the circumstances. It is the only form of trade that can be fitted in with a use of maritime power strictly applied to the ensurance of definite routes and certain supplies of vital import.

FOOTNOTES

1. Rostovtzeff, "Greet Sightseers in Egypt," Journal of Egyptian Archeology, (1929), XIV, p. 14.

2. Grundy, Thucydides and the History of his Age, (2 ed., Oxford 1948) vol. I, p. 90.

3. Jarde, Les cereales dans l'antiquite Grecque, p. 184.

4. Gomme, The Population of Athens in the Fifth and Fourth Centuries B.C., p. 26.

5. I.G. II^2 1672.

6. Gomme, pp. 28-33.

7. C.A.H., vol. V, p. 13.

8. Livy, XLIII, 6, 3.

9. Aristophanes, Wasps 717-18.

10. Athenaeus III, 113 A.

11. In the Roman army barley rations instead of wheat were issued to the troops as a punishment.

12. Naum Jasny, The Wheats of Classical Antiquity, (Baltimore 1944), p. 15.

13. Dem. XX, 31-32.

14. Kocevalov, "Die Einfuhr von Getreide nach Athen," in Rheinisches Museum, XXXI (1932), pp. 321-23.

15. This is the main theme of Grundy's Thucydides and the History of his Age, to which we are indebted for many of the insights of this section.

16. Glotz, Ancient Greece at Work, p. 297.

17. H. Francotte, "Le pain a bon marche et le pain gratuit dans les cites grecques," in Melanges Nicole, (Geneva 1905), p. 135.

18. Josephus, Jewish Wars II, 383 and 386.

19. M. Charlesworth, Trade-Routes and Commerce of the Roman Empire, p. 144 (?)

20. Rostovtzeff, Social and Economic History of the Roman Empire, pp. 148-49.

21. Arist., Const. of Athens XLIII, 4.

22. Xen., Mem. III, 6.

23. Ps.-Dem. XXXIV, 37.

24. Ps.-Dem. XXXV, 50; LVI, 6.

25. I, 4, 11, 1360a12.

26.

27. E.H. Minns, Scythians and Greeks (Cambridge, Eng., 1913), p. 442.

28. IV, 43.

29. C.A.H. vol. V, p. 19.

30. S. Casson, Macedonia, Thrace and Illyria (Oxford, 1926), p. 255. - According to Casson this same route was used for local trade in modern times until the building of a railroad early in the twentieth century.

31. Casson, p. 90; cf. J.M.F. May, Ainos, Its History and Coinage, 474-341 B.C. (London 1950) passim.

32. "Because of the peculiar currents of the Bosporus, every ship going through that strait must stop at Byzantium." Polybius, IV, 43.

33. Minns, p. 439; cf. also Strabo VII, 6, 2.

34. IV, 144.

35. VII, 147.

36. VI, 5 and 26.

37. VI, 33.

38. Thuc. I, 95.

39. A.B. West, "Coins from the Thracian Coast" in Numismatic Notes and Monographs, v. XL. Cf. also M.L. Strack, Die antiken Munzen Nordgriechenlands, who emphasized the Persian influence.

40. C.S. Seltmann, Greek Coins, London, 1933, p. 145. Cf. also West. p. 146.

41. Seltmann, p. 141.

42. West, p. 151

43. West, p. 150, Strack, p. ...

44. H. Merle, Geschichte der Staedte Byzantion und Kalchedon, p. 19.

45. Thuc. II, 97, 1.

46. Their savagery remained a problem during the Roman Empire; Strabo VII, 3, 13.

47. Thuc. II, 96.

48. Ibid., II, 97, 4-6.

49. Casson, p. 201 Cf. also West, pp. 57, 147, 150.

50. Strabo VII, 3, 13.

51. West, p. 121.

52. West, pp. 123-4.

53. Polybius, IV, 45.

54. II, 1346b 13-26.

55. Thuc. I, 94.

56. Ibid., I, 130-31.

57. Bury, History of Greece, p. 325, n. 4.

58. Plut., Pericles XX, 2-3.

59. G. Glotz, Histoire Grecque, v. I, p. 191.

60. A.E. Zimmern, The Greek Commonwealth p. 363.

61. Aristotle, Rhetoric, III, 10, 7, 1411a 13.

62. Plut., Pericles XIX, 1.

63. Ibid.

64. Ibid., XIX, 2.

65. Grundy, vol. I, p. 79.

66. Plut., Pericles XXIII, 2.

67. Thuc. VII, 28, 1.

68. Rostoxtzeff, "The Bosporan Kingdom" in C.A.H., vol. VIII, p. 564.

69. Plut., Pericles XX, 1.

70. Rostovtzeff, pp. 564-65.

71. Ibid., p. 565.

72. Ibid., p. 564.

73. Wilamowitz-Moellendorff, Griechisches Lesebuch, II/2, p. 249.

74. See also J. Hasebroek, Trade and Politics in Ancient Greece, p. 143.

75. Francotte, "Le pain a bon marche," pp. 140-141.

76. Cf. Jarde, Cereales 182-83, and F. Heichelheim, Wirtschaftliche Schwankungen der Zeit von Alexander bis Augustus (Jena 1930) 51-52, 57-59.

77. Rostovtzeff, p. 569.

78. Herod IV, 17.

79. Dem. XX, 33.

80. Arist., C. of A. LI, 4.

81. Ps.-Xen., C. of A. II, 3.

82. Xenophon, Hellenica, I, 1, 35-36.

83. Rostovtzeff, p. 567.

84. Rostovtzeff, p. 506-7.

85. Rostovtzeff, "Greek Sightseers in Egypt" p. 14.

86. Dem. XX, 31-32.

87. Ibid., 33.

88. Minns. p. 574.

89. Dem. XX, 36.

90. Minns, p. 571. Cf. also Hasebroek, p. 114.

91. Ps.-Dem. XXXIV, 36.

92. Minns, p. 576.

93. Dem. XX, 33.

94. Strabo VII, 4, 6.

95. Hasebroek, p. 111.

96. Ibid., pp. 126-27.

97. Francotte, "Le pain a bon marche," p. 136.

98. Xen., Hell. V, 1, 28.

99. Dem. XVIII, 87

100. Ps.-Dem. L, 17.

101. Rostovtzeff, in C.A.H., vol. VIII, p. 574.

102. Plut., Pericles XX, 2; XXII, 1.

103. Ibid., XXXVII, 3. - Cf. also Mallet, Les Rapports des Grecs avec l'Egypte, p. 47.

104. Scholiast to Aristophanes, Wasps 716, referred to by Mallet, Les premiers etablissements des Grecs dans l'Egypte, p. 283.

105. G.S. Hall, History of the Near East, pp. 144, 161.

106. Hall, p. ...

107. Herod. II, 178-79.

108. e.g., Grundy,vol. I, p. 64 n.1; Semple, Smith (?)

109. Prinz, Funde aus Naucratis, pp. 111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and other finds show that the same wares always go to the same place, without exception (p. 144).

110. Diodorus I, 29, 1.

111. Mallet, p. 48.

112. Bacchylides, frag. 70 in J.M. Edmonds, Lyra Graeca, vol. 3 (Loeb Classical Library, 2nd ed.). Cf. also Mallet, p. 283.

113. Thuc., IV, 53, 3.

114. Andocides II, 21.

115. Grundy, vol. I, p. 327.

116. Rostovtzeff, Social and Economic History of the Hellenistic World, vol. I, p. 89.

117. I.G. II^2 206, referred to by Smith, Naukratis, p. 64.

118. Herod. VII, 158-60.

119. T.J. Dunbabin, The Western Greeks (Oxford, 1948), p. 214

120. Ibid., p. 216.

121. Ibid., p. 227.

122. Dunbabin, p. 215; Rostovtzeff, History, p. 269; Grundy, vol. I, pp. 185-87.

123. Dunbabin, p. 215.

124. Thuc. III, 86, 4.

7

Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market trade? Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative in setting up such a market? One need not share an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these common sense terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of corn?

The answer, we submit, lay in the geographical and political structure of the regions in which corn supplies and routes of communications were situated. These conditions, under which military and diplomatic means had to be employed to ensure the forthcoming of the supplies, ~~and indeed~~ as well as the safety of the trade routes themselves, determined the methods and organization of the corn trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious about the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian

foreign policy was corn policy, it was ~~never~~ rarely ever affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the corn trade.

I.

Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in the economic ~~development~~ foreign policy of continental Greece, it would unquestionably be that area's preponderent dependence on imports for ~~her~~ its food supply.

Greek social and political thought may well have reflected this unalterable circumstance. The Greeks, one is tempted to conclude, never developed a discipline of economics because at no time the country could ~~never~~ rely for its food supply on the market. Instead, it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self-sufficiency the ~~basis~~ conscious postulate of her existence and thus of her theory of the ideal state. Autarky ~~was to~~ became for the Greek mind the <u>rationale</u> of the polis. On this point Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was still so pronounced that not a trace of commercial rivalry could be found between the two greatest grain producers, Egypt and the Cimmerian Bosporus. Grundy[1] insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent on imports. Jarde,[2] the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices.[3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 218,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves.[4] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription

of 329 B.C. records Attic production at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten.[5] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns,[6] Tod at 450,000.[7] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a population range of two to three hundred thousand, minimum imports of one to one and a half million medimns would be required, or two to three times the domestic production. Domestic production must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian embassadors at Rome claim that Athens "feeds even the husbandmen with imported corn."[8]

The dependence on imports was even greater than this statistical guess would indicate. While the population <u>as a whole</u> depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley. [9] A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread. [10]

While wheat was considered the citizens' staple, it constituted

no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens. Imports ~~thus~~ quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens thus depended entirely on imports.[11] Such was mostly the case; according to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the exclusion of the others."[12] / grains;

Our estimate of the extent of Athens' dependence on imports is confirmed by a speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kočevalov, a Russian philologist, insists that a study of the syntax of Demosthenes'[S] phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[14] He argues that this latter figure referred only to Panticapeum, "the home port", not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is ~~widespread~~ agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy <u>was</u>

food policy.[15] So does Glotz.[16] Francotte observes that "la première des questions économiques pour les Grecs etait celle du pain."[17]

Only three instances come to mind of great powers which largely imported their food supply: the city states of Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic ~~instance~~ case of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the organization of world trade. Having lost that control, Britain finds herself dependent on the treacherous mechanism of an unregulated world market. An increase in raw material prices due to armaments and stockpiling may threaten the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct

control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months; [18] this probably amounted to 2,900,000 and 5,800,000 medimni respectively. [19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovtzeff when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade:

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital. [20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly the trade routes and controlled by military means the sources of supply in the Eastern seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first

instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country. 21/

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines. 22/

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation. 23/ No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens. 24/ We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty *emporos* could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the

organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tamkar type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - most of this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean hinterland - thus served as the chief granary of Athens in the classical period.

II.

Peisistratus was the first to make a sustained effort to

extend Athenian power towards the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrance to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese. The corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[25] Persian expansion into Europe during the last two decades of the sixth century however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies, largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century the products of the Black Sea were not carried all the way by ship to Greece. Throughout antiquity the powerful and treacherous currents of the Bosporus were greatly feared, as indeed, they are even today. Polybius' description of them has become famous (IV, 43). This was particularly true before the remarkable progress in navigation and shipbuilding which resulted from the Persian Wars. [26] The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a

cape, preferring to portage their tiny boats. So the early traders avoided turning the cape guarding the Bosporus. Instead of sailing with their goods across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, they landed them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river.[27] This city, although situated in the most barren part of Thrace, was one of the wealthiest in that region,[28] occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium.[29] The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route will disclose in concrete terms the military and political conditions of the corn trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries.[30] Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading

advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. (IV, 144). But this only proves how unimportant the route from the Pontus had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits; since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese,[31] and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea.[32] It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned[33] and was not resettled until its recapture from the Persians in 479.[34] During this relatively long period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Chersonese began issuing coins on the Persian standard. 35/ Greece must have been now cut off from her Black Sea corn supply.

479 B.C., the year of the Persian retreat from Europe,

marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 480 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city.[36] She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward.[37] In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished proteges."[38] From this time on, the city was in a reduced condition.[39]

Byzantium's rise was a meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[40]

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding

must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea, [41] and including as its subjects the Thracian tribes, the formidable Getae [42] and "the other hordes" around the Danube bordering on Scythia. [43] Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison... [44]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction," [45] according to Casson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time, [46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years" [47] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus River to the Sea of Marmara was exiled, and this territory

became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys.[48] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries.[49] These raids made settled agriculture impossible; the city thus was forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an emporium. Not the gradual growth of economic forces but a political cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica II (1346 b, 13-25) which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the city was resettled.[50] But two years later, when Pausanias showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon.[51] Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when

the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea.[52] During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast was a member of the League. The Egyptian expedition, intended to outflank Persia, ended in disaster in 456.

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly, the middle of the century saw an important shift in Athenian foreigh policy. Pericles made Athenian endeavours to veer from the north, south, and west [53] of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled.

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of

Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests,"[54] and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships.[55] Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus,"[56] guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between the Aegean and the Propontis, which protected the isthmus against Thracian incursions.[57] Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there. [58]

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont corn was not carried directly to the Piraeus, since that would entailed turning the sinister cape of Sunium at the southern tip of Attica. (This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus.)[59] Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelea. [60] The Euboean revolt in 447/6 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in

their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. 61/

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sumium, "at great cost." 62/

In 447, a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros: - the island commanding the approach to the Hellespont from the Aegean. Between 436 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens. 63/ In 437-36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. 64/

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, along with the setting up of an Athenian cleruchy at nearby Nymphaeum. 65/ The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, and two principal ports-of-trade for the Crimean and Scythian corn. For reasons Rostovtzeff regards as mysterious, Athens was unable to gain a foothold in Olbia, a key city on the north western shore; the corn had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan

straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies."[68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a decree dated 426/5 relating to Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium.[69] It can hardly be doubted that under such conditions corn was bought and sold at proclaimed equivalencies; the persistance, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the violent fluctuations in the price of grain [71] in general. The modernizing notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Thus corn moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum: Rostovtzeff infers a sort of Oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior.[72] Herodotus reports, not without amazement, that the Scythians grow corn "not for their own use but for sale."[73] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum.[74] These emporia could not have in their organization differed essentially from the early European factories and ports of trade as we find them established on the Pepper, Gold, Tooth and Slave Coasts of West Africa. From Panticapeum, the corn crossed the Black Sea and moved along the southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds (according to a fourth century law, which may have existed even earlier) had to be immediately carried to Athens.[75] That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause. Aristophanes' picture of the starving Megarian peasant in the Acharnians cannot have been altogether off the truth. (Aristophanes

gives this as the cause of the war in order to show what he regarded as its triviality). The Old Oligarch, also explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea. 76/

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the corn trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine proxenos at Sparta to Byzantium in an effort to win over that city as well as Calchedon from Athens. 77/ This occurred after the Spartan capture of Decelea - half way between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom. 78/ But the administered trade of the fourth century differed much from that of the fifth, as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly since the Bosporan cities were under her rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now-powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea. 79/ The Bosporan kings

were chieftain traders whose wealth derived from the corn trade which they appropriated; Athens in turn needed the Bosporan corn. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[80]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (ca.388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of lading to any merchant carrying corn to Athens and exempted such merchants from the customs dues of a thirtieth.[81] These rights traditionally applied to Panticapeum, the port of trade for corn. But Leucon also opened another emporium, as Demosthenes himself calls it, at Theodosia and applied the same privileges there.[82] Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role. Leucon's conquests restored Theodosia as an emporium.[83] In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.[84] In 347, the year following on Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus [85] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and Demosthenes credits him with a renewal of the privileges. [86]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that she had in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax.[87]

King Leucon made also gifts of corn to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a tamkar-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the Treasury after disposing of the grain.[88] This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems - in this case more likely. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia. 89/ This may refer to the same or to another gift, but it need not; it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial

advantages, but with the supply of corn and other indispenseble commodities, including materials for defence and shipbuilding".[90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in lading[91] - i.e. the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Clazomenae on the Asia Minor coast, granted that city permission to buy corn in certain specified cities.[92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.[93] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian corn supply. According to Demosthenes, King Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.[94]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. About 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there.[95] Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338. [96] Two years later

Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an end. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organisation of Athenian corn trade with the Black Sea. He was a master of Realpolitik: he was governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Plutarch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage... 97/
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won. 98/ That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what came to pass.99/

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and almost ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

II.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne 74-77 of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support.[100] Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;[101] it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptain-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is inconclusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant upon the breakdown of the Mycenean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then the Cyprus, and thence to Greece.[102] After a three hundred year lapse trade was resumed in the seventh century maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor. [103] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded perhaps at the end of the seventh century by the Egyptian king Amasis. [104] There is no mention of Athens in connection with Naucratis in this early period.

Although most writers[105] assume that corn was one of the principal exports from Naukratis, a list of Egyptain exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[106] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.[107]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was on the other hand, a fifth century poet, Bacchylides, quoted by Athenaeus, speaks of

> vessels filled with wheat (which) bring from Egypt, through the shining waves of the sea, the most precious of riches. [109]

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too since during the Peloponnessian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and Lybia commonly put in. [110]

At the same time, Athenian imports from Egypt are indicated about 406 B.C. Andocides persuaded Cyprus to lift its embargo on grain exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way. [111] Since the coasting

route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,[112] we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds.[113] In the middle of the fourth century, the Athenians passed a decree in honor of a Naukratis citizen, Theogenes, a man

> kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately. [114]

We may assume that the "public business" included the purchase of corn.

III.

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief- either of the Greek army or of the Greek fleet.[115] While there is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way. [116] While the volume of trade during the fifth century

cannot be accurately judged, it was of a regular character.[117] The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic gave her dominance over trade with the west.[118] The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[119] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it".[120] Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse.

> upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection. 121/

It was this threat to the food supplies of the Peloponnese that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril to Sparta and her allies; Sparta and Corinth were thus drawn together by the common danger. The Peloponnesian War was the outcome of the Athenian aim of controlling the western corn supply.

1. Rostovtzeff, "Great Sightseers in Egypt", in Journal of Egyptian Archeology, v. XIV, p. 14

2. Grundy, Thucydides and the History of his Age, v. I, p. 90

3. Jarde, Les cereales d'antiquite Grecque, p. 184

4. Gomme, The Population of Athens in the Fifth and Fourth Centuries B.C., p. 26

5. B.C.H. VII, pp. 194-216

6. Gomme, p. 33

7. C.A.H., v. V, p. 13

8. Livy, XLIII, 6

9. Aristophanes, Wasps, 718

10. Athenaeus, III, 113 A

11. In the Roman army barley rations instead of wheat were issued to the troops as a punishment.

12. Haum Jasny, ..., p. 15

13. Demosthenes, Contra Leptinem, 31

14. Kocevalov, "Die Einfuhr von Getreide nach Athen", in Rheinisches Museum, XXX (?) (1932), p. 321

15. This is the main theme of Grundy's Thucydides and the History of his Age, to which we are indebted for many of the insights of this section.

16. Glotz, Ancient Greece at Work, p. 297

17. Francotte, "Le pain a bon marche et le pain gratuit", in Melanges Nicoles, p. 135

18. Josephus, Jewish Wars, II, 383 and 386

19. M. Charlesworth, "Trade Routes of the Roman Empire", p. 144 (?)

20. Rostovtzeff, Social and Economic History of the Roman Empire, pp. 148-9

21. Aristotle, Constitution of Athens, XLIII, 4

22. Xenophon, Memorabilia, III, 6, 3

23. Demosthenes, In Phormionem, 37

24. Demosthenes, Contra Lacritum, 50; In Dionysodorum, 6

25. E.H. Minns, Scythians and Greeks, p. 442

26. C.A.H. v. V, p. 19

27. S. Casson, Macedonia, Thrace and Illyria, Oxford, 1926, p. 255. - According to Casson this same route was used for local trade in modern times until the building of a railroad early in the twentieth century.

28. Casson, p. 90

29. "Because of the peculiar currents of the Bosporus, every ship going through that strait must stop at Byzantium". Polybius, IV, 43

30. Minns, p. 439; Cf. also Strabo, VII, 6, 2

31. Herodotus, VII, 147

32. VI, 5 and 26

33. VI, 33

34. Thucydides, I, 95

35. A.B. West, "Coins from the Thracian Coast" in Numismatic Notes and Monographs, v. XL. Cf. also M.L. Strack, Die antiken Munzen Nordgriechenlands, who emphasized the Persian influence.

36. C.S. Seltmann, Greek Coins, London, 1933, p. 145. Cf. also West.p.146

37. Seltmann, p. 141

38. West, p. 151

39. West, p. 150. Strack, p. ...

40. H. Merle, Geschichte der Staedte Byzantion und Kalchedon, p. 19

41. Thuc., II, 97

42. Their savagery remained a problem during the Roman Empire.-Strabo, VII, 3, 13

43. Thuc., II, 96

44. II. 98

45. Casson, p. 201 Cf. also West, pp. 57, 147, 150.

46. Strabo, VII, 3, 13

47. West, p. 121

48. West, pp. 123-4

49. Polybius, IV, 42

50. Thuc., I, 95

51. I, 130-1 - Plut. Cimon

52. Bury, History of Greece, p. 325, n. 4

53. Plutarch, Pericles, XX, 2-3

54. G. Glotz, Histoire Grecque, v. I, p. 191

55. A.L. Zimmern, The Greek Commonwealth p. 363

56. Aristotle, Rhetoric, III, 10, 7

57. Plut., Per. XIX, 1

58. XIX, 1

59. XIX, 3

60. Grundy, v. I, p. 79

61. Plut., Per. XXIII, 2

62. Thuc., VII, 28

63. Rostovtzeff, "The Bosporan Kingdom" in C.A.H., v. VIII, p. 564

64. Plut., Per. XX, 1

65. Rostovtzeff, pp. 564-5

66. Rostovtzeff, p. 565

67. Rostovtzeff, p. 564

68. Wilamowitz-Moellendorff, Griechisches Lesebuch, II/2, p. 249

69. See also J. Hasebroek, Trade and Politics in Ancient Greece, p. 143

70. N. Francotte, p. ...

71. Cf. Jarde and F. Heichelheim, ...

72. Rostovtzeff, pp. 564-5

73. Herod, IV, 17

74. Dem. In Lept., 32; cf. also Kocevalov.

75. Arist. Ath. Pol. 51, 4

76. Old Oligarch, On the Constitution of Athens, II, 3

77. Xenophon, Hellenica, I, 1, 35-6

78. Rostovtzeff, p. 567

79. Rostovtzeff, p. ...

80. Rostovtzeff, "Greek Sightseers in Egypt" in Journal of Egyptian Archeology, v. XIV, p. 14

81. Dem., C. Lept. 32

82. 33

83. Minns. p. 574

84. Dem., C. Lept., 32

85. Minns, p. 571. Cf. also Hasebroek, p. 114

86. Dem., In Phorm. 36

87. Minns, p. 576. Cf. also Grundy, p. 87, note 2

88. Dem., C. Lept. 33

89. Strabo, VII, 4, 6

90. Hasebroek, p. 111

91. Ibid. pp. 126-7

92. Francotte, p. 136

93. Xen., Hell., V, 1, 28

94. Demosthenes, De Corona, 87

95. Demosthenes, Contra Polyclem, 17

96. Rostovtzeff, in C.A.H., v. VIII, p. 574 (?)

97. Plut., Per. XX, 2-3

98. XXI, 1

99. XXII, 1

100. XXXVII, 3. - Cf. also Mallet, Les Rapports des Grecs avec l'Egypte, p. 47

101. Scholia to Aristophanes, Wasps 716, referred to by A. Boeckh, Public Economy of Athens (Lewis translation), p. 90, and Mallet, Les premiers ms etablissements des Grecs dans l'Egypte, p. 283

102. G.S. Hall, History of the Near East, pp. 144, 161

103. Hall, p. ...

104. Herod., II, 178-9

80. Rostovtzeff, "Greek Sightseers in Egypt" in Journal of Egyptian Archeology, v. XIV, p. 14

81. Dem., C. Lept. 32

82. 33

83. Minns. p. 574

84. Dem., C. Lept., 32

85. Minns, p. 571. Cf. also Hasebroek, p. 114

86. Dem., In Phorm. 36

87. Minns, p. 576. Cf. also Grundy, p. 87, note 2

88. Dem., C. Lept. 33

89. Strabo, VII, 4, 6

90. Hasebroek, p. 111

91. Ibid. pp. 126-7

92. Francotte, p. 136

93. Xen., Hell., V, 1, 28

94. Demosthenes, De Corona, 87

95. Demosthenes, Contre Polyclem, 17

96. Rostovtzeff, in C.A.H., v. VIII, p. 574 (?)

97. Plut., Per. XX, 2-3

98. XXI, 1

99. XXII, 1

100. XXXVII, 3. - Cf. also Mallet, Les Rapports des Grecs avec l'Egypte, p. 47

101. Scholia to Aristophanes, Wasps 716, referred to by A. Boeckh, Public Economy of Athens (Lewis translation), p. 90, and Mallet, Les premiers as etablissements des Grecs dans l'Egypte, p. 283

102. C.S. Hall, History of the Near East, pp. 144, 161

103. Hall, p. ...

104. Herod., II, 178-9

105. e.g., Grundy, Semple, Smith (?)

106. Prinz, Funde aus Naukratis, pp. 111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and other finds show that the same wares always go to the same place, without exception (p. 144).

107. Diodorus I, 29, 1

108. Mallet, p. 46

109. Athenaeus, II, 39 f. Cf. also Mallet, p. 283

110. Thuc., IV, 53

111. Andocides, On His Return, 21

112. Grundy, p. 327

113. Rostovtzeff, Social and Economic History of the Hellenistic World, v. I, p. 89

114. C.I.G., 4, 35, referred to by Smith, Naukratis, p. 64

115. Herod., VII, 156-60

116. T.J. Dunbabin, The Western Greeks, Oxford, 1948, p. 214

117. Dunbabin, p. 216

118. Rostovtzeff, History of the Ancient World, II, p. 269. - Dunbabin, p. 227

119. Dunbabin, p. 215. - Rostovtzeff, p. 269. - Grundy, p. 185

120. Dunbabin, p. 215

121. Thuc. III, 86

Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market trade? Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative of setting up such a market? One need not share an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these common sense terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of corn?

The answer, we submit, lay in the geographical and political structure of the regions in which supplies and communications were situated. These conditions under which military and political power had to be employed to ensure the forthcoming of the supplies, and indeed the safety of the trade routes themselves, determined the methods and organization of trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious for the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian

foreign policy was corn policy, it was never affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the corn trade.

I.

Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in Greek economic development, it would unquestionably be that area's preponderant dependence on imports for her food supply.

Greek social and political thought reflected this unalterable circumstance. The Greeks never developed a discipline of economics because the country could never rely for its food supply on the market. Instead it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self sufficiency the basic postulate of her existence and thus of her theory of the ideal state. Autarky was to the Greek mind the <u>rationale</u> of the polis. On this point ~~Art~~ Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was so pronounced that not a trace of commercial rivalry can be found between the two greatest grain producers, Egypt and the Bosporus.[1] Grundy insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent on imports.[2] Jardé, the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices.[3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate the orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 216,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves.[4] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription

of 329 B.C. records Attic production at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten. [5] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns, [6] Tod at 450,000. [7] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a population range of two to three hundred thousand, minimum imports of one to one and one-half million medimns would be required, or two to three times the domestic production. Domestic production, must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian ambassadors at Rome claim that Athens "feeds even the husbandmen with imported corn." [8]

The dependence on imports was even greater than this statistical guess would indicate. While the population as a whole depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley. [9] A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread. [10]

While wheat was considered the citizens' staple, it constituted

no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens. Imports thus quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens depended entirely on imports.[11] Such was mostly the case; according to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the exclusion of the others."[12]

Our estimate of the extent of Athens' dependence on imports is confirmed by a speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kocevalov, a Russian philologist, insists that a study of the syntax of Demosthenes' phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[14] He argues that this latter figure referred only .to. Panticapeum, "the home port", not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is widespread agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy <u>was</u>

food policy.[15] So does Glotz.[16] Francotte observes that "la première des questions économiques pour les Grecs était celle du pain."[17]

Only three instances come to mind of great powers which largely imported their food supply: the city states of Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic instance of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the organization of world trade. Having lost that control, Britain finds herself dependent on the treacherous mechanism of an unregulated world market. An increase in raw material prices due to armaments and stockpiling threatens the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct

control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months;[18] this probably amounted to 2,900,000 and 5,600,000 medimni respectively.[19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovtzeff when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade:

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital.[20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly the trade routes and controlled by military means the sources of supply in the Eastern Seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first

instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each pryteny - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country. 21/

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines. 22/

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation. 23/ No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens. 24/ We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty emporos could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the

organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tamkar type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - all this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean <u>hinterland</u> - thus served as the chief granary of Athens in the classical period.

II.

Peisistratus was the first to extend Athenian power towards

the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrace to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese.The corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[25] Persian expansion into Europe during the last two decades of the sixth century however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies, largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century the products of the Black Sea were not carried all the way by ship to Greece. Throughout antiquity the powerful and treacherous currents of the Bosporus were greatly feared, as indeed, they are even today. Polybius' description of them has become famous (IV, 43). This was particularly true before the remarkable progress in navigation and shipbuilding which resulted from the Persian Wars. [26] The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a

cape, preferring to portage their tiny boats. So the early traders avoided turning the cape guarding the Bosporus. Instead of sailing with their goods across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, landed them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river.[27] This city, although situated in the most barren part of Thrace, was one of the wealthiest in that region,[28] occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium.[29] The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route will disclose in concrete terms the military and political conditions of the corn trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries.[30] Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of ~~her soil~~ the site; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading

advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. (IV, 144). But this only proves how unimportant the route from the Pontic had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits at all, since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese, 31/ and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea. 32/ It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned 33/ and was not resettled until its recapture from the Persians in 479. 34/ During this relatively long period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Chersonese began issuing coins on the Persian standard. 35/ Greece must have been now cut off from her Black Sea corn supply.

479 B.C., the year of the Persian retreat from Europe,

marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 480 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city.[36] She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ~~paxaxiy~~ ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward.[37] In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished proteges."[38] From this time on, the city was in a reduced condition.[39]

Byzantium's rise was as meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[40]

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was

the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea,[41] and including as its subjects the Thracian tribes, the formidable Getae[42] and "the other hordes" around the Danube bordering on Scythia.[43] Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison...[44]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction."[45] according to Casson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time, [46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this

negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years"[47] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus River to the Sea of Marmara was exiled, and this territory became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys.[48] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries. These raids made settled agriculture impossible;[49] the city thus was forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an emporium. Not the gradual growth of economic forces but a political cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica II (1346 b, 13-25), which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the

city was resettled.[50] But two years later, when Pausanias showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon.[51] Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the Insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea.[52] During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast was a member of the League. The Egyptian expedition, intended to outflank Persia, ended in total disaster, in 456.

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly the middle of

the century saw an important shift in Athenian foreign policy. Pericles made Athenian endeavours to veer from the north, south, and west[53] of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled.

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465, to collect the tribute and to "represent Athens' interests,"[54] and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships.[55] Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus,"[56] guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between Aegean and Propontis, which protected the isthmus against Thracian incursions.[57] Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there.[58]

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont corn was not carried directly to the Piraeus, since that would have entailed turning the sinister cape of Sunium at the southern tip of Attica. This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus.[59]

Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelea.[60] Gomme, p. 79. CIA I, 28. The Euboean revolt in 447 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. [61]

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sumium, "at great cost." [62]

In 447, a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros: - the islands commanding the approach to the Hellespont from the Aegean. Between 438 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens.[63] In 437-36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. [64]

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, along with the setting up of an Athenian cleruchy at nearby Nymphaeum.[65] The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, the two principal ports-of-trade for the Crimean and Scythian corn. For reasons Rostovtzeff regards as mysterious, Athens was unable to gain a foothold in Olbia, a key city on the north western shore; the corn had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies."[68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a treaty dated 426/5 between Athens and Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium.[69] It can hardly be doubted that under

such conditions corn was bought and sold at proclaimed equivalencies; the persistence, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the violent fluctuations in the price of grain[71] in general. The modernizing notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Thus corn moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum: Rostovtzeff infers a sort of Oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior.[72] Herodotus reports, not without amazement, that the Scythians grow corn "not for their own use but for sale."[73] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum. [74] These emporia could not have in their organization differed essentially from the early European factories and ports of trade as we find them established on the Pepper, Gold, Tooth and Slave Coasts of West Africa. From Panticapeum, the corn crossed the Black Sea and moved along the

southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds (according to a fourth century law, but which probably existed already) had to be immediately carried to Athens.[75] That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause, Aristophanes' picture of the starving Megarian peasant in the Acharnians cannot have been altogether off the truth. (Aristophanes gives this as the cause of the war in order to show up ~~what he regarded as~~ its triviality). The Old Oligarch, also explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea. [76]

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the corn trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine proxenos at Sparta to Byzantium in an effort to win over that city as well as Calchedon from Athens.[77] This occurred after the Spartan capture of Decelea - half way

between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom.[78] But the administered trade of the fourth century differed much from that of the fifth, as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly since the Bosporan cities were under her rule; in the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now-powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea.[79] The Bosporan kings were chieftain traders whose wealth derived from the corn trade which they appropriated; Athens in turn needed the Bosporan corn. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[80]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (ca.388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of lading to any merchant carrying corn to Athens and exempted such merchants from the customs dues of a thirtieth. [81] These rights traditionally applied to Panticapeum, the port of trade for corn. But Leucon also opened another <u>emporium</u> as Demosthenes himself calls it, at Theodosia, and

applied the same privileges there.[82] Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role. Leucon's conquests restored Theodosia as an emporium.[83] In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.[84] In 347, the year following on Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus[85] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and Demosthenes credits him with a renewal of the privileges.[86]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that as in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax. [87]

King Leucon made also gifts of corn to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a tamkar-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the

Treasury after disposing of the grain.[88] This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems - in this case - more likely. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia.[89] This may refer to the same or to another gift, but it need not; it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial advantages, but with the supply of corn and other indispensable commodities, including materials for defence and shipbuilding".[90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in leading[91] - i.e. the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Clazomenae on the Asia Minor coast, granted that the

city permission to buy corn in certain specified cities.[92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.[93] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian corn supply. According to Demosthenes, King Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.[94]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. In 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there.[95] Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338.[96] Two years later Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an end. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian corn trade with the Black Sea. He was a master of Realpolitik: he was

governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Plutarch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage... 97/
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expensive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won. 98/ That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what come to pass. 99/

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and almost ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

II.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne 74-77 of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support.[100] Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;[101] it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptian-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is inconclusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant on the breakdown of the Mycenean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then to Cyprus, and thence to Greece.[102] After a three hundred year lapse trade was resumed in the seventh century maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor. [103] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded at the end of the seventh century by the Egyptian king Amasis. [104] There is no mention of Athens in

connection with Naucratis in this early period.

Although most writers[105] assume that corn was one of the principal exports from Naukratis, a list of Egyptian exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[106] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.[107]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was not an important source of grain for Athens in the fifth century.[108] On the other hand, a fifth century Athenian poet, Bacchylides, quoted by Athenaeus, speaks of

> vessels filled with wheat (which) bring from
> Egypt, through the shining waves of the sea,
> the most precious of riches. [109]

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too since during the Peloponnessian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and
> Lybia commonly put in. [110]

At the same time, Athenian imports from Egypt are indicated in 408 B.C. Andocides persuaded Cyprus to ~~x~~ lift its embargo on grain

exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way.[111] Since the coasting route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,[112] we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus, Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds.[113] In the middle of the fourth century, the Athenian senate passed a decree in honor of a Naukratis citizen, Theogenes, a man

> Kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately. [114]

We may assume that the "public business" included the purchase of corn.

III.

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief either of the Greek army or of the Greek fleet. [115] While there

is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way.[116] While the volume of trade during the fifth century cannot be accurately judged, it was of a regular character.[117] The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic gave her dominance over trade with the west.[118] The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[119] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it".[120] Eventually, the Athenians intervened on behalf of the Leontines in their local war with Syracuse,

> upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection.[121]

It was this threat to the food supplies of the Peloponnese that long standing brought Athens about a head-on clash between into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril

to Sparta and her allies; Sparta and Corinth were ~~thus~~ drawn together by the common danger. Thus the ~~The~~ Peloponnesian War was the inevitable outcome of the Athenian aim of controlling the western corn supply.

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Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market trade? ~~And~~ Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? One need not ~~nurse~~ (share) an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these (common terms) terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and ~~compel to~~ require the use of administrative methods of trading in order to ensure the supply of corn? ~~The~~

The answer, we submit, lay in the (~~Grecian~~ regions) geographical and political structure of the ~~Grecian system~~ in which supplies and (communications) ~~transportation~~ were situated. ~~The use of~~ military and political power, to ensure the forthcoming of the supplies, and indeed the safety of the trade routes themselves, ~~became the determinant condition of~~ the ~~actual~~ methods and organization of trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious for the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian foreign policy was corn policy, ~~that policy~~ it was never affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from ~~him~~ a bare outline of the history of the corn trade.

I.

If we were to look for any one determining factor in Greek economic development, it would unquestionably be that area's preponderant dependence on imports for her food supply. Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staples of her diet.

Greek social and political thought reflected this unalterable circumstance. The Greeks never developed a discipline of economics because the country could never rely for its food supply on the market. Instead it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self sufficiency the basic postulate of her existence and thus of her theory of the ideal state. Autarky was to the Greek mind the rationale of the polis. On this point Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was so pronounced that not a trace of commercial rivalry can be found between the two greatest grain producers, Egypt and the Bosporus. Grundy insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent

on imports. . Jardé,[732] the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices.[743]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 218,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves.[754] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription of 329 B.C. records Attic production at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten.[765] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns,[776] Tod at 450,000.[787] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a

population range of two to three hundred thousand, minimum imports of one to one and one-half million medimns would be required, or two to three times the domestic production. Domestic production, must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian ambassadors at Rome claim that Athens "feeds even the husbandmen with imported corn."[798]

The dependence on imports was even greater than this statistical guess would indicate. While the population as a whole depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only ~~if there were no alternative, i.e.~~ if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the ~~publicized~~ democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley.[809] A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread.[810]

~~But~~ While wheat was considered the citizens' staple, it constituted no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens[811]. Imports thus quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens depended entirely on imports.[811] Such was mostly the case; accordin to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the

exclusion of the others."[12]

Our estimate of the extent of Athens' dependence on imports is confirmed by a famous speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kocevalov, a Russian philologist, insists that a study of the syntax of Demosthenes' phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[1] Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is widespread agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy was food policy.[15] So does Glotz.[16] Francotte observes that "la premiere des questions economiques pour les Grecs était celle du pain."[17]

[1] He argues that this latter figure referred only to Panticapaeum, "the home port", not also to Theodosia from which once again that amount was shipped.

~~Gift trade would seem to be too hazardous to ensure the supply of a vital staple.~~

Only three instances come to mind of great powers which largely imported their food supply: Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic instance of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the ~~trade routes and sources of supply.~~ Having lost that control, Britain finds herself dependent on the treacherous mechanism of ~~a~~ world market. An increase in raw material prices due to armaments and stockpiling threatens the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through

the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months; this probably amounted to 2,900,000 and 5,800,000 medimni respectively.[18][19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovzteff, when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade: ~~He ruefully remarks:~~

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital.[20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly, by military means, the trade routes and controlled the sources of supply in the Eastern Seas. When her strategic hold was ~~weakened and eventually destroyed~~ lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country.[9421]

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines.[9422]

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation.[9423] No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens.[9524] We may assume that timber and other supplies

for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty emporos could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tanker type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - all this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was not in earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean hinterland - thus served as the chief granary of Athens in the classical period.

But that was by the end of the fourth century.

II.

Peisistratus was the first to extend Athenian power towards the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrance to the Hellespont, and supported Miltiades in occupying the northern shore , the Thracian ChersoneseThe corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time. ~~625~~ Persian expansion into Europe during the last two decades of the sixth century, however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies , largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century, the ~~corn and other~~ products of the ~~Crimea (and the other lands bordering the Black Sea~~ were not carried all the way by ~~sea~~ ship to Greece. Throughout antiquity ~~it~~ indeed, even today (as they are) the powerful and treacherous currents of the Bosporus were greatly feared. Polybius' description of them has become famous (IV, 43). This was particularly true before the ~~remarkable progress~~ 4726 in navigation and shipbuilding which resulted from the Persian Wars. The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a cape, preferring to portage their tiny boats. ~~The~~ So the early traders ~~therefore~~ avoided turning the cape ~~leading into~~ guarding the Bosporus. Instead of sailing across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, with their goods, they landed them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river. 9827 This city, although ~~located~~ situated in the most barren part of Thrace, was one of the wealthiest in that region, 9928 occupying in regard to the Black Sea trade a ~~strategic~~ position as strategic as was that of Byzantium, ~~in the late fifth century and after~~. 10029 The rivalry of Ainos and Byzantium, I will disclose in concrete terms the military and political conditions of the corn trade.

I the port of trade of the land route,
I the port of trade of the sea route

White Cross

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the

straits, Byzantium ~~was~~ remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off ~~wealthier~~ than Calchedon only because of her superior fisheries. for 30 Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading advantage ~~superiority~~ was already evident, ~~chides~~ ridiculed the Chalcedonians for their blindness ~~in not recognizing the superior site of Byzantium~~ in settling on the wrong side of the straits. (IV, 144). But this only proves how ~~the previous~~ unimportance ~~of~~ to the ~~Black~~ sea route from the ~~Black Sea.~~ Pontic had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits at all, since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese, for 31 and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea. ~~(p. 103)~~ 32 It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's

greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the ~~1043~~ population fled to the Black Sea port of Mesembria; the city was ~~burned~~ burned and was not resettled until its recapture from the Persians in 479. ~~105~~ 34 During this period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Chersonese began issuing coins on the Persian standard. ~~35~~ ~~106~~ Greece must have been now cut off from her Black Sea corn supply.

Prelatively long

double space!

479 B.C., the year of the Persian retreat from Europe, marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 480 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city. ~~107~~ 36 She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward. ~~108~~ 37 In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished protégés." ~~109~~ 38

From this time on, the city was in a reduced condition.[110] 39

Byzantium's rise was as meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed[55] four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[111] 40

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The ~~major~~ factor impelling ~~this change~~ was the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea,[112] 41 and including as its subjects the Thracian tribes, the formidable Getae[113] 42 and "the other hordes" around the Danube bordering on Scythia.[114] 43 Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison...[115] 44

The ~~establishment~~ rise of this empire ~~forced the substitution~~ left the

~~of the~~ all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction," [46] according to Casson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time, [46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this negative correlation that at the end of the century, around 412 B.C., Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years" [47] - as the result of a struggle for supremacy among Odrysian princes. After ~~the death of~~ Seuthes I (death) ~~the ruler of the~~ a local prince who had ruled the ~~Thracian~~ territory from the Hebrus River to the ~~Propontis (the Sea of Marmora)~~ Sea of Marmara was exiled, and ~~his~~ this territory became severed from the Odrysian empire. ~~This~~ The turn of events once more opened up the land route to the Black Sea ~~again for Ainos~~ for Ainos and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys. [48] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium ~~from~~ from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries. These raids made settled agriculture impossible; [49] the city thus was forced literally to the water's edge and by necessity had to make her living from the sea.

Byzantium did not miss her opportunity: almost overnight, she (trading place. Not the gradual growth of economic forces, but a political cataclysm led to the establishment of the) was deliberately converted into an emporium. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica II (1346 b, 13-25), which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the city was resettled. +1250 But two years later, when Pausanias showed ~~evidenced~~ Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon. +1251 Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis ~~(Sea of Marmora)~~ and the Black Sea. +1252 During this period Athens unsuccessfully attempted to gain control of Thrace (in the north) and Egypt (in the south). She captured Eion, at the mouth of the Strymon River, in 476, but (colonization attempt at) was thwarted by the Thracian tribes (tried without success). She also ~~failed in an attempt~~ to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side.)

Athens did secure the seas around Thrace; in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, (off the Thracian coast) was a member of the League. The Egyptian expedition (intended to outflank Persia,) ended in total disaster in 456.

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace, ~~thereby threatening the security of the corn route from the Black Sea.~~ Accordingly, the middle of the century ~~then~~ saw an important shift in Athenian foreign policy. ~~So~~ Pericles ~~took power, it was his influence that~~ made Athenian ~~interests~~ endeavours to veer from the north, south, and west ~~to the northeast~~ (12453 of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled).

The ~~most~~ immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests," (12554) and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships. (12658) Byzantium ~~controls~~ governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus," (12756) ~~controls~~ guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between ~~the~~ Aegean and Propontis, which protected the isthmus against ~~the~~ Thracian incursions. (12857) Of all his

expeditions, ~~remarks~~ writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there.~~129~~ 58

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont, corn was not carried directly to the Piraeus, since that would have entailed turning the sinister cape of Sunium at the southern tip of Attica. This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus.~~130~~ 59 Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelea.~~131~~ 60 The Euboean revolt in 447 thus ~~posed~~ created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it ~~under control~~ to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew.~~132~~ 61

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sumium, "at great cost."~~133~~ 62

In 447, ~~also~~ a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros; - the islands commanding the approach to the Hellespont from the Aegean. Between 438 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens ~~control~~. 134 63 In 437/36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. ~~135~~ 64

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, ~~contemporaneously~~ at once with the ~~establishment~~ setting up of an Athenian cleruchy at nearby Nymphaeum. 136 65 The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, the two principal ports-of-trade for the Crimean and Scythian corn. For reasons, Rostovtzeff regards as mysterious, Athens was unable to gain a foothold ~~control of~~ in Olbia, a key city on the north western shore; the corn

had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Asteous and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships, i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies."[68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a treaty dated 426/5 between Athens and Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium.[69] can hardly be doubted that under such conditions corn was bought and sold at proclaimed equivalencies; the persistence, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the

MEDIMN

violent fluctuations in the price of grain in general. The modernistic notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Corn Thus moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum: Rostovzteff infers a sort of oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior. Herodotus reports, not without amazement, that the Scythians grow corn "not for their own use but for sale." In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum. These emporia could not have in their organization differed essentially from the early European factories and ports of trade (of West Africa) as we find them established on the Pepper, Gold, Tooth and Slave Coasts) on the Persian coast during the sixteenth to eighteenth centuries. From Panticapeum, the corn crossed the Black Sea and moved along the southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two-thirds (according to a fourth century law, but which probably existed already) had to be immediately carried to Athens. That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market, the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause, Aristophanes' picture of the starving Megarian peasant in the Acharnians cannot have been altogether off the truth. (Aristophanes gives this as the cause of the war in order to show what he regarded as its triviality.) The Old Oligarch,

also, explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea.[76]

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her control over the corn trade. One of the instruments of the Spartan strategy, in fact, was an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine proxenos at Sparta to Byzantium in an effort to win that city over as well as Calchedon from Athens.[77] This occurred after the Spartan capture of Decelea closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405. Peloponnesian War.

Athenian naval supremacy was recovered after the battle of Cnidus in 394, As soon as a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom,[78] But the administered trade of the fourth century differed much from that of the fifth; however, as to the degree of Athenian control. In the fifth century, Athens had administered the trade almost single-handedly, since the Bosporan cities were under her control. rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens controlled ruled the seas only from the Thracian Bosporus westward, while the now-powerful Bosporan kingdom (of the Cimmerian Bosporus) maintained effective rule of dominance over the Black Sea.[79] They were mutually dependent. The Bosporan kings were chieftain traders whose

half way between Oropus and Athens —

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76 147 Old Oligarch, Constitution of Athens, II, 3.

77 148 Xenophon, Hellenica I, 1, 35-6. This was after the Spartan capture

78 145 Rostovtzeff, in C.A.H., v.VIII, p.567.

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79 150 Ibid, p. ....

wealth ~~was~~ derived from the corn trade; Athens in turn needed the Bosporan corn. ~~Later~~, when Egypt under Ptolemy Philadelphus ruled the Aegean, ~~after Alexander's death~~ we find close diplomatic relations between the Bosporus and Egypt.*

Details of this ~~administrated~~ trade during the reign of the greatest of the Bosporan kings, Leucon (ca. 388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of lading to any merchant carrying corn to Athens and exempted ~~those~~ merchants from the customs dues of a thirtieth.** These rights ~~had~~ traditionally applied ~~at~~ Panticapeum, the port of trade for ~~this trade~~. But Leucon also opened another emporium (Demosthenes' phrase), at Theodosia and applied the same privileges there.*** Theodosia had earlier been a great emporium, ~~but~~ Scythian incursions ~~had destroyed~~ this role. ~~Following Leucon's conquest and restoration, Its vastly superior harbor facilities and its proximity to the corn fields made it largely supplant Panticapeum as the chief port of trade.~~**** In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was ~~published~~ in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.***** In 347, following Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor (also honoring a third brother who did not share in the rule) in the Piraeus.****** Paerisades

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* M. Rostovtzeff, "Greek Sightseers in Egypt," Journal of Egyptian Archaeology, v.XIV, p.14.

** Demosthenes, ~~In~~ Leptines, 31.

*** ~~Ibid~~, 33.

**** Minns, ~~op. cit.~~, p.574.

***** Demosthenes, ~~In~~ Leptines, 32.

****** Minns, ~~op. cit.~~, p.571. Cf. also Hasebroek, ~~op. cit.~~, p.114.

~~began single rule~~ became sole ruler in 334/3, and Demosthenes credits him with a renewal of the privileges.[86]

While Athens was the most favored nation ~~in~~ under this treaty trade, she did not enjoy the same monopoly that ~~she did in the~~ as in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax.[87]

~~But~~ King Leucon ~~also supplied some of Athens' needs by large~~ made also gifts of corn to Athens. ~~Thus~~ Demosthenes says that ~~Leucon gave so large a~~ the gift ~~of corn to Athens~~ in 357 was so large that the sitones (a tanker-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the Treasury after disposing of the grain.[88] This should mean ~~The meaning of this "surplus" is not clear.~~ one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, ~~and~~ the remainder being ~~was~~ sold for the benefit of the ~~treasury~~, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative in this case seems more likely. Strabo, in writing of Theodosia's superiority over Panticapaeum, remarks that Leucon once sent 2,100,000 medimns — a very large amount — to Athens from Theodosia.[89] ~~We cannot determine whether this~~ This may refer to the same or to another gift, but it need not have been a gift at all; it may simply ~~be~~ represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens

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86 ~~157~~ * Demosthenes, In Phormionem, 36.

87 ~~158~~ ** Minns, p.576; cf. also Grundy, ~~op. cit.~~, p.87, note 2.

88 ~~159~~ *** ~~in~~ Contra Leptinem, 33.

89 ~~160~~ **** Strabo, VII, 4, 6.

and the Crimea was not exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial advantages, but with the supply of corn and other indispensable commodities, including materials for defence and shipbuilding."* [90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or country and advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in lading* [91] - the conditions of the Athens-Bosporus trade.

Athens in her efforts attempted to retain control of the western Pontic route, but was only partially successful. In 387, a treaty with Clazomenae on the Asia Minor coast granted that city permission to buy corn in certain specified cities.** [92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.*** [93] One of the first steps taken by Philip of Macedon, Alexander's father, (making a bid for striking out on an Aegean empire, designed to rule the Aegean, was to reach out for a stranglehold on the Athenian corn supply. According to Demosthenes, king Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.**** [94]

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90 * J. Hasebroek, op. cit., p.111.

91 * Ibid, pp. 126-7.

92 ** Francotte, loc. cit., p.136.

93 *** Xenophon, Hellenica V, 1, 28.

94 **** Demosthenes, de Corona, 87.

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. In 360, she found herself compelled to convoy grain ships because the Byzantines were "again" forcing her to put into Byzantium and unload their cargo there.* Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338.** Two years later Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade (was practically at an end.

It can hardly be a mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian corn trade with the Black Sea. He was a master of Realpolitik; he was governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Plutarch, analyzing this in an extended passage of rare insight, following upon his description of Pericles' expedition to the Black Sea,

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage...*** 97

> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won.*** 98

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45 Demosthenes, Contra Polycles, 17.

46 ** Rostovtzeff, in C.A.H., v.VIII, p.574.

47 *** Plutarch, Pericles, XX, 2-3.

48 *** Ibid, XXI, 1.

That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what came to pass.* 170-99

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest ~~control of~~ power over Egypt ~~from~~ from Persia a few years earlier. The attempt proved abortive ~~and resulted in~~ and ended in almost total disaster ~~in 454. Plutarch says that~~ (eventually) Pericles resisted all further ~~attempts by some citizens to begin a new~~ attempts to renew the attack on Egypt.

II. Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in ~~an attempt to win~~ the hope of winning her support.** 171 100 Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;*** 172 101 it is this gift that Aristophanes ridiculed because only barley was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptian-Persian relations.

It is ~~very~~ difficult to assess the ~~degree~~ extent to which Athens received grain from Egypt during this period; the evidence is ~~very~~ inconclusive (may have been a trickle of ~~was~~ trade between Greece and Egypt from the third millennium until about the tenth century, when ~~it was stoppedby~~ the convulsions attending the breakdown of the Mycenean civilization ~~stopped it altogether. Trade~~ moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then to Cyprus, and thence to Greece.**** 173 102 Trade was resumed in the seventh century after a three hundred year lapse, ~~possibly because of a change in trade routes~~ maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and

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99 170 * XXII, 1.

100 171 ** ~~Plutarch, Pericles~~ XXXVII, 3. — Mallet, Les Rapports des Grecs avec l'Egypte, p.47.

101 172 *** Scholia to Aristophanes, Wasps 716, referred to by A. Boeckh, Public Economy of Athens (Lewis translation), p.90, and Mallet, Les Premiers Établissements des Grecs dans l'Egypte, p.283.

102 173 **** G.S. Hall, History of the Near East, pp. 144, 161.

thence to the Greek settlements in Asia Minor.* 174 103 Miletus ~~and Rhodes~~ took the lead in this phase of the trade, which was carried on exclusively through the ~~great~~ port of trade of Naucratis, ~~established~~ founded at the end of the seventh century by the Egyptian king Amasis.** 175 104 There is no mention of Athens in connection with ~~the founding or administration of~~ Naucratis in this early period.

Although most writers*** 176 105 assume that corn was one of the principal exports ~~through~~ from Naukratis, a list of Egyptian exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.**** 177 106 On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.***** 178 107

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103 174 * Hdt. I. ....

104 175 ** Herodotus II, 178-9.

105 176 *** E.g. Grundy, Sample (?), Smith.

106 177 **** Prinz, Funde aus Naukratis, pp.111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and and other finds show that the same wares always go to the same place, without exception (p.144).

107 178 ***** Diodorus I, 29, 1.

While gift trade of an occasional character in record did occur in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was not an important source of grain for Athens in the fifth century.****** 179 108 On the other hand, a fifth century Athenian poet, Bacchylides, quoted by Athenaeus, speaks of

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108 179 ****** Mallet, Les rapports ..., p.48.

> vessels filled with wheat (which) bring from Egypt, through the shining waves of the sea, the most precious of riches.* 109

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too, since during the Peloponnesian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and Lybia commonly put in.** 110

At the same time, Athenian imports from Egypt are indicated in 408 B.C. Andocides persuaded Cyprus to lift its embargo on grain exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way.*** 111 Since the coasting route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,**** 112 we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus, Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds.***** 113 In the middle of the fourth century, the Athenian senate passed a decree in honor of a Naukratis citizen, Theogenes, a man

> kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately.****** 114

We may assume that the "public business" included the purchase of corn.

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109 * Athenaeus, II, 39 f. Cf. also Mallet, p.283.

110 ** Thucydides, IV, 53.

111 *** Andocides, On His Return, 21.

112 **** Grundy, op. cit., p.327.

113 ***** Rostovtzeff, Social and Economic History of the Hellenistic World, v.I, p.89.

114 ****** CIG 4, 35, referred to by Smith, Naukratis, p.64.

II

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief (either) of the Greek army or of the Greek fleet.* While there is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way.** While the volume of trade during the fifth century cannot be accurately judged, it was of a regular character.*** The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade routes. Her strategic site, together with her colonies in the Adriatic gave her dominance over the trade with the west. The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain. Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it". Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse.

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115 * Herodotus, VII, 158.
116 ** T. J. Dunbabin, The Western Greeks, Oxford 1948, p.214.
117 *** Ibid, p.216.
M. Rostovtzeff, History of the Ancient World, II, p.269.
Dunbabin, op. cit., p.227.
119 120 **** Dunbabin, p.215.
Rostovtzeff, op. cit., p.269.
Grundy, op. cit., p.185.
120 121 ***** Dunbabin, p.215.

upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection. 121

It was this threat to the food supplies of the Peloponnese that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril to Sparta and her allies; Sparta and Corinth were thus drawn together by the common danger. The Peloponnesian War was the inevitable outcome of the Athenian aim of controlling the western corn supply.

Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market Trade? Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative in setting up such a market? One need not share an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these common sense terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of corn?

The answer, we submit, lay in the geographical and political structure of the regions in which supplies and communications were situated. These conditions, under which military and political power had to be employed to ensure the forthcoming of the supplies, and indeed the safety of the trade routes themselves, determine the methods and organization of trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious about the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian

foreign policy was corn policy, it was never affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the corn trade.

I.

Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in the economic development of continental Greece, it would unquestionably be that area's preponderant dependence on imports for her food supply.

Greek social and political thought may well have reflected this unalterable circumstance. The Greek one is tempted to conclude, never developed a discipline of economics because the country could never rely for its food supply on the market. Instead it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self-sufficiency the basic postulate of her existence and thus of her theory of the ideal state. Autarky was to the Greek mind the <u>rationale</u> of the polis. On this point Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was so pronounced that not a trace of commercial rivalry can be found between the two greatest grain producers, Egypt and the Bosporus. Grundy [1] insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent on imports. . Jarde, [2] the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices. [3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 218,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves. [4] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription

of 329 B.C. records Attic production at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten.[5] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns,[6] Tod at 450,000.[7] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a population range of two to three hundred thousand, minimum imports of one to one and a half million medimns would be required, or two to three times the domestic production. Domestic production must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian embassadors at Rome claim that Athens "feeds even the husbandmen with imported corn."[8]

The dependence on imports was even greater than this statistical guess would indicate. While the population <u>as a whole</u> depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley.[9] A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread.[10]

While wheat was considered the citizens' staple, it constituted

no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens. Imports thus quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens depended entirely on imports.[11] Such was mostly the case; according to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the exclusion of the others."[12]

Our estimate of the extent of Athens' dependence on imports is confirmed by a speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kocevalov, a Russian philologist, insists that a study of the syntax of Demonthenes' phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[14] He argues that this latter figure referred only to Panticapeum, "the home port", not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is widespread agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy <u>was</u>

food policy.[15] So does Glotz.[16] Francotte observes that "la premiere des questions economiques pour les Grecs etait celle du pain."[17]

Only three instances come to mind of great powers which largely imported their food supply: the city states of Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic instance of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the organization of world trade. Having lost that control, Britain finds herself dependent on the treacherous mechanism of an unregulated world market. An increase in raw material prices due to armaments and stockpiling threatens the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct

control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months; [18] this probably amounted to 2,900,000 and 5,800,000 medimni respectively. [19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovtzeff when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade:

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital. [20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly the trade routes and controlled by military means the sources of supply in the Eastern seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first

instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country. 21/

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines. 22/

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation. 23/ No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens. 24/ We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty emporos could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the

organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tamkar type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - most of this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean hinterland - thus served as the chief granary of Athens in the classical period.

II.

Peisistratus was the first to make a sustained effort to

extend Athenian power towards the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrance to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese. The corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[25] Persian expansion into Europe during the last two decades of the sixth century however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies, largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century the products of the Black Sea were not carried all the way by ship to Greece. Throughout antiquity the powerful and treacherous currents of the Bosporus were greatly feared, as indeed, they are even today. Polybius' description of them has become famous (IV, 43). This was particularly true before the remarkable progress in navigation and shipbuilding which resulted from the Persian Wars. [26] The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a

cape, preferring to portage their tiny boats. So the early traders avoided turning the cape guarding the Bosporus. Instead of sailing with their goods across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, they landed them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river.[27] This city, although situated in the most barren part of Thrace, was one of the wealthiest in that region,[28] occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium.[29] The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route will disclose in concrete terms the military and political conditions of the corn trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries.[30] Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading

advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. (IV, 144). But this only proves how unimportant the route from the Pontus had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits; since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese,[31] and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea.[32] It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned[33] and was not resettled until its recapture from the Persians in 479.[34] During this relatively long period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Charsonese began issuing coins on the Persian standard. [35] Greece must have been now cut off from her Black Sea corn supply.

479 B.C., the year of the Persian retreat from Europe,

marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 480 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city.[36] She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward.[37] In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished proteges."[38] From this time on, the city was in a reduced condition.[39]

Byzantium's rise was a meteroric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[40]

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding

must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea,[41] and including as its subjects the Thracian tribes, the formidable Getae[42] and "the other hordes" around the Danube bordering on Scythia.[43] Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison... [44]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction,"[45] according to Gasson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time,[46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years" [47] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus River to the Sea of Marmara was exiled, and this territory

became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys. 48/ Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries. These raids made settled agriculture impossible; 49/ the city thus was forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an emporium. Not the gradual growth of economic forces but a political cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica II (1346 b, 13-25) which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the city was resettled. 50/ But two years later, when Pausanias showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon. 51/ Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when

the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea. 52/ During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast was a member of the League. The Egyptian expedition, intended to outflank Persia, ended in disaster in 456.

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly, the middle of the century saw an important shift in Athenian foreigh policy. Pericles made Athenian endeavours to veer from the north, south, and west 53/ of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled.

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of

Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests,"[54] and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships.[55] Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus,"[56] guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between the Aegean and the Propontis, which protected the isthmus against Thracian incursions.[57] Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there. [58]

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont corn was not carried directly to the Piraeus, since that would entailed turning the sinister cape of Sunium at the southern tip of Attica. (This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus.)[59] Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelas. [60] The Euboean revolt in 447/6 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in

their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. 61/

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sumium, "at great cost." 62/

In 447, a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros: - the island commanding the approach to the Hellespont from the Aegean. Between 438 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens. 63/ In 437-36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. 64/

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, along with the setting up of an Athenian cleruchy at nearby Nymphaeum. 65/ The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, and two principal ports-of-trade for the Crimean and Scythian corn. For reasons Rostovtzeff regards as mysterious, Athens was unable to gain a foothold in Olbia, a key city on the north western shore; the corn had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan

straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies."[68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a decree dated 426/5 relating to Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium.[69] It can hardly be doubted that under such conditions corn was bought and sold at proclaimed equivalencies; the persistance, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the violent fluctuations in the price of grain [71] in general. The modernizing notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Thus corn moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum: Rostovtzeff infers a sort of Oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior.[72] Herodotus reports, not without amazement, that the Scythians grown corn "not for their own use but for sale."[73] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum.[74] These emporia could not have in their organization differed essentially from the early European factories and ports of trade as we find them established on the Pepper, Gold, Tooth and Slave Coasts of West Africa. From Panticapeum, the corn crossed the Black Sea and moved along the southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds (according to a fourth century law, which may have existed even earlier) had to be immediately carried to Athens.[75] That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause. Aristophanes' picture of the starving Megarian peasant in the Archarnians cannot have been altogether off the truth. (Aristophanes

gives this as the cause of the war in order to show what he regarded as its triviality). The Old Oligarch, also explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea. 76/

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the corn trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine proxenos at Sparta to Byzantium in an effort to win over that city as well as Calchedon from Athens. 77/ This occurred after the Spartan capture of Decelea - half way between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom. 78/ But the administered trade of the fourth century differed much from that of the fifth, as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly since the Bosporan cities were under her rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now-powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea. 79/ The Bosporan kings

were chieftain traders whose wealth derived from the corn trade which they appropriated; Athens in turn needed the Bosporan corn. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[80]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (ca.388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of lading to any merchant carrying corn to Athens and exempted such merchants from the customs dues of a thirtieth.[81] These rights traditionally applied to Panticapeum, the port of trade for corn. But Leucon also opened another emporium, as Demosthenes himself calls it, at Theodosia and applied the same privileges there.[82] Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role. Leucon's conquests restored Theodosia as an emporium.[83] In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.[84] In 347, the year following on Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus [85] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and Demosthenes credits him with a renewal of the privileges. [86]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that she had in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax.[87]

King Leucon made also gifts of corn to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a tamkar-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the Treasury after disposing of the grain.[88] This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems - in this case more likely. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia. [89] This may refer to the same or to another gift, but it need not; it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial

advantages, but with the supply of corn and other indispensable commodities, including materials for defence and shipbuilding".[90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in lading[91] - i.e. the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Clazomenae on the Asia Minor coast, granted that city permission to buy corn in certain specified cities.[92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.[93] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian corn supply. According to Demosthenes, King Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.[94]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. About 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there.[95] Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338. [96] Two years later

Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an end. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian corn trade with the Black Sea. He was a master of Realpolitik: he was governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Plutarch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage... 97/
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won. 98/ That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what came to pass. 99/

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and almost ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

II.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne 74-77 of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support.[100] Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;[101] it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptain-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is incondusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant upon the breakdown of the Mycenean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then the Cyprus, and thence to Greece.[102] After a three hundred year lapse trade was resumed in the seventh century maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor. [103] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded perhaps at the end of the seventh century by the Egyptian king Amasis. [104] There is no mention of Athens in connection with Naucratis in this early period.

Although most writers[105] assume that corn was one of the principal exports from Naudratis, a list of Egyptain exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[106] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.[107]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was on the other hand, a fifth century poet, Bacchylides, quoted by Athenaeus, speaks of

> vessels filled with wheat (which) bring from Egypt, through the shining waves of the sea, the most precious of riches. 109/

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too since during the Peloponnessian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and Lybia commonly put in. 110/

At the same time, Athenian imports from Egypt are indicated about 408 B.C. Andocides persuaded Cyprus to lift its embargo on grain exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way. 111/ Since the coasting

route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,[112] we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds.[113] In the middle of the fourth century, the Athenians passed a decree in honor of a Naukratis citizen, Theogenes, a man

> kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately. [114]

We may assume that the "public business" included the purchase of corn.

III.

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief- either of the Greek army or of the Greek fleet.[115] While there is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way. [116] While the volume of trade during the fifth century

cannot be accurately judged, it was of a regular character.[117] The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic gave her dominance over trade with the west.[118] The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[119] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it".[120] Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse.

> upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection.[121]

It was this threat to the food supplies of the Peloponnese that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril to Sparta and her allies; Sparta and Corinth were thus drawn together by the common danger. The Peloponnesian War was the outcome of the Athenian aim of controlling the western corn supply.

1. Rostovtzeff, "Greet Sightseers in Egypt", in Journal of Egyptian Archeology, v. XIV, p. 14

2. Grundy, Thucydides and the History of his Age, v. I, p. 90

3. Jarde, Les cereales d'antiquite Grecque, p. 184

4. Gomme, The Population of Athens in the Fifth and Fourth Centuries B.C., p. 26

5. B.C.H. VII, pp. 194-216

6. Gomme, p. 33

7. C.A.H., v. V, p. 13

8. Livy, XLIII, 6

9. Aristophanes, Wasps, 718

10. Athenaeus, III, 113 A

11. In the Roman army barley rations instead of wheat were issued to the troops as a punishment.

12. Naum Jasny, ..., p. 15

13. Demosthenes, Contra Leptinem, 31

14. Kocevalov, "Die Einfuhr von Getreide nach Athen", in Rheinisches Museum, XXX (?) (1932), p. 321

15. This is the main theme of Grundy's Thucydides and the History of his Age, to which we are indebted for many of the insights of this section.

16. Glotz, Ancient Greece at Work, p. 297

17. Francotte, "Le pain a bon marche et le pain gratuit", in Melanges Nicoles, p. 135

18. Josephus, Jewish Wars, II, 383 and 386

19. M. Charlesworth, "Trade Routes of the Roman Empire", p. 144 (?)

20. Rostovtzeff, Social and Economic History of the Roman Empire, pp. 148-9

21. Aristotle, Constitution of Athens, XLIII, 4

22. Xenophon, Memorabilia, III, 6, 3

23. Demosthenes, In Phormionem, 37

24. Demosthenes, Contra Lacritum, 50; In Dionysodorum, 6

25. E.H. Minns, Scythians and Greeks, p. 442

26. C.A.H. v. V, p. 19

27. S. Casson, Macedonia, Thrace and Illyria, Oxford, 1926, p. 255. - According to Casson this same route was used for local trade in modern times until the building of a railroad early in the twentieth century.

28. Casson, p. 90

29. "Because of the peculiar currents of the Bosporus, every ship going through that strait must stop at Byzantium". Polybius, IV, 43

30. Minns, p. 439; Cf. also Strabo, VII, 6, 2

31. Herodotus, VII, 147

32. VI, 5 and 26

33. VI, 33

34. Thucydides, I, 95

35. A.B. West, "Coins from the Thracian Coast" in Numismatic Notes and Monographs, v. XL. Cf. also M.L. Strack, Die antiken Munzen Nordgriechenlands, who emphasized the Persian influence.

36. C.S. Seltmann, Greek Coins, London, 1933, p. 145. Cf. also West.p.146

37. Seltmann, p. 141

38. West, p. 151

39. West, p. 150. Strack, p. ...

40. H. Merle, Geschichte der Staedte Byzantion und Kalchedon, p. 19

41. Thuc., II, 97

42. Their savagery remained a problem during the Roman Empire.-Strabo, VII, 3, 13

43. Thuc., II, 96

44. II. 98

45. Casson, p. 201 Cf. also West, pp. 57, 147, 150.

46. Strabo, VII, 3, 13

47. West, p. 121

48. West, pp. 123-4

49. Polybius, IV, 42

50. Thuc., I, 95

51. I, 130-1 - Plut. Cimon

52. Bury, History of Greece, p. 325, n. 4

53. Plutarch, Pericles, XX, 2-3

54. G. Glotz, Histoire Grecque, v. I, p. 191

55. A.L. Zimmern, The Greek Commonwealth p. 363

56. Aristotle, Rhetoric, III, 10, 7

57. Plut., Per. XIX, 1

58. XIX, 1

59. XIX, 3

60. Grundy, v. I, p. 79

61. Plut., Per. XXIII, 2

62. Thuc., VII, 28

63. Rostovtzeff, "The Bosporan Kingdom" in C.A.H., v. VIII, p. 564

64. Plut., Per. XX, 1

65. Rostovtzeff, pp. 564-5

66. Rostovtzeff, p. 565

67. Rostovtzeff, p. 564

68. Wilamowitz-Moellendorff, Griechisches Lesebuch, II/2, p. 249

69. See also J. Hasebroek, Trade and Politics in Ancient Greece, p. 143

70. N. Francotte, p. ...

71. Cf. Jarde and F. Heichelheim, ...

72. Rostovtzeff, pp. 564-5

73. Herod, IV, 17

74. Dem. In Lept., 32; cf. also Kocevalov.

75. Arist. Ath. Pol. 51, 4

76. Old Oligarch, On the Constitution of Athens, II, 3

77. Xenophon, Hellenica, I, 1, 35-6

78. Rostovtzeff, p. 567

79. Rostovtzeff, p. ...

80. Rostovtzeff, "Greek Sightseers in Egypt" in Journal of Egyptian Archeology, v. XIV, p. 14

81. Dem., C. Lept. 32

82. 33

83. Minns. p. 574

84. Dem., C. Lept., 32

85. Minns, p. 571. Cf. also Hasebroek, p. 114

86. Dem., In Phorm. 36

87. Minns, p. 576. Cf. also Grundy, p. 87, note 2

88. Dem., C. Lept. 33

89. Strabo, VII, 4, 6

90. Hasebroek, p. 111

91. Ibid. pp. 126-7

92. Francotte, p. 136

93. Xen., Hell., V, 1, 28

94. Demosthenes, De Corona, 87

95. Demosthenes, Contra Polyclem, 17

96. Rostovtzeff, in C.A.H., v. VIII, p. 574 (?)

97. Plut., Per. XX, 2-3

98. XXI, 1

99. XXII, 1

100. XXXVII, 3. - Cf. also Mallet, Les Rapports des Grecs avec l'Egypte, p. 47

101. Scholia to Aristophanes, Wasps 716, referred to by A. Boeckh, Public Economy of Athens (Lewis translation), p. 90, and Mallet, Les premiers ~~xx~~ etablissements des Grecs dans l'Egypte, p. 283

102. G.S. Hall, History of the Near East, pp. 144, 161

103. Hall, p. ...

104. Herod., II, 178-9

105. e.g., Grundy, Semple, Smith (?)

106. Prinz, Funde aus Naudratis, pp. 111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and other finds show that the same wares always go to the same place, without exception (p. 144).

107. Diodorus I, 29, 1

108. Mallet, p. 48

109. Athenaeus, II, 39 f. Cf. also Mallet, p. 283

110. Thuc., IV, 53

111. Andocides, On His Return, 21

112. Grundy, p. 327

113. Rostovtzeff, Social and Economic History of the Hellenistic World, v. I, p. 89

114. C.I.G., 4, 35, referred to by Smith, Naukratis, p. 64

115. Herod., VII, 158-60

116. T.J. Dunbabin, The Western Greeks, Oxford, 1948, p. 214

117. Dunbabin, p. 216

118. Rostovtzeff, History of the Ancient World, II, p. 269. - Dunbabin, p. 227

119. Dunbabin, p. 215. - Rostovtzeff, p. 269. - Grundy, p. 185

120. Dunbabin, p. 215

121. Thuc. III, 86

VII

Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market Trade? Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative in setting up such a market? One need not share an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these common sense terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of corn?

The answer, we submit, lay in the geographical and political structure of the regions in which supplies and communications were situated. These conditions, under which military and political power had to be employed to ensure the forthcoming of the supplies, and indeed the safety of the trade routes themselves, determined the methods and organization of trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious about the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian

foreign policy was corn policy, it was never affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the corn trade.

I.

Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in the economic development of continental Greece, it would unquestionably be that area's preponderant dependence on imports for her food supply.

Greek social and political thought may well have reflected this unalterable circumstance. The Greek one is tempted to conclude, never developed a discipline of economics because the country could never rely for its food supply on the market. Instead it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self-sufficiency the basic postulate of her existence and thus of her theory of the ideal state. Autarky was to the Greek mind the <u>rationale</u> of the polis. On this point Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was so pronounced that not a trace of commercial rivalry can be found between the two greatest grain producers, Egypt and the Bosporus. Grundy [1] insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent on imports. . Jarde, [2] the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices. [3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 218,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves. [4] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription

of 329 B.C. records Attic production at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten.[5] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns,[6] Tod at 450,000.[7] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a population range of two to three hundred thousand, minimum imports of one to one and a half million medimns would be required, or two to three times the domestic production. Domestic production must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian embassadors at Rome claim that Athens "feeds even the husbandmen with imported corn."[8]

The dependence on imports was even greater than this statistical guess would indicate. While the population as a whole depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley. 9/ A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread. 10/

While wheat was considered the citizens' staple, it constituted

no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens. Imports thus quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens depended entirely on imports.[11] Such was mostly the case; according to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the exclusion of the others."[12]

Our estimate of the extent of Athens' dependence on imports is confirmed by a speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kocevalov, a Russian philologist, insists that a study of the syntax of Demonthenes' phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[14] He argues that this latter figure referred only to Panticapeum, "the home port", not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is widespread agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy <u>was</u>

food policy.[15] So does Glotz.[16] Francotte observes that "la premiere des questions economiques pour les Grecs etait celle du pain."[17]

Only three instances come to mind of great powers which largely imported their food supply: the city states of Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic instance of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the organization of world trade. Having lost that control, Britain finds herself dependent on the treacherous mechanism of an unregulated world market. An increase in raw material prices due to armaments and stockpiling threatens the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct

control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months; [18] this probably amounted to 2,900,000 and 5,800,000 medimni respectively. [19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovtzeff when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade:

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital. [20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly the trade routes and controlled by military means the sources of supply in the Eastern seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first

instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country. 21/

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines. 22/

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation. 23/ No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens. 24/ We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty *emporos* could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the

organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tamkar type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - most of this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean hinterland - thus served as the chief granary of Athens in the classical period.

II.

Peisistratus was the first to make a sustained effort to

extend Athenian power towards the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrance to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese. The corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[25] Persian expansion into Europe during the last two decades of the sixth century however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies, largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century the products of the Black Sea were not carried all the way by ship to Greece. Throughout antiquity the powerful and treacherous currents of the Bosporus were greatly feared, as indeed, they are even today. Polybius' description of them has become famous (IV, 43). This was particularly true before the remarkable progress in navigation and shipbuilding which resulted from the Persian Wars. [26] The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a

cape, preferring to portage their tiny boats. So the early traders avoided turning the cape guarding the Bosporus. Instead of sailing with their goods across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, they landed them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river.[27] This city, although situated in the most barren part of Thrace, was one of the wealthiest in that region,[28] occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium.[29] The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route will disclose in concrete terms the military and political conditions of the corn trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries.[30] Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading

advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. (IV, 144). But this only proves how unimportant the route from the Pontus had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits; since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese,[31] and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea.[32] It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned[33] and was not resettled until its recapture from the Persians in 479.[34] During this relatively long period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Chersonese began issuing coins on the Persian standard. [35] Greece must have been now cut off from her Black Sea corn supply.

479 B.C., the year of the Persian retreat from Europe,

marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 480 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city.[36] She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward.[37] In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished proteges."[38] From this time on, the city was in a reduced condition.[39]

Byzantium's rise was a meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[40]

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding

must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea, [41] and including as its subjects the Thracian tribes, the formidable Getae [42] and "the other hordes" around the Danube bordering on Scythia. [43] Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison... [44]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction," [45] according to Casson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time, [46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years" [47] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus River to the Sea of Marmara was exiled, and this territory

became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys.[48] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries.[49] These raids made settled agriculture impossible; the city thus was forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an emporium. Not the gradual growth of economic forces but a political cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica II (1346 b, 13-25) which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the city was resettled. [50] But two years later, when Pausanias showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon. [51] Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when

the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea.[52] During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast was a member of the League. The Egyptian expedition, intended to outflank Persia, ended in disaster in 456.

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly, the middle of the century saw an important shift in Athenian foreigh policy. Pericles made Athenian endeavours to veer from the north, south, and west[53] of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled.

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of

Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests,"[54] and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships.[55] Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus,"[56] guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between the Aegean and the Propontis, which protected the isthmus against Thracian incursions.[57] Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there. [58]

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont corn was not carried directly to the Piraeus, since that would entailed turning the sinister cape of Sunium at the southern tip of Attica. (This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus.)[59] Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelas. [60] The Euboean revolt in 447/6 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in

their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. 61/

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sumium, "at great cost." 62/

In 447, a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros: - the island commanding the approach to the Hellespont from the Aegean. Between 438 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens. 63/ In 437-36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. 64/

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, along with the setting up of an Athenian cleruchy at nearby Nymphaeum. 65/ The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, and two principal ports-of-trade for the Crimean and Scythian corn. For reasons Rostovtzeff regards as mysterious, Athens was unable to gain a foothold in Olbia, a key city on the north western shore; the corn had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan

straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies."[68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a decree dated 426/5 relating to Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium.[69] It can hardly be doubted that under such conditions corn was bought and sold at proclaimed equivalencies; the persistance, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the violent fluctuations in the price of grain [71] in general. The modernizing notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Thus corn moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum: Rostovtzeff infers a sort of Oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior.[72] Herodotus reports, not without amazement, that the Scythians grown corn "not for their own use but for sale."[73] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum.[74] These emporia could not have in their organization differed essentially from the early European factories and ports of trade as we find them established on the Pepper, Gold, Tooth and Slave Coasts of West Africa. From Panticapeum, the corn crossed the Black Sea and moved along the southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds (according to a fourth century law, which may have existed even earlier) had to be immediately carried to Athens.[75] That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause. Aristophanes' picture of the starving Megarian peasant in the Archarnians cannot have been altogether off the truth. (Aristophanes

gives this as the cause of the war in order to show what he regarded as its triviality). The Old Oligarch, also explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea. 76/

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the corn trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine proxenos at Sparta to Byzantium in an effort to win over that city as well as Calchedon from Athens. 77/ This occurred after the Spartan capture of Decelea - half way between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom. 78/ But the administered trade of the fourth century differed much from that of the fifth, as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly since the Bosporan cities were under her rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now-powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea. 79/ The Bosporan kings

were chieftain traders whose wealth derived from the corn trade which they appropriated; Athens in turn needed the Bosporan corn. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[80]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (ca.388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of leding to any merchant carrying corn to Athens and exempted such merchants from the customs dues of a thirtieth.[81] These rights traditionally applied to Panticapeum, the port of trade for corn. But Leucon also opened another emporium, as Demosthenes himself calls it, at Theodosia and applied the same privileges there.[82] Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role. Leucon's conquests restored Theodosia as an emporium.[83] In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.[84] In 347, the year following on Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus [85] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and Demosthenes credits him with a renewal of the privileges. [86]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that she had in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax.[87]

King Leucon made also gifts of corn to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a tamkar-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the Treasury after disposing of the grain.[88] This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems - in this case more likely. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia. [89] This may refer to the same or to another gift, but it need not; it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial

advantages, but with the supply of corn and other indispensable commodities, including materials for defence and shipbuilding".[90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in lading[91] - i.e. the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Clazomenae on the Asia Minor coast, granted that city permission to buy corn in certain specified cities.[92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.[93] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian corn supply. According to Demosthenes, King Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.[94]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. About 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there.[95] Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338. [96] Two years later

Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an end. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian corn trade with the Black Sea. He was a master of Realpolitik: he was governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Plutarch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage... 97/
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won. 98/ That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what came to pass. 99/

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and almost ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

II.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne 74-77 of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support.[100] Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;[101] it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptain-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is inconclusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant upon the breakdown of the Mycenean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then the Cyprus, and thence to Greece.[102] After a three hundred year lapse trade was resumed in the seventh century maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor. [103] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded perhaps at the end of the seventh century by the Egyptian king Amasis. [104] There is no mention of Athens in connection with Naucratis in this early period.

Although most writers[105] assume that corn was one of the principal exports from Naudratis, a list of Egyptain exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[106] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.[107]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was on the other hand, a fifth century poet, Bacchylides, quoted by Athenaeus, speaks of

> vessels filled with wheat (which) bring from Egypt, through the shining waves of the sea, the most precious of riches. [109]

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too since during the Peloponnessian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and Lybia commonly put in. [110]

At the same time, Athenian imports from Egypt are indicated about 408 B.C. Andocides persuaded Cyprus to lift its embargo on grain exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way. [111] Since the coasting

route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route, 112/ we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds. 113/ In the middle of the fourth century, the Athenians passed a decree in honor of a Naukratis citizen, Theogenes, a man

> kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately. 114/

We may assume that the "public business" included the purchase of corn.

III.

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief- either of the Greek army or of the Greek fleet. 115/ While there is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way. 116/ While the volume of trade during the fifth century

cannot be accurately judged, it was of a regular character.[117] The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic gave her dominance over trade with the west.[118] The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[119] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it".[120] Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse.

> upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection.[121]

It was this threat to the food supplies of the Peloponnese that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril to Sparta and her allies; Sparta and Corinth were thus drawn together by the common danger. Thucydides The Peloponnesian War was the inevitable outcome of the Athenian aim of controlling the western corn supply.

1. Rostovtzeff, "Greet Sightseers in Egypt", in Journal of Egyptian Archeology, v. XIV, p. 14

2. Grundy, Thucydides and the History of his Age, v. I, p. 90

3. Jarde, Les cereales d'antiquite Grecque, p. 184

4. Gomme, The Population of Athens in the Fifth and Fourth Centuries B.C., p. 26

5. B.C.H. VII, pp. 194-216

6. Gomme, p. 33

7. C.A.H., v. V, p. 13

8. Livy, XLIII, 6

9. Aristophanes, Wasps, 718

10. Athenaeus, III, 113 A

11. In the Roman army barley rations instead of wheat were issued to the troops as a punishment.

12. Naum Jasny, ..., p. 15

13. Demosthenes, Contra Leptinem, 31

14. Kocevalov, "Die Einfuhr von Getreide nach Athen", in Rheinisches Museum, XXX (?) (1932), p. 321

15. This is the main theme of Grundy's Thucydides and the History of his Age, to which we are indebted for many of the insights of this section.

16. Glotz, Ancient Greece at Work, p. 297

17. Francotte, "Le pain a bon marche et le pain gratuit", in Melanges Nicoles, p. 135

18. Josephus, Jewish Wars, II, 383 and 386

19. M. Charlesworth, "Trade Routes of the Roman Empire", p. 144 (?)

20. Rostovtzeff, Social and Economic History of the Roman Empire, pp. 148-9

21. Aristotle, Constitution of Athens, XLIII, 4

22. Xenophon, Memorabilia, III, 6, 3

23. Demosthenes, In Phormionem, 37

24. Demosthenes, Contra Lacritum, 50; In Dionysodorum, 6

25. E.H. Minns, Scythians and Greeks, p. 442

26. C.A.H. v. V, p. 19

27. S. Casson, Macedonia, Thrace and Illyria, Oxford, 1926, p. 255. - According to Casson this same route was used for local trade in modern times until the building of a railroad early in the twentieth century.

28. Casson, p. 90

29. "Because of the peculiar currents of the Bosporus, every ship going through that strait must stop at Byzantium". Polybius, IV, 43

30. Minns, p. 439; Cf. also Strabo, VII, 6, 2

31. Herodotus, VII, 147

32. VI, 5 and 26

33. VI, 33

34. Thucydides, I, 95

35. A.B. West, "Coins from the Thracian Coast" in Numismatic Notes and Monographs, v. XL. Cf. also M.L. Strack, Die antiken Munzen Nordgriechenlands, who emphasized the Persian influence.

36. C.S. Seltmann, Greek Coins, London, 1933, p. 145. Cf. also West.p.146

37. Seltmann, p. 141

38. West, p. 151

39. West, p. 150. Strack, p. ...

40. H. Merle, Geschichte der Staedte Byzantion und Kalchedon, p. 19

41. Thuc., II, 97

42. Their savagery remained a problem during the Roman Empire.-Strabo, VII, 3, 13

43. Thuc., II, 96

44. II. 98

45. Casson, p. 201 Cf. also West, pp. 57, 147, 150.

46. Strabo, VII, 3, 13

47. West, p. 121

48. West, pp. 123-4

49. Polybius, IV, 42

50. Thuc., I, 95

51. I, 130-1 - Plut. Cimon

52. Bury, History of Greece, p. 325, n. 4

53. Plutarch, Pericles, XX, 2-3

54. G. Glotz, Histoire Grecque, v. I, p. 191

55. A.L. Zimmern, The Greek Commonwealth p. 363

56. Aristotle, Rhetoric, III, 10, 7

57. Plut., Per. XIX, 1

58. XIX, 1

59. XIX, 3

60. Grundy, v. I, p. 79

61. Plut., Per. XXIII, 2

62. Thuc., VII, 28

63. Rostovtzeff, "The Bosporan Kingdom" in C.A.H., v. VIII, p. 564

64. Plut., Per. XX, 1

65. Rostovtzeff, pp. 564-5

66. Rostovtzeff, p. 565

67. Rostovtzeff, p. 564

68. Wilamowitz-Moellendorff, Griechisches Lesebuch, II/2, p. 249

69. See also J. Hasebroek, Trade and Politics in Ancient Greece, p. 143

70. M. Francotte, p. ...

71. Cf. Jarde and F. Heichelheim, ...

72. Rostovtzeff, pp. 564-5

73. Herod, IV, 17

74. Dem. In Lept., 32; cf. also Kocevalov.

75. Arist. Ath. Pol. 51, 4

76. Old Oligarch, On the Constitution of Athens, II, 3

77. Xenophon, Hellenica, I, 1, 35-6

78. Rostovtzeff, p. 567

79. Rostovtzeff, p. ...

80. Rostovtzeff, "Greek Sightseers in Egypt" in Journal of Egyptian Archeology, v. XIV, p. 14

81. Dem., C. Lept. 32

82. 33

83. Minns. p. 574

84. Dem., C. Lept., 32

85. Minns, p. 571. Cf. also Hasebroek, p. 114

86. Dem., In Phorm. 36

87. Minns, p. 576. Cf. also Grundy, p. 87, note 2

88. Dem., C. Lept. 33

89. Strabo, VII, 4, 6

90. Hasebroek, p. 111

91. Ibid. pp. 126-7

92. Francotte, p. 136

93. Xen., Hell., V, 1, 28

94. Demosthenes, De Corona, 87

95. Demosthenes, Contra Polyclem, 17

96. Rostovtzeff, in C.A.H., v. VIII, p. 574 (?)

97. Plut., Per. XX, 2-3

98. XXI, 1

99. XXII, 1

100. XXXVII, 3. - Cf. also Mallet, Les Rapports des Grecs avec l'Egypte, p. 47

101. Scholia to Aristophanes, Wasps 716, referred to by A. Boeckh, Public Economy of Athens (Lewis translation), p. 90, and Mallet, Les premiers ms etablissements des Grecs dans l'Egypte, p. 283

102. G.S. Hall, History of the Near East, pp. 144, 161

103. Hall, p. ...

104. Herod., II, 178-9

105. e.g., Grundy, Semple, Smith (?)

106. Prinz, Funde aus Naukratis, pp. 111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and other finds show that the same wares always go to the same place, without exception (p. 144).

107. Diodorus I, 29, 1

108. Mallet, p. 48

109. Athenaeus, II, 39 f. Cf. also Mallet, p. 283

110. Thuc., IV, 53

111. Andocides, On His Return, 21

112. Grundy, p. 327

113. Rostovtzeff, Social and Economic History of the Hellenistic World, v. I, p. 89

114. C.I.G., 4, 35, referred to by Smith, Naukratis, p. 64

115. Herod., VII, 158-60

116. T.J. Dunbabin, The Western Greeks, Oxford, 1948, p. 214

117. Dunbabin, p. 216

118. Rostovtzeff, History of the Ancient World, II, p. 269. - Dunbabin, p. 227

119. Dunbabin, p. 215. - Rostovtzeff, p. 269. - Grundy, p. 185

120. Dunbabin, p. 215

121. Thuc. III, 86

Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market trade? Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative of setting up such a market? One need not share an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these common sense terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of corn?

The answer, we submit, lay in the geographical and political structure of the regions in which supplies and communications were situated. These conditions, under which military and political power had to be employed to ensure the forthcoming of the supplies, and indeed the safety of the trade routes themselves, determine the methods and organization of trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious for the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian

foreign policy was corn policy, it was never affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the corn trade.

I.

Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in ~~Greek~~ the economic development of continental Greece, it would unquestionably be that area's preponderant dependence on imports for her food supply. Greek social and political thought may well have reflected this unalterable circumstance. The Greeks one is tempted to conclude never developed a discipline of economics because the country could never rely for its food supply on the market. Instead it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self-sufficiency the basic postulate of her existence and thus of her theory of the ideal state. Autarky was to the Greek mind the rationale of the polis. On this point ~~Aristotle~~ Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was so pronounced that not a trace of commercial rivalry can be found between the two greatest grain producers, Egypt and the Bosporus. [1] Grundy insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent on imports. [2] Jardé, the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices. [3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 218,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves. [4] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription

of 329 B.C. records Attic production at 366,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten. [5] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns, [6] Tod at 450,000. [7] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a population range of two to three hundred thousand, minimum imports ~~of one to [illegible] of one-half million~~ of 1 to 1½ million medimns would be required, or two to three times the domestic production. Domestic production must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian ambassadors at Rome claim that Athens "feeds even the husbandmen with imported corn." [8]

The dependence on imports was even greater than this statistical guess would indicate. While the population as a whole depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley. [9] A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread. [10]

While wheat was considered the citizens' staple, it constituted

no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens. Imports thus quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens depended entirely on imports.[11] Such was mostly the case; according to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the exclusion of the others."[12]

Our estimate of the extent of Athens' dependence on imports is confirmed by a speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 328, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kocevalov, a Russian philologist, insists that a study of the syntax of Demosthenes' phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[14] He argues that this latter figure referred only .to. Panticapeum, "the home port", not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is widespread agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy <u>was</u>

food policy.[15] So does Glotz.[16] Francotte observes that "la premiere des questions economiques pour les Grecs etait celle du pain."[17]

Only three instances come to mind of great powers which largely imported their food supply: the city states of Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic instance of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the organization of world trade. Having lost that control, Britain finds herself dependent on the treacherous mechanism of an unregulated world market. An increase in raw material prices due to armaments and stockpiling threatens the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct

control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months;[18] this probably amounted to 2,900,000 and 5,800,000 medimni respectively.[19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovtzeff when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade:

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital.[20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly the trade routes and controlled by military means the sources of supply in the Eastern Seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first

instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country. 21/

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines.22/

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation.23/ No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens.24/ We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty emporos could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the

organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tanker type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - most of this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean hinterland - thus served as the chief granary of Athens in the classical period.

II.

Peisistratus was the first to move Athenian power towards

the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrace to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese.The corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[25] Persian expansion into Europe during the last two decades of the sixth century however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies, largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century the products of the Black Sea were not carried all the way by ship to Greece. Throughout antiquity the powerful and treacherous currents of the Bosporus were greatly feared, as indeed, they are even today. Polybius' description of them has become famous (IV, 43). This was particularly true before the remarkable progress in navigation and shipbuilding which resulted from the Persian Wars. [26] The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a

cape, preferring to portage their tiny boats. So the early traders avoided turning the cape guarding the Bosporus. Instead of sailing with their goods across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, they had them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river.[27] This city, although situated in the most barren part of Thrace, was one of the wealthiest in that region,[28] occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium.[29] The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route will disclose in concrete terms the military and political conditions of the corn trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries.[30] Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading

advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. (IV, 144). But this only proves how unimportant the route from the Pontic had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits; ~~at all.~~ Since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese, 31/ and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea. 32/ It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned 33/ and was not resettled until its recapture from the Persians in 479. 34/ During this relatively long period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Chersonese began issuing coins on the Persian standard. 35/ Greece must have been now cut off from her Black Sea corn supply.

479 B.C., the year of the Persian retreat from Europe,

marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 460 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city.[36] She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

Sources?

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ~~paxaxix~~ ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward.[37] In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished proteges."[38] From this time on, the city was in a reduced condition.[39]

Byzantium's rise was as meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[40]

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was

the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea,[41] and including as its subjects the Thracian tribes, the formidable Getae[42] and "the other hordes" around the Danube bordering on Scythia.[43] Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison...[44]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction,"[45] according to Casson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time,[46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this

negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years"[47] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus River to the Sea of Marmara was exiled, and this territory became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys.[48] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the hinterland. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries. These raids made settled agriculture impossible;[49] the city thus was forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an emporium. Not the gradual growth of economic forces but a political (MILITARY ?) cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian Oeconomica II (1346 b, 13-25), which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the

Thuc. I, 130-31
Plut: Cim

city was resettled.[50] But two years later, when Pausanias showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon.[51] Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea.[52] During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast was a member of the League. The Egyptian expedition, intended to outflank Persia, ended in ~~total~~ disaster in 456.

Sept 6

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly, the middle of

the century saw an important shift in Athenian foreign policy. Pericles made Athenian endeavours to veer from the north, south, and west[53] of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled.

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests,"[54] and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships.[55] Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus,"[56] guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between Aegean and Propontis, which protected the isthmus against Thracian incursions.[57] Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there. [58]

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont corn was not carried directly to the Piraeus, since that would have entailed turning the sinister cape of Sunium at the southern tip of Attica. (This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus. [59])

Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelea.[60] The Euboean revolt in 447 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. [61]

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sunium, "at great cost." [62]

In 447, a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros: - the islands commanding the approach to the Hellespont from the Aegean. Between 438 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens.[63] In 437-36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. [64]

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, along with the setting up of an Athenian cleruchy at nearby Nymphaeum.[65] The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, the two principal ports-of-trade for the Crimean and Scythian corn. For reasons Rostovtzeff regards as mysterious, Athens was unable to gain a foothold in Olbia, a key city on the north western shore; the corn had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies."[68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a treaty dated 426/5 between Athens and Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium.[69] It can hardly be doubted that under

such conditions corn was bought and sold at proclaimed equivalencies; the persistence, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the violent fluctuations in the price of grain[71] in general. The modernizing notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Thus corn moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum: Rostovtzeff infers a sort of Oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior.[72] Herodotus reports, not without amazement, that the Scythians grow corn "not for their own use but for sale."[73] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum. [74] These emporia could not have in their organization differed essentially from the early European factories and ports of trade as we find them established on the Pepper, Gold, Tooth and Slave Coasts of West Africa. From Panticapeum, the corn crossed the Black Sea and moved along the

southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds (according to a fourth century law, ~~but~~ which ~~probably~~ may have existed ~~already~~ even earlier) had to be immediately carried to Athens.[75] That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause, Aristophanes' picture of the starving Megarian peasant in the Acharnians cannot have been altogether off the truth. (Aristophanes gives this as <u>the</u> cause of the war in order to show what he regarded as its triviality). The Old Oligarch, also explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea.[76]

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the corn trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine <u>proxenos</u> at Sparta to Byzantium in an effort to win over that city as well as Calchedon from Athens.[77] This occurred after the Spartan capture of Decelea - half way

between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom.[78] But the administered trade of the fourth century differed much from that of the fifth, as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly since the Bosporan cities were under her rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now-powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea.[79] The Bosporan kings were chieftain traders whose wealth derived from the corn trade which they appropriated; Athens in turn needed the Bosporan corn. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[80]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (ca.388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of lading to any merchant carrying corn to Athens and exempted such merchants from the customs dues of a thirtieth. [81] These rights traditionally applied to Panticapeum, the port of trade for corn. But Leucon also opened another emporium, as Demosthenes himself calls it, at Theodosia and

applied the same privileges there.[82] Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role. Leucon's conquests restored Theodosia as an emporium.[83] In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapaeum, and one in the temple of Zeus at the entrance to the Black Sea.[84] In 347, the year following on Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus[85] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and Demosthenes credits him with a renewal of the privileges.[86]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that ~~as in~~ she had in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax.[87]

King Leucon made also gifts of corn to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a temple-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the

Treasury after disposing of the grain.[88] This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems - in this case more likely. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia.[89] This may refer to the same or to another gift, but it need not; it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial advantages, but with the supply of corn and other indispensable commodities, including materials for defence and shipbuilding."[90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in lading[91] - i.e. the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Olbiopolis on the Asia Minor coast, granted that

city permission to buy corn in certain specified cities.[92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.[93] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian corn supply. According to Demosthenes, King Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.[94]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. In 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there.[95] Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338.[96] Two years later Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an end. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian corn trade with the Black Sea. He was a master of Realpolitik: he was

governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Pluterch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage... 97/
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won. 98/ That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what came to pass. 99/

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and almost ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

II.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne 74-77 of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support.[100] Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;[101] it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptian-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is inconclusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant upon the breakdown of the Mycenean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then to Cyprus, and thence to Greece.[102] After a three hundred year lapse trade was resumed in the seventh century maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor.[103] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded at the end of the seventh century by the Egyptian king Amasis.[104] There is no mention of Athens in

connection with Naucratis in this early period.

Although most writers[105] assume that corn was one of the principal exports from Naukratis, a list of Egyptian exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[106] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.[107]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was not an important source of grain for Athens in the fifth century.[108] On the other hand, a fifth century ~~Athenian~~ poet, Bacchylides, quoted by Athenaeus, speaks of

> vessels filled with wheat (which) bring from Egypt, through the shining waves of the sea, the most precious of riches.[109]

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too since during the Peloponnesian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and Lybia commonly put in.[110]

At the same time, Athenian imports from Egypt are indicated in ABOUT 408 B.C. Andocides persuaded Cyprus to ~~in~~ lift its embargo on grain

exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way.[111] Since the coasting route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,[112] we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus, Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds.[113] In the middle of the fourth century, the Athenian ~~Senate~~ passed a decree in honor of a Naukratis citizen, Theogenes, a man

> Kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately. [114]

We may assume that the "public business" included the purchase of corn.

III.

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief either of the Greek army or of the Greek fleet. [115] While there

is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way.[116] While the volume of trade during the fifth century cannot be accurately judged, it was of a regular character.[117] The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic gave her dominance over trade with the west.[118] The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[119] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it".[120] Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse.

> upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection.[121]

It was this threat to the food supplies of the Peloponnese that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril

to Sparta and her allies; Sparta and Corinth were thus drawn together by the common danger. The Peloponnesian War was the outcome of the Athenian aim of controlling the western corn supply.

1. Rostovtseff, "Great Sightseers in Egypt", in Journal of Egyptian Archeology v. xiv, p. 14

2. Grundy, Thucydides and the History of his Age, v. I, p. 90

3. Jarde, Les cereales d'antiquite Grecque, p. 184

4. Gomme, The Population of Athens in the Fifth and Fourth Centuries B.C., p. 26

5. B.C.H. VII, pp. 194-216

6. Gomme, p. 33

7. C.A.H., v. V, p. 13

8. Livy, XLIII, 6

9. Aristophanes, Wasps, 718

10. Athenaeus, III, 113 A

11. In the Roman army barley rations instead of wheat were issued to the troops as a punishment.

12. Naum Jasny, ..., p. 15

13. Demosthenes, Contra Leptinem, 31

14. Kocevalov, "Die Einfuhr von Getreide nach Athen", in Rheinisches Muscum, XXX (?) (1932), p. 321

15. Josephus, Jewish Wars, II, 383 and 386

16. C.A.H. v. X, p. 410 (?)

16a. M. Charlesworth, "Trade Routes of the Roman Empire", p. 144 (?)

17. Rostovtzeff, Social and Economic History of the Roman Empire, pp. 148-9

18. This is the main theme of Grundy's Thucydides and the History of his Age, to which we are indebted for many of the insights of this section.

19. Glotz, Ancient Greece at Work, p. 297

20. Francotte, "Le pain a bon marche et le pain gratuit", in Melanges Nicoles, p. 135

21. Aristotle, Constitution of Athens, XLIII, 4

22. Xenophon, Memorabilia, III, 6, 3

23. Demosthenes, In Phormionem, 37

24. Demosthenes, Contra Lacritum, 50; In Dionysodorum, 6

25. E.H. Minns, Scythians and Greeks, p. 442

26. C.A.H., v. V, p. 19

27. S. Casson, Macedonia, Thrace and Illyria, Oxford, 1926, p. 255. - According to Casson this same route was used for local trade in modern times until the building of a railroad early in the twentieth century.

28. Casson, p. 90

29. "Because of the peculiar currents of the Bosporus, every ship going through that strait must stop at Byzantium". Polybius, IV, 43

30. Minns, p. 439; Cf. also Strabo, VII, 6, 2

31. Herodotus, VII, 147

32. VI, 5 and 26

33. VI, 33

34. Thucydides, I, 95

35. A.B. West, "Coins from the Thracian Coast" in Numismatic Notes and Monographs, v. XL. Cf. also M.L. Strack, Die antiken Münzen Nordgriechenlands, who emphasized the Persian influence.

36. G.S. Seltmann, Greek Coins, London, 1933, p. 145. Cf. also West. p. 146

37. Seltmann, p. 141

38. West, p. 151

39. West, p. 150. Strack, p. ...

40. H. Merle, Geschichte der Staedte Byzantion und Kalchedon, p. 19

41. Thuc., II, 97

42. Their savagery remained a problem during the Roman Empire.- Strabo, VII, 3,13

43. Thuc., II, 96

44. II. 98

45. Casson, p. 201. Cf. also West, pp. 57, 147, 150.

46. Strabo, VII, 3, 13

47. West, p. 121

48. West, pp 123-4

49. Polybius, IV, 42

50. Thuc., I, 95

51. I, 130-1 Plut. Cimon

52. Bury, History of Greece, p. 325, n. 4

53. Plutarch, Pericles, XX, 2-3

54. G. Glotz, Histoire Grecque, v. I, p.191

55. A.E. Zimmern, The Greek Commonwealth, p. 363

56. Aristotle, Rhetoric, III, 10, 7

57. Plut., Per. XIX, 1

58. XIX, 1

59. XIX, 3

60. Grundy, v. I, p. 79

61. Plut., Per. XXIII, 2

[illegible]

62. Thuc., VII, 28

63. Rostovtzeff, "The Bosporan Kingdom" in C.A.H., v. VIII,p.564

64. Plut., Per. XX, 1

65. Rostovtzeff, pp. 564-5

66. Rostovtzeff, p. 565

67. Rostovtzeff, p. 564

68. Wilamowitz-Moellendorff, Griechisches Lesebuch, II/2, p. 249

69. See also J. Hasebroek, Trade and Politics in Ancient Greece, p. 143

70. H. Francotte, p. ...

71. Cf. Jarde and F. Heichelheim, ...

72. Rostovtzeff, pp. 564-5

73. Herod. IV, 17

74. Dem. In Lept. , 32; cf. also Kocevalov.

75. ..... Arist. Ath. Pol. 51, 4

76. Old Oligarch, On the Constitution of Athens, II, 3

77. Xenophon, Hellenica, I, 1, 35-6

78. Rostovtzeff, p. 567

79. Rostovtzeff, p. ...

80. Rostovtzeff, "Greek Sightseers in Egypt" in Journal of Egyptian Archeology, v. XIV, p. 14

81. Dem., C. Lept. 32

82. 33

83. Minns, p. 574

[illegible]

84. Dem., C. Lept. 32

85. Minns, p. 571. Cf. also Hasebroek, p. 114

86. Dem., In Phorm. 36

87. Minns, p. 576. Cf also Grundy, p. 87, [illegible] note 2

88. Dem., C. Lept. 33

89. Strabo, VII, 4, 6

90. Hasebroek, p. 111

91. Ibid. pp. 126-7

92. Francotte, p. 136

93. Xen., Hell., V, 1, 28

94. Demosthenes, De Corona, 87

95. Demosthenes, Contra Polyclem, 17

96. Rostovtzeff, in C.A.H., v. VIII, p. 574 (?)

97. Plut., Per. XX, 2-3

98. XXI, 1

99. XXII, 1

100. XXXVII, 3. - Cf. also Mallet, Les Rapports des Grecs avec l'Egypte, p. 47

101. Scholia to Aristophanes, Wasps 716, referred to by A, Boeckh, Public Economy of Athens (Lewis translation), p. 90, and Mallet, Les premiers etablissements des Grecs dans l'Egypte, p. 283

102. G.S.Hall, History of the Near East, pp. 144, 161

103, Hall, p. ...

104. Herod., II, 178-9

105. e.g., Grundy, Semple, Smith (?),

106. Prinz, Funde aus Naukratis, pp. 111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and other finds show that the same wares always go to the same place, without exception (p. 114).

107. Diodorus I, 29, 1

108. Mallet, p. 48

109. Athenaeus, II, 39 f. Cf. also Mallet, p. 283

110. Thuc., IV, 53

111. Andocides, On His Return, 21

112. Grundy, p. 327

113. Rostovtzeff, Social and Economic History of the Hellenistic World, v. I, p. 89

114. C.I.G. 4, 35, referred to by Smith, Naukratis, p. 64

115. Herod., VII, 158-60

116. T.J. Dunbabin, The Western Greeks, Oxford, 1948, p. 214

117. Dunbabin, p. 216

118. Rostovtzeff, History of the Ancient World, II, p. 269. - Dunbabin, p. 227

119. Dunbabin, p. 215. - Rostovtzeff, p. 269. - Grundy, p. 185

120. Dunbabin, p. 215

121. THUC. III, 86

Chapter 36. Securing corn imports

Why did Athens, the site of the first important market place in history, the famed agora, herself never become a pioneer of market trade? Why did her extreme dependence on imported grain, combined with her experience in market methods not make her take the lead in the establishment of an international corn market which, on the face of it, should have solved her problem? Indeed, why did she strike out rather in the opposite direction, obstructing the Egyptian initiative of setting up such a market? One need not share an unhistorical prejudice in favour of market methods to see the problem of Athenian corn trade in these common sense terms.

Accordingly, our points of enquiry should be: To what extent did the conditions of the corn trade permit the development of market trade? Or, conversely, how far did those circumstances discourage such a development and require the use of administrative methods of trading in order to ensure the supply of corn?

The answer, we submit, lay in the geographical and political structure of the regions in which supplies and communications were situated. These conditions under which military and political power had to be employed to ensure the forthcoming of the supplies, and indeed the safety of the trade routes themselves, determine the methods and organization of trade.

Nine tenths of the matter is comprised in the geographical circumstances which kept Attica at all times keenly anxious for the provenance of her daily bread from overseas, and made her eventually seek out the Black Sea, Egypt and Sicily, in succession. The rest may be summed up in the recognition that while Athenian

foreign policy was corn policy, it was never affected by commercial considerations or inspired by so-called trade interests. The reason for this apparent paradox will be manifest from a bare outline of the history of the corn trade.

I.

Greece as a whole lacks pasture land and Attica's soil is best suited for the growing of oil and vine. At no time after the Solonic crisis did Athens raise more than a fraction of her grain. Yet grain, supplemented by fresh and dried fish, constituted the staple of her diet. If we were to look for any one determining factor in Greek economic development, it would unquestionably be that area's preponderant dependence on imports for her food supply.

Greek social and political thought reflected this unalterable circumstance. The Greeks never developed a discipline of economics because the country could never rely for its food supply on the market. Instead it turned to political theory which almost to this day has retained the cast of the mould of the Athenian polis. Her ever unassuaged need for an adequate food supply made the principle of self sufficiency the basic postulate of her existence and thus of her theory of the ideal state. Autarky was to the Greek mind the <u>rationale</u> of the polis. On this point ~~Ari~~ Aristotle agreed with Plato - they both thought that the citizen population of the polis should consist of farmers. Indeed, from the history of Athens no other lesson could be drawn.

There is agreement among scholars of antiquity over this extreme dependence on imports. Rostovtzeff has shown that as late as the third century, this inadequacy was so pronounced that not a trace of commercial rivalry can be found between the two greatest grain producers, Egypt and the Bosporus. [1] Grundy insists that every Greek state, with the possible exception of Thessaly and Euboea, was to a greater or lesser extent dependent on imports. [2] Jarde, the authority on the subject, suggests that Athen's dependence was so great that she could always absorb any amount of imports without their causing a failure of domestic prices. [3]

It is possible to make a crude estimate of the Athenian deficit in grain stuffs. Since statistical accuracy cannot be attained for antiquity, the figures can do no more than indicate orders of magnitude.

On the population of Attica the calculations of A.W. Gomme remain authoritative. He estimates the total population 431 B.C. as 315,000; of this total, 172,000 were citizens, 28,500 metics, and 115,000 slaves. Six years later, after the plague, the total population was 218,000, with 116,000 citizens. In 323, Gomme estimates the population as 258,000: 112,000 citizens, 42,000 metics, and 104,000 slaves. [4] The population of Attica, therefore, may have ranged between 200,000 and 300,000, the latter figure being approached before the ravages of the plague in the beginning of the Peloponnesian War.

Our only information on Athenian domestic production and imports is for the late fourth century. An Eleusian inscription

of 329 B.C. records Attic production at 368,850 medimns. But of this total, only 28,500 medimns were wheat, the rest barley, a ratio of less than one to ten. [5] While this probably was a famine year, Gomme estimates the maximum possible production at 410,000 medimns, [6] Tod at 450,000. [7] Accepting Beloch's estimate of an average per capita consumption of six medimns, a maximum of 75,000 people could be supported from the domestic production. With a population range of two to three hundred thousand, minimum imports of one to one and one-half million medimns would be required, or two to three times the domestic production. Domestic production, must have been insufficient even to feed the agrarian population; In 170 B.C., when the population of Attica was probably much smaller than in the classical era, Athenian ambassadors at Rome claim that Athens "feeds even the husbandmen with imported corn." [8]

The dependence on imports was even greater than this statistical guess would indicate. While the population as a whole depended on imports for a large proportion of its food, the citizenry depended on imports almost entirely. Our figures referred to the total of wheat and barley. But barley was considered fit only for slaves and metics; a citizen would eat barley only if he were very poor or if famine conditions prevailed. Aristophanes, sneers at the democratic grain distributions, reminding his audience that the gift of five medimns in 424 B.C. was mere barley. [9] A speaker in the Deinosophists says:

> We have no interest in barley since the town is full of wheat bread. [10]

While wheat was considered the citizens' staple, it constituted

no more than one-tenth of the domestic Athenian crop - enough to feed perhaps eight or nine thousand citizens. Imports thus quite generally meant wheat imports. A large proportion of the slaves could probably be fed by domestic barley; the citizens depended entirely on imports.[11] Such was mostly the case; according to Naum Jasny's research on ancient agriculture, wheat "dominated the international grain trade of the classical era almost to the exclusion of the others."[12]

Our estimate of the extent of Athens' dependence on imports is confirmed by a speech of Demosthenes, in which he observes that 400,000 medimni of wheat had been imported from the Pontus in 338, and that the imports from "there" generally equal Athens' total imports from all other sources.[13] The figure, he said, could be verified by checking the books of the inspectors at the emporium. This would amount to total wheat imports of only 800,000 medimns for that year. But Kocevalov, a Russian philologist, insists that a study of the syntax of Demosthenes' phrase shows conclusively that 800,000 medimni were meant as coming from the Bosporus, not 400,000.[14] He argues that this latter figure referred only .to. Panticapeum, "the home port", not also to Theodosia from which once again that amount was shipped. Accepting these figures, we get total imports of 1,600,000 medimns. Including the home crop this would amount to about 2,000,000 medimns - the probable yearly requirement.

There is no need to stress the point further. There is widespread agreement to-day that corn supply dominated Athenian foreign policy. Grundy bluntly asserts that foreign policy was

food policy.[15] So does Glotz.[16] Francotte observes that "la premiere des questions economiques pour les Grecs etait celle du pain."[17]

Only three instances come to mind of great powers which largely imported their food supply: the city states of Athens and Rome in antiquity, and Britain, approximately since 1770.

Free trade England represents the classic instance of reliance for food on a world market. She virtually destroyed her domestic agriculture after 1846 in the name of the doctrine of comparative costs. For half a century her wealth and power apparently justified her abnegation of self-sufficiency. But since World War I it has become increasingly evident that the successful functioning of the world market itself depended on Britain's financial, military or political control of the organization of world trade. Having lost that control, Britain finds herself dependent on the treacherous mechanism of an unregulated world market. An increase in raw material prices due to armaments and stockpiling threatens the stability of her whole economy. She is at present trying to free herself from such a dependence through long-term barter agreements, currency control, licensing arrangements and other instruments of administered trade.

The Roman Empire adopted the other alternative. Rather than rely on the "world corn market" which had been established in the late fourth century in the eastern Mediterranean, Rome smashed this market and brought the chief grain producers under her direct

control. Sicily was conquered first in the third century, and throughout Roman history remained her "storehouse." In the year 6 A.D., the emperor assumed the responsibility for feeding the city of Rome; he filled this obligation ably, through the tributes levied in kind on the provinces. Besides Sicily, Josephus tells us that Egypt sent enough corn to feed Rome for four months and Africa enough for eight months;[18] this probably amounted to 2,900,000 and 5,800,000 medimni respectively.[19] Since the emperor's responsibilities extended far beyond the feeding of the city of Rome, - the army and the imperial household also had to be fed, methods of administered trade were employed. Rostovtzeff when listing what he deems to be proof of extensive capitalistic activity in the Roman Empire, is forced to admit the primacy of administered trade:

> It must be admitted. . . that the largest consumer was the imperial annona and that most of the merchants, who frequently were at the same time shipowners and owners of storehouses, worked on behalf of the emperor, that is to say, on behalf of the population of the city of Rome and the army... The imperial annona was the chief moving force in the interprovincial trade, buying and transporting large masses of corn, oil, wine, meat, fish, lumber, hides, metals, and clothes for the needs of the armies on the Rhine, Danube, and Euphrates, and some of these articles for the needs of the capital.[20]

Athens never achieved the imperial splendor of Rome. During a memorable half century she ruled directly the trade routes and controlled by military means the sources of supply in the Eastern Seas. When her strategic hold was lost, she turned to a complex of administrative methods to secure her food supply.

But let us begin at the beginning.

The Solonic embargo on the export of corn is the first

instance of corn supply being brought within the realm of public policy; it never left that place.

One meeting of the Athenian Assembly in each prytany - a tenth part of the year - was called the "sovereign" Assembly; in this meeting, according to Aristotle,

> the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn, and the defence of the country. 21/

Corn supply, national defence, and the continuing supervision of the magistrates, in other words, are the three subjects which must be considered at least once during each session of the Assembly. Corn supply is prominent on a list of subjects any prospective statesman must master, according to Xenophon; the others are state revenues and expenditures, war, home defence, and the silver mines. 22/

The Solonic embargo was never repealed. Rather it was reinforced. Legislation was designed, in a general way, to draw the greatest possible amount of grain to Athens and to prevent the movement of grain away from Athens. No Athenian resident was permitted to transport grain anywhere except to Athens; the "severest penalties" were prescribed for violation. 23/ No sea-loan could be made on any ship or cargo unless it were specified that a return cargo of corn or certain other legally specified commodities were brought to Athens. 24/ We may assume that timber and other supplies for shipbuilding figured prominently on the list, although only corn is mentioned in the sources. Since, as we have said above, the petty emporos could hardly put to sea without the sea-loan, this regulation must have been of great importance.

As may perhaps be inferred from these passages, the

organization of corn supply was an instance of administered trade. The actual trading was done by the characteristic metic trader, at least at the Greek end. Greece knew no tanker type of trade except in time of emergency. Yet the trade routes, the terms of trade - including price, to a considerable extent - the sources of goods - all this was fixed by treaties or other diplomatic arrangements, and the actual trading took place as a rule in a port of trade. The extent to which this trade was administered is suggested by a passage in Aristotle's Rhetoric. In specifying the matters a statesman must be conversant with in order to administer state affairs, he says that

> in regard to food (he) must know what amount of expenditure is sufficient to support the State; what kind of food is produced at home or can be imported; and what exports and imports are necessary, in order that contracts and agreements may be made with those who can furnish them. (I, 4, 11)

The great corn producers listed by Theophrastus were Assyria, Egypt, Lybia, Pontus, Thrace, and Sicily. But that was by the end of the fourth century. In earlier times the power of Persia blocked Athenian access to the East, as well as to Egypt and Lybia, in the south, although Athens appears to have drawn some corn from the latter; the rise of Syracuse, in the west, along with the rivalry of the Peloponnesus, checked for a long time Athenian influence in Sicily. Thrace and the Black Sea region - particularly the Crimean hinterland - thus served as the chief granary of Athens in the classical period.

II.

Peisistratus was the first to extend Athenian power towards

the north east, Thrace and the Black Sea region. He reconquered Sigeum on the southern shore of the entrace to the Hellespont, and supported Miltiades in occupying the northern shore, the Thracian Chersonese.The corn of this region may have been paid for by the black-figured Attic vases and archaic Athenian gold and bronze-work dating from this period, which have been found there in large numbers. The trade was made possible by the establishment of a "stable equilibrium" among the Scythian tribes at about this time.[25] Persian expansion into Europe during the last two decades of the sixth century however, must have cut off this trade, which was resumed on a grand scale immediately after the Persian defeat at Salamis.

It seems doubtful whether, before the seventh century, Greek trade with the Black Sea region was of any account. At that time a number of Greek colonies, largely under Milesian auspices, were established - first on the south shore of the Black Sea, then on its north shore. Not until the fifth century were these brought under Athenian influence or control.

Up to the middle of the fifth century the products of the Black Sea were not carried all the way by ship to Greece. Throughout antiquity the powerful and treacherous currents of the Bosporus were greatly feared, as indeed, they are even today. Polybius' description of them has become famous (IV, 43). This was particularly true before the remarkable progress in navigation and shipbuilding which resulted from the Persian Wars. [26] The early seafarers never braved the open sea, if it was possible to coast along the shore; but they were in mortal fear of turning a

cape, preferring to portage their tiny boats. So the early traders avoided turning the cape guarding the Bosporus. Instead of sailing with their goods across the Sea of Marmora, the Propontis of the ancients, and the Dardanelles, landed them on the west coast of the Black Sea at Odessos, Mesembria, or Apollonia. From here, they had them carried overland to the Hebrus Valley, thence down the Hebrus River to the great emporium of Ainos (Aenus) on the Aegean outlet of the river.[27] This city, although situated in the most barren part of Thrace, was one of the wealthiest in that region,[28] occupying in regard to the Black Sea trade a position as strategic as was that of Byzantium.[29] The rivalry of Ainos, the port of trade of the land route, and of Byzantium, the port of trade of the sea route will disclose in concrete terms the military and political conditions of the corn trade.

Byzantium, the Constantinople of our days, ran neck to neck with Ainos in the fifth century B.C. in their race for primacy. Settled in the middle of the seventh century, seventeen years after the city of Calchedon on the opposite side of the straits, Byzantium remained, like Calchedon, an unimportant agricultural settlement for the next two centuries. She was better off than Calchedon only because of her superior fisheries.[30] Calchedon, as noted, was settled somewhat earlier than Byzantium, because of the greater fertility of her soil; Byzantium's fisheries were apparently not utilized until somewhat later. Herodotus, writing in the middle of the fifth century, when Byzantium's trading

advantage was already evident, ridiculed the Chalcedonians for their blindness in settling on the wrong side of the straits. (IV, 144). But this only proves how unimportant the route from the Pontic had been before. For the perfect location of Byzantium could not have been overlooked, if trade had moved through the straits at all. Since the currents force every ship that comes from the Black Sea to stop there. Certainly some of the corn trade did pass through the Hellespont; thus Herodotus describes Xerxes watching corn ships passing through the Hellespont on their way to Aegina and the Peloponnese, 31/ and reports that when Miletus exiled its tyrant, Histiaeus, he sailed to Byzantium with eight triremes and seized every ship coming from the Black Sea. 32/ It may be, however, that Herodotus is guilty of an anachronism in this regard, these events occurred almost seventy-five years before he wrote, and in the meantime Byzantium's greatness may have become so famed that he could not conceive of an alternative route. In any event, no mention is made of Athens receiving Crimean corn at that time.

Byzantium fell before the Persian advance into Europe in 512 B.C., and the population fled to the Black Sea port of Mesembria; the city was burned 33/ and was not resettled until its recapture from the Persians in 479. 34/ During this relatively long period Persian influence and control extended through all of Thrace; Ainos and the other Greek cities of the Chersonese began issuing coins on the Persian standard. 35/ Greece must have been now cut off from her Black Sea corn supply.

479 B.C., the year of the Persian retreat from Europe,

marks the height of Ainos' glory and wealth, which can be traced through her coins and through the Athenian tribute lists. In 480 she began to strike coins on a light Attic standard; her tetradrachms, for beauty and workmanship are not surpassed by those of any other Greek city.[36] She was assessed an annual tribute of twelve talents from 454 to 450 B.C. as a member of the Confederacy of Delos.

But Ainos' wealth and greatness were short-lived; by the third quarter of the fifth century, she had been reduced to poverty and relative obscurity. Her tribute assessment was reduced to ~~paxaxiy~~ ten talents between 445 and 440 B.C. In the next two years it dropped to only four talents; Ainos paid no tribute whatsoever from 437 onward.[37] In 450 she issued a gold coin bearing a figure of Hermes on a throne - a type issued only three times during the city's history, each a time of serious crisis. According to A.B. West, the coin "was an emphatic way of calling upon their patron god to bring aid to his impoverished proteges."[38] From this time on, the city was in a reduced condition.[39]

Byzantium's rise was as meteoric as was the fall of Ainos. In 452, the first year she appears on the tribute lists, she paid nothing. Five years later, she was assessed four talents 3000 drachmae, which was increased to fifteen talents in 443, eighteen talents in 436, and twenty-one talents 4320 drachmae in 425.[40]

The simultaneous decline of Ainos and rise of Byzantium were rooted in a single event: the substitution of the new sea route for the traditional land route. The impelling factor was

the creation of a native Thracian empire which wiped out the overland route, although the improvement in navigation and shipbuilding must have contributed to the process. But the military event was dominant. Between the years 480 and 460 B.C., Teres, the chief of the Odrysians, a Thracian tribe, created an empire extending from Abdera in the Aegean to the mouth of the Danube on the Black Sea,[41] and including as its subjects the Thracian tribes, the formidable Getae[42] and "the other hordes" around the Danube bordering on Scythia.[43] Under his successors, Sitalkes and Seuthes, the empire was consolidated and made into a great and wealthy power. In 429, two years after Teres' death, the Athenians sought an alliance with Sitalkes, and Thucydides observed that his kingdom

> was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian gulf and the Euxine, and in numbers and military resources coming decidedly next to the Scythians, with whom indeed no European country can bear comparison...[44]

The rise of this empire left the all-sea route as the only alternative and consequently impoverished Ainos. "The establishment of the Odrysian kingdom athwart the trade routes that provided the wealth of Ainos would bring about its virtual extinction."[45] according to Casson's study on the history and archaeology of this region. Since the raids of the savage Getae cut off the trade of Apollonia as late as Strabo's time, [46] we may assume the same interferences at that earlier date. The archaeologist and the numismatist agree that the growth of the Odrysian empire made an end to overland trade. So close was this

negative correlation that at the end of the century, around 412 B.C. Ainos enjoyed a temporary resurgence of wealth "such as she had not known for thirty years"[47] - as the result of a struggle for supremacy among Odrysian princes. After Seuthes' I death, a local prince who had ruled the territory from the Hebrus River to the Sea of Marmara was exiled, and this territory became severed from the Odrysian empire. This turn of events once more opened up for Ainos the land route to the Black Sea and she enjoyed a thirty-year prosperity which was brought to an end when the empire was once again consolidated under Cotys.[48] Correspondingly we find Byzantium's tribute reduced in 414 to fifteen talents from its high of almost twenty-two talents in 425.

The same events which had destroyed Ainos' trade route also cut off Byzantium from the <u>hinterland</u>. Other Thracian tribes, most notably the Astae, began a series of raids which continued for several centuries. These raids made settled agriculture impossible;[49] the city thus was forced literally to the water's edge and by necessity had to make her living from the sea. Byzantium did not miss her opportunity: almost overnight, she was deliberately converted into an <u>emporium</u>. Not the gradual growth of economic forces but a political cataclysm led to the establishment of this trading place. A mutilated description of this transformation has been preserved for us in the pseudo-Aristotelian <u>Oeconomica II</u> (1346 b, 13-25), which will be discussed below when we consider the problem of the port of trade.

Byzantium was recaptured from the Persians by the Hellenic fleet under the command of the Spartan, Pausanias, in 479, and the

city was resettled.[50] But two years later, when Pausanias showed Persian sympathies, he was expelled from the entire area by an Athenian fleet under the command of Cimon.[51] Pausanias' dealings with the Persian emperor were imperilling the Black Sea corn supply.

The next twenty years saw the establishment of the Confederacy of Delos and its conversion into an Athenian empire. By 454, when the treasury of the League was moved from Delos to Athens, the league included perhaps 260 cities, grouped in five divisions: the Thracian, Hellespontine, Ionian, Carian, and the insular. The Thracian district ranged from Methone in the west to Ainos; the Hellespontine included the Chersonese and the Greek cities on the shores of the Propontis and the Black Sea.[52] During this period Athens unsuccessfully attempted to gain control of Thrace in the north and Egypt in the south. She captured Eion, at the mouth of the Strymon River, in 476, but an attempt at colonization was thwarted by the Thracian tribes. She also tried without success to seize the city of Doriscus, on the northern side of the mouth of the Hebrus River (opposite Ainos which is on the south side). Athens did secure the seas around Thrace: in 474, for example, she captured the island of Scyros, on the route to western Thrace, and Thasos with its gold mines, off the Thracian coast was a member of the League. The Egyptian expedition intended to outflank Persia, ended in total disaster in 456.

The power of Persia thus blocked Athenian ambitions in the south, while the growth of the Odrysian empire prevented Athenian expansion to the north into Thrace. Accordingly the middle of

the century saw an important shift in Athenian foreign policy. Pericles made Athenian endeavours to veer from the north, south, and west [53] of the Mediterranean and to concentrate in the direction of the Black Sea which was now imperilled.

The immediate danger was to the trade-route itself. The Odrysian empire was moving towards the Propontis: control of Byzantium and Sestos would have meant control of the trade going through both ends of the Sea. Officials had been sent to Byzantium, among other cities, in 465 to collect the tribute and to "represent Athens' interests," [54] and special officials, called "warders of the Hellespont", were stationed at Sestos to control passing ships. [55] Byzantium governs the exit from the Bosporus, while Sestos, the "corn-chest of the Piraeus," [56] guards the exit from the Hellespont. In 447, therefore, Pericles personally led an expedition to the Thracian Chersonese; he established a cleruchy (military colony) with a thousand men, and built a wall across the Isthmus between Aegean and Propontis, which protected the isthmus against Thracian incursions. [57] Of all his expeditions, writes Plutarch, this one

> was held in most loving remembrance, since it proved the salvation of the Hellenes who dwelt there. [58]

Pericles was determined to protect the trade route from Greek as well as barbarian enemies. From the Hellespont corn was not carried directly to the Piraeus, since that would have entailed turning the sinister cape of Sunium at the southern tip of Attica. This was at a time when Pericles was "admired and celebrated even amongst foreigners" for having circumnavigated the Peloponnesus. [59]

Instead, the goods of the Hellespont were landed at Histiaea, on the northern tip of Euboea. From there they were carried to the Euboean Sea and shipped to Oropus, on the northern shore of Attica, thence overland to Athens via Decelea.[60] The Euboean revolt in 447 thus created a danger to the Athenian supply route fully as great as the Odrysian expansion. Pericles promptly attacked the island with fifty ships and five thousand hoplites and brought it to heel. The island was treated mildly, with but one exception. The citizens of Histiaea were removed as a body and Athenians were settled in their place, because they had dared interfere with Athenian shipping. As Plutarch puts it, Pericles treated

> them, and them only, thus inexorably, because they had taken an Attic ship captive and slain its crew. [61]

Pericles' wisdom in recognizing this threat and dealing with it was borne out by Athenian experience in the Peloponnesian War. When the Spartans captured Decelea in 413, grain had to be carried by sea past Sunium, "at great cost." [62]

In 447, a cleruchy with two thousand men was established also on the isle of Lemnos, and fifteen years later one of a thousand men on Imbros: - the islands commanding the approach to the Hellespont from the Aegean. Between 438 and 435 Pericles brought the Greek cities of the Black Sea region under the sway of Athens.[63] In 437-36, Pericles led a "large and splendidly equipped armament" into the Black Sea, where

> he effected what the Greek cities desired, and dealt with them humanely, while to the neighboring nations of Barbarians with their kings and dynasts he displayed the magnitude of his forces and the fearless courage with which they sailed whithersoever they pleased and brought the whole sea under their own control. [64]

The Spartocid dynasty in the Crimea, which was to remain friendly to Athens for at least a century, was established in 437 with Athenian aid, along with the setting up of an Athenian cleruchy at nearby Nymphaeum.[65] The Spartocid kingdom of Bosporus had as its capital Panticapeum, and later included Theodosia, the two principal ports-of-trade for the Crimean and Scythian corn. For reasons, Rostovtzeff regards as mysterious, Athens was unable to gain a foothold in Olbia, a key city on the north western shore; the corn had therefore to move across the Black Sea and then along the south western shore of the Black Sea on its way to the Bosporan straits.[66] Athenian colonists were established at Sinope, commanding that route, as well as either side of Sinope, at Astacus and Amisus.[67]

Athenian military control of the corn trade thus was complete. To insure her supremacy, Athens forbade any but Athenian ships i.e., ships carrying grain to Athens, from entering the Black Sea; the prohibition did not stop short of the Athenian "allies." [68] Byzantium was the focal point of the system; other states could buy corn at Byzantium only by special permission of Athens. One such grant has been preserved for us, in the form of a treaty dated 426/5 between Athens and Methone, a Macedonian city which was a member of the Athenian League. Methone undertook to provide a body of soldiers for a current Athenian war in Thrace; in return, she was granted permission to buy each year a specified amount of corn in Byzantium. For each purchase, written notice must be given to the Athenian officials at Byzantium, and no Methonian ship may proceed past Byzantium. [69] It can hardly be doubted that under

such conditions corn was bought and sold at proclaimed equivalencies; the persistence, for several centuries, of the belief that the "just price" for corn was five drachmae per medimn,[70] in the face of what appears a secular rise in prices, probably had its roots in such proclaimed equivalencies. We should also note at this point the persistence of a 2:1 ratio of wheat to barley prices from the fourth to the second centuries, despite the violent fluctuations in the price of grain[71] in general. The modernizing notion that a corn market, once established, could have secured the same degree of continuity of supplies and anything like the same degree of stability of prices, appears entirely unrealistic.

Thus corn moves along a specific trade route guarded by Athenian colonies and naval power, in accordance with Athenian foreign policy. The corn was bought at the great emporium of Panticapeum; Rostovtzeff infers a sort of Oikos trade on the part of the Greek lords and tyrants of that region, in which they sold both the products of their own feudal estates and, to an even greater extent, the corn purchased from the Scythian tribes of the interior.[72] Herodotus reports, not without amazement, that the Scythians grow corn "not for their own use but for sale."[73] In the middle of the fourth century, the Bosporan kingdom opened another emporium, Theodosia, which because of its superior harbor facilities soon supplanted Panticapeum. [74] These emporia could not have in their organization differed essentially from the early European factories and ports of trade as we find them established on the Pepper, Gold, Tooth and Slave Coasts of West Africa. From Panticapeum, the corn crossed the Black Sea and moved along the

southern shore to Byzantium, where some of it was resold to various Greek states. The bulk was shipped to the great emporium of the Piraeus, where two thirds (according to a fourth century law, but which probably existed already) had to be immediately carried to Athens.[75] That the Greek states of the mainland did in fact buy much of their food in the Athenian emporium of Piraeus is evident from the importance generally ascribed to Pericles' decree forbidding the Megarians from entering the Athenian market - the immediate cause of the Peloponnesian War. While Thucydides demonstrates that this was more a deliberate provocation than an underlying cause, Aristophanes' picture of the starving Megarian peasant in the Acharnians cannot have been altogether off the truth. (Aristophanes gives this as <u>the</u> cause of the war in order to show what he regarded as its triviality). The Old Oligarch, also explains the crucial role of Athenian sea power in maintaining its empire:

> For there is no city that does not require to import or export commodities; and this will be out of its power unless it be obedient to those who have the mastery of the sea. [76]

Athens' defeat by Sparta in the Peloponnesian War temporarily destroyed her hold over the corn trade. One of the instruments of the Spartan strategy was, in fact, an attack on the enemy's supply route. Agis, besieging Athens in 409, saw "vessel after vessel laden with corn reaching Piraeus," and decided that Athens could not be defeated unless her corn supply were cut off. He therefore sent the son of the Byzantine <u>proxenos</u> at Sparta to Byzantium in an effort to win over that city as well as Calchedon from Athens.[77] This occurred after the Spartan capture of Decelea - half way

between Oropus and Athens - had closed the land route from Euboea. The Spartans also attempted to cut off corn shipments from Egypt. Eventually, Athens lost her fleet, and the war, in 405.

As soon as Athenian naval supremacy was recovered after the Peloponnesian war in 394, a commercial treaty was signed between Athens and Satyrus, the king of the Bosporan kingdom.[78] But the administered trade of the fourth century differed much from that of the fifth, as to the degree of Athenian control. In the fifth century, Athens administered the trade almost single-handedly since the Bosporan cities were under her rule. In the fourth century, the Pontic trade was administered as treaty-trade between great powers. Athens ruled the seas only from the Thracian Bosporus westward, while the now-powerful kingdom of the Cimmerian Bosporus maintained dominance over the Black Sea.[79] The Bosporan kings were chieftain traders whose wealth derived from the corn trade which they appropriated; Athens in turn needed the Bosporan corn. In the same way, after Alexander the Great's death, when Egypt under Ptolemy Philadelphus ruled the Aegean, we find close diplomatic relations between the Bosporus and Egypt.[80]

Details of this administered trade during the reign of the greatest of the Bosporan kings, Leucon (ca.388 to 348 B.C.) have been preserved in the speeches of Demosthenes. Leucon, "who controls the trade," granted priority of lading to any merchant carrying corn to Athens and exempted such merchants from the customs dues of a thirtieth. 81/ These rights traditionally applied to Panticapeum, the port of trade for corn. But Leucon also opened another <u>emporium</u> as Demosthenes himself calls it at Theodosia and

applied the same privileges there.[82] Theodosia had in earlier times been an important emporium before Scythian incursions put an end to this her role. Leucon's conquests restored Theodosia as an emporium.[83] In return, Athens conferred citizenship on Leucon while exempting him from all civic obligations, and crowned him with a golden wreath at the Panathenaeic festival. The decree giving him these rights and honors was set out in stone in triplicate; one copy was set up in the Piraeus, one at Panticapeum, and one in the temple of Zeus at the entrance to the Black Sea.[84] In 347, the year following on Leucon's death, his sons Spartocus II and Paerisades I, who succeeded him, sent emissaries to Athens to announce their father's death and their intention to continue his policies; Athens set up a decree in their honor in the Piraeus[85] (also honoring a third brother who did not share in the rule). Paerisades became the ruler in 334/3, and Demosthenes credits him with a renewal of the privileges.[86]

While Athens was the most favored nation under this treaty trade, she did not enjoy the same monopoly that as in the preceding century. Thus, a decree in honor of Leucon passed by Arcadia in 369 B.C. suggests that she, too, received some privilege. And in 350, Mytilene, on the island of Lesbos, received permission from Leucon to buy 100,000 medimns of corn at an export duty of only 1 1/9%; on exports above that amount, a duty of 1 2/3 was charged, in itself a saving of half the normal export tax.[87]

King Leucon made also gifts of corn to Athens. Demosthenes says that the gift in 357 was so large that the sitones (a tamkar-like official appointed to purchase grain on governmental account during emergencies) had a surplus of fifteen talents left for the

Treasury after disposing of the grain.[88] This should mean one of two things. Either the grain was an outright gift and was distributed on some conventional basis to the citizenry, the remainder being sold for the benefit of the treasury, or else Leucon sold the grain to Athens at much less than the normal price, the fifteen talents being the difference between the cost and the resale price. The first alternative seems - in this case more likely. Strabo, in writing of Theodosia's superiority over Panticapeum, remarks that Leucon once sent 2,100,000 medimns - a very large amount - to Athens from Theodosia.[89] This may refer to the same or to another gift, but it need not; it may simply represent the total of a year's shipments to Athens.

The example of Mytilene shows that the administered trade between Athens and the Crimea was exceptional. Hasebroek insists that "all the so-called commercial treaties which have come down to us from pre-Hellenistic times are concerned not with commercial advantages, but with the supply of corn and other indispensable commodities, including materials for defence and shipbuilding".[90] Grain supplies were almost universally secured through treaties, which were generally concerned with the right to buy goods in a certain port or ports and in obtaining advantages in transportation: full or partial exemption from dues; safety from seizure; and priority in lading[91] - i.e. the conditions of the Athens-Bosporus trade.

Athens was only partially successful in her efforts to retain control of the western half of the Pontic route. In 387, a treaty with Clazomenae on the Asia Minor coast, granted that xxx

city permission to buy corn in certain specified cities.[92] But other former dependencies, notably Byzantium herself, asserted their independence from time to time by seizing grain ships, either expropriating the grain or forcing the ships to pay duty. Thus, during a Spartan war with Athens, in 387/6, the Spartan general, with eighty ships under his command, prevented the ships from the Black Sea from sailing to Athens.[93] One of the first steps taken by Philip of Macedon, Alexander's father, making a bid for an Aegean empire, was to reach out for a stranglehold on Athenian corn supply. According to Demosthenes, King Philip

> seeing that we have more imported corn than any other people in the world . . . went to Thrace, and first called upon the Byzantines, who were his allies, to join in the war against us.[94]

Athens had increasing difficulty in keeping Byzantium within her sphere of influence. In 360, she found herself compelled to convoy her grain ships because the Byzantines were "again" forcing them to put into Byzantium and unload their cargo there.[95] Instances of seizures of corn ships by Byzantium, Calchedon, Cyzicus, Chios, Cos, Rhodes, and Macedonia are recorded between 362 and 338.[96] Two years later Alexander succeeded his father on the throne; as soon as his great campaigns in the east were launched, the corn supply of the Black Sea was diverted for the use of his armies, and Athenian trade was practically at an end. It can hardly be mere chance that over the next years Attica saw her worst famine since Solonian times.

More than anything else the political genius of Pericles had been responsible for the organization of Athenian corn trade with the Black Sea. He was a master of Realpolitik: he was

governed by the principle of limiting Athenian policy to the attainable. Control of the route to the Black Sea and of the surrounding countries was within the scope of Athenian power, hence he sought to channel Athenian efforts in this direction and to restrict them in others. Pluterch, following upon his description of Pericles' expedition to the Black Sea, offers this analysis of rare insight:

> But in other matters he did not accede to the vain impulses of the citizens, nor was he swept along with the tide when they were eager, from a sense of their great power and good fortune, to lay hands again on Egypt and molest the realms of the King (i.e. of Persia) which lay along the sea. Many also were possessed already of that inordinate and inauspicious passion for Sicily which was afterward kindled into flame by such orators as Alcibiades. And some there were who actually dreamed of Tuscany and Carthage... 97/
>
> But Pericles was ever trying to restrain this extravagance of theirs, to lop off their expansive meddlesomeness and to divert the greatest part of their forces to the guarding and securing of what they already had won. 98/ That he was right in seeking to confine the power of the Athenians within lesser Greece was amply proved by what come to pass. 99/

Pericles, in short, developed the Black Sea corn supply as an alternative to the Egyptian and the Sicilian, which were blocked by the power of Persia and Syracuse. Athens had made a tremendous effort to wrest power over Egypt from Persia a few years earlier. The attempt proved abortive and almost ended in total disaster. Pericles eventually resisted all further attempts to renew the attack on Egypt.

II.

Athens' interest in Egypt was prompted at least in part by a desire to tap Egypt's vast grain production. Thus, a Libyan pretender to the throne 74-77 of Egypt sent a gift of forty thousand medimns of wheat to Athens in 445 B.C. in the hope of winning her support.[100] Some twenty years later, the Egyptian king Amasis sent Athens a large quantity of barley during a famine, in exchange for an alliance against Persia;[101] it is this gift that Aristophanes ridiculed because barley only was sent, instead of wheat. Corn clearly was the means of persuading Athens to take a hand in Egyptian-Persian relations.

It is difficult to assess the extent to which Athens received grain from Egypt during this period; the evidence is inconclusive. There may have been a trickle of trade between Greece and Egypt from the third millennium until about the tenth century, when the convulsions attendant the breakdown of the Mycenean civilization stopped it altogether. Trade moved from Egypt along the Syrian and Palestinian coast, either by land or sea, then to Cyprus, and thence to Greece.[102] After a three hundred year lapse trade was resumed in the seventh century maybe because of increased mastery of the sea, since it was now possible to sail by sea from Egypt directly to Rhodes and Crete, and thence to the Greek settlements in Asia Minor. [103] Miletus took the lead in this phase of the trade, which was carried on exclusively through the port of trade of Naucratis, founded at the end of the seventh century by the Egyptian king Amasis. [104] There is no mention of Athens in

connection with Naucratis in this early period.

Although most writers[105] assume that corn was one of the principal exports from Naukratis, a list of Egyptian exports to Greece through that port of trade during the seventh and sixth centuries does not mention grain.[106] On the other hand, Egyptian myths recorded by Diodorus (an unreliable source) say that some of the ancient kings of Athens were Egyptian. One in particular, Erechtheus, "through his racial connections with Egypt brought from there to Athens a great supply of grain" during a famine and thereby became king.[107]

While gift trade of an occasional character is on record in the fifth century, it is hard to determine how much trade of a more regular sort did occur. Certainly the Persian conquest of Egypt must have had some disturbing effect, and Mallet, who has made a study of Greek-Egyptian relations, believes that Egypt was not an important source of grain for Athens in the fifth century.[108] On the other hand, a fifth century Athenian poet, Bacchylides, quoted by Athenaeus, speaks of

> vessels filled with wheat (which) bring from
> Egypt, through the shining waves of the sea,
> the most precious of riches. [109]

However much wheat Athens did or did not obtain from Egypt, she did not control the trade. Sparta apparently drew some grain from Egypt, too since during the Peloponnesian War Athens attacked the Spartan island of Cythera (off the southern tip of Laconia),

> where the merchant vessels from Egypt and
> Lybia commonly put in. [110]

At the same time, Athenian imports from Egypt are indicated in 408 B.C. Andocides persuaded Cyprus to ~~x~~ lift its embargo on grain

exports to Athens, and reports that fourteen ships are about to enter the Piraeus, with more on their way.[111] Since the coasting route from Egypt to Cyprus was still popular, perhaps more popular than the direct sea route,[112] we may reasonably assume that this shipment originated in Egypt. Athenian grain imports from Egypt seem to have increased in the late fifth century, as Andocides' speech indicates. Thus, Rostovtzeff points to the prevalence of Athenian influences in Naukratis in the late fifth and fourth centuries, as shown by the pottery and coinage finds.[113] In the middle of the fourth century, the Athenian senate passed a decree in honor of a Naukratis citizen, Theogenes, a man

> Kindly disposed toward the Athenian people, who does whatever good he can to those who come to him on both public business and privately. [114]

We may assume that the "public business" included the purchase of corn.

III.

The third great source of grain - the island of Sicily - lay just outside the orbit of Athenian power. The position of Athens was tantalizing. The size of the Sicilian corn crop is indicated by the offer made by Gelo, tyrant of Syracuse, to supply corn "for the whole Grecian army" for the duration of the Persian War, on condition that he be made commander-in-chief either of the Greek army or of the Greek fleet. [115] While there

is no positive evidence of Sicilian wheat exports to Greece before the fifth century, we cannot doubt that there was, in fact, significant trade; the western colonies could have paid for their imports from continental Greece only in this way.[116] While the volume of trade during the fifth century cannot be accurately judged, it was of a regular character.[117] The Peloponnese was the main customer.

Athens was barred from this source by Corinth which sat astride the trade route. Her strategic site, together with her colonies in the Adriatic gave her dominance over trade with the west.[118] The Athenian break with Corinth about 460 at the time of the expedition to Egypt can have been meant only as an attempt to press for the mastery of all overseas sources of grain.[119] Athens first attacked Corinth indirectly by seizing Aegina, destroying the commerce of Megara and bringing Boeotia to heel, so as to gain a footing in the Corinthian Gulf. But ultimately, securing of imports from the west depended upon at least partial control of the Sicilian and Southern Italian ports of trade themselves. "Nothing less than the success of the Syracusan expedition could have achieved it".[120] Thus the Athenians intervened on behalf of the Leontines in their local war with Syracuse.

> upon the plea of their common descent, but in reality to prevent the exportation of Sicilian corn to Peloponnese and to test the possibility of bringing Sicily into subjection.[121]

It was this threat to the food supplies of the Peloponnese that brought Athens into conflict with Sparta. The Athenian pressure towards the Corinthian isthmus was clearly recognized as a peril

to Sparta and her allies; Sparta and Corinth were thus drawn together by the common danger. The Peloponnesian War was the outcome of the Athenian aim of controlling the western corn supply.

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1. Rostovtseff, "Greek Sightseers in Egypt", in Journal of Egyptian Archeology v. xiv, p. 14

2. Grundy, Thucydides and the History of his Age, v. I, p. 90

3. Jarde, Les cereales d'antiquite ~~[illegible]~~ Grecque, p. 164

4. Gomme, The Population of Athens in the Fifth and Fourth Centuries B.C., p. 26

5. B.C.H. VII, pp. 194-216

6. Gomme, p. 33

7. C.A.H., v. V, p. 13

8. Livy, XLIII, 6

9. Aristophanes, Wasps, 718

10. Athenaeus, XII, 113 A

11. In the Roman army barley rations instead of wheat were issued to the troops as a punishment.

12. Naum Jasny, ..., p. 15

13. Demosthenes, Contra Leptinem, 31

14. Kocevalov, "Die Einfuhr von Getreide nach Athen", in Rheinisches Museum, XXX (?) (1932), p. 321

18 ~~15~~. Josephus, Jewish Wars, II, 383 and 386

~~[illegible]~~ 16. C.A.H. v. X, p. 410 (?)

19 ~~16a~~. M. Charlesworth, "Trade Routes of the Roman Empire", ~~[illegible]~~ p. 144 (?)

20 ~~17~~. Rostovtseff, Social and Economic History of the Roman Empire, pp. 148-9

15 ~~18~~. This is the main theme of Grundy's Thucydides and the History of his Age, to which we are indebted for many of the insights of this section.

16 ~~19~~. Glotz, Ancient Greece at Work, p. 297

17 ~~20~~. Francotte, "Le pain a bon marche et le pain gratuit", in Melanges Nicoles, p. 135

21. Aristotle, Constitution of Athens, XLIII, 4

22. Xenophon, Memorabilia, III, 6, 3

23. Demosthenes, In Phormionem, 37

24. Demosthenes, Contra Lacritum, 50; In ~~[illegible]~~ Dionysodorum, 6

25. E.H. Minns, Scythians and Greeks, p. 442

26. C.A.H., v. V, p. 19

27. S. Casson, Macedonia, Thrace and Illyria, Oxford, 1926, p. 255. - According to Casson this same route was used for local trade in modern times until the building of a railroad early in the twentieth century.

28. Casson, p. 90

29. "Because of the peculiar currents of the Bosporus, every ship going through that strait must stop at Byzantium". Polybius, IV, 43

30. Minns, p. 439; Cf. also Strabo, VII, 6, 2

31. Herodotus, VII, 147

32. VI, 5 and 26

33. VI, 33

34. Thucydides, I, 95

35. A.B. West, "Coins from the Thracian Coast" in Numismatic Notes and Monographs, v. XI. Cf. also M.L. Strack, Die antiken Münzen Nordgriechenlands, who emphasized the Persian influence.

36. C.S. Seltmann, Greek Coins, London, 1933, p. 145. Cf. also West. p. 146

37. Seltmann, p. 141

38. West, p. 151

39. West, p. 150. Strack, p. ...

40. H. Berle, Geschichte der Staadte Byzantion und Kalchedon, p. 19

41. Thuc., II, 97

42. Their savagery remained a problem during the Roman Empire.- Strabo, VII, 3,13

43. Thuc., II, 96

44. II. 97

45. Casson, p. 201. Cf. also West, pp. 57, 147, 150.

46. Strabo, VII, 3, 13

47. West, p. 121

48. West, pp 123-4

49. Polybius, IV, 42

50. Thuc., I, 95

51. I, 130-1 ; Pl.: Cimon

quoted from

52. Bury, History of Greece, p. 325, n. 4

53. Plutarch, Pericles, XX, 1-3

54. G. Glotz, Histoire Grecque, v. I, p.191

55. A.E. Zimmern, The Greek Commonwealth, p. 363

56. Aristotle, Rhetoric, III, 10, 7

57. Plut., Per. XIX, 1

58. XIX, 1

59. XIX, 3

60. Grundy, v. I, p. 79

61. Plut., Per. XXIII, 2

[illegible]

62. Thuc., VII, 28

63. Rostovtzeff, "The Bosporan Kingdom" in C.A.H., v. VIII, p.561

64. Plut., Per. XX, 1

65. Rostovtzeff, pp. 561-5

66. Rostovtzeff, p. 565

67. Rostovtzeff, p. 561

68. Wilamowitz-Moellendorff, Griechisches Lesebuch, II/2, p. 219

69. See also J. Hasebroek, Trade and Politics in Ancient Greece, p. 113

70. H. Francotte, p. ...

71. Cf. Jardé and F. Heichelheim, ...

72. Rostovtzeff, pp. 561-5

73. Herod. IV, 17

74. Dem. In Lept. , 32; cf. also Isocrates.

75. Ath. Const. of Ath. 57, 4

76. Old Oligarch, On the Constitution of Athens, II, 3

77. Xenophon, Hellenica, I, 1, 35-6

78. Rostovtzeff, p. 567

79. Rostovtzeff, p. ...

80. Rostovtzeff, "Greek Sightseers in Egypt" in Journal of Egyptian Archeology, v. XIV, p. 14

81. Dem., C. Lept. 32

82. 33

83. Hamm, p. 578

84. Dem., C. Lept. 32

85. Hamm, p. 571. Cf. also Hasebroek, p. 114

86. Dem., In Phorm. 36

87. Hamm, p. 575. Cf also Grundy, p. 87, [illegible] note 2

88. Dem., C. Lept. 33

89. Strabo, XII, 4, 6

90. Hasebroek, p. 113

91. Ibid pp. 126-7

92. Francotte, p. 136

93. Xen., Hell., V, 1, 28

94. Demosthenes, De Corona, 87

95. Demosthenes, Contra Polycles, 17

96. Rostovtzeff, in C.A.H., v. VIII, p. 578 (f)

97. Xen., Oec. XX, 3-3

98. XXI, 1

99. XXII, 1

100. XXXII, 3. -- Cf. also Hallet, Les Rapports des Grecs avec l'Egypte, p. 47

101. Scholia to Aristophanes, Nubes 716, referred to by A. Boeckh, Public Economy of Athens (London translation), p. 90, and Hallet, Les premiers etablissements des Grecs dans l'Egypte, p. 203

102. G.A.Hall, History of the Near East, pp. 111, 161

103. Hall, p. ...

104. Herod., II, 178-9

105. e.g., Grundy, Semple, Smith (?)

106. Prinz, Funde aus Naukratis, pp. 111-112. The administered character of this trade is made evident by Prinz's remark that the pottery and other finds show that the same wares always go to the same place, without exception (p. 114).

107. Diodorus I, 29, 1

108. Mallet, p. 48

109. Athenaeus, II, 39 f. Cf. also Mallet, p. 283

110. Thuc., IV, 53

111. Andocides, On His Return, 21

112. Grundy, p. 327

113 . Rostovtzeff, Social and Economic History of the Hellenistic World, v. I, p. 89

114. C.I.G. 4, 35, referred to by Smith, Naukratis, p. 64

115. Herod., VII, 158

116. T.J. Dunbabin, The Western Greeks, Oxford, 1948, p. 214

117. Dunbabin, p. 216

118. Rostovtzeff, History of the Ancient World, II, p. 269. - Dunbabin, p. 227

119. Dunbabin, p. 215. - Rostovtzeff, p. 269. - Grundy, p. 105

120. Dunbabin, p. 215

121. Thuc. III, 86