THE SELEUKID ROYAL ECONOMY

The finances and financial administration of the Seleukid empire

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ABSTRACT

The sources are first discussed, with emphasis on Near Eastern written material, archaeological data and numismatics. After a brief historical summary, the essential problem of the early Seleukid kings is presented: how to convert a commodity-based economy into a monetary one.

The underlying economy of the empire is next described. An assessment by region points to a peak population of some 20 million, occupied mainly in agriculture and local trade, which the new city foundations and royal land-grants stimulated.

Ps-Aristotle's *Oikonomika* forms the basis of the main section. It is argued that the work belongs to the early 3rd century B.C. and describes the conditions of the Seleukid empire. Every form of satrapal revenue listed is analysed and rates of tribute, taxation and rent derived, where possible, and shown to be generally high. Coinage is found to have been increasingly used for payments by the administration, mostly for a large standing army. Similarly, taxation receipts were also required in coin and surplus commodity production on royal land was disposed of for silver, where possible. The tetradrachm served as the primary medium and fiduciary bronze tended to be used in place of small silver, but the Seleukids sought only to maintain appropriate currency levels in each region and their many mints essentially coined to replace what was lost through wear, apart from bursts of production for military needs. Foreign currencies circulated freely, including sometimes those on different standards.

A quantitative model links population, production, royal revenue and expenses and coinage. Annual revenue may have reached 20,000 talents, but expenses were high and any surplus small.

Finally, the financial administration of the empire owed much to Achaemenid prototypes. A picture emerges of regional and district officials, responsible both for satrapal finances and royal land and reporting directly to the king.
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PREFACE

This Dissertation has what may be two novel features.

Firstly, it is an attempt by a Greek to view the Seleukid empire from a distinctly non-Hellenocentric point of view. This is more difficult than it sounds, given the conditioning that I have been exposed to about the superiority of ancient Greek civilization over those of the ancient Near East. Since I am dealing with financial administration of an empire, it requires that close attention be paid to the methods used by other Near-Eastern empires, particularly the Achaemenid. It also means that I must centre myself more in the affairs of the Seleukid heartland: Mesopotamia, northern Syria and western Iran, and less in the peripheral Greek world of Asia Minor.

Secondly, the Dissertation relies quite heavily on the analysis of numerical data in the sources. But this I have tried to present at all times as clearly and as simply as I can, recognizing the pitfalls of source reliability and cross-checking as much as possible. I am satisfied that the overall picture that emerges hangs together reasonably well.

To a considerable extent, my approach has been influenced by my two supervisors, to whom I owe a great deal. Amélie Kuhrt's books first interested me in the Seleukid empire. But it was, more importantly, her teaching of the history of the ancient Near East, and particularly that of the Persian empire, that decided me to embark upon this study of the Seleukid royal economy as a continuation, in many ways, of that of its Achaemenid predecessors. Amélie painstakingly read and corrected my work and continuously reinforced my knowledge of the ancient Near East as we progressed. Michael Crawford encouraged me to break away from the trodden path and develop theories of my own (of which this Dissertation is perhaps too full). But he also controlled my excesses in the many areas of his expertise, whether an incorrect translation of a Greek text or a shaky interpretation of a source or a dubious calculation. To my surprise and pleasure I found that many of my so-called theories he had already thought of or immediately accepted. I concede many good points of my work to both my supervisors and take responsibility for all errors.

Finally, this Dissertation would not have been possible without the consideration and support of my wife, Myrto. I dedicate it to her.
The Hellenistic Near East
INTRODUCTION

The finances and financial administration of the Seleukid empire are usually discussed only in passing in general historical surveys of the Seleukids or the Hellenistic world\(^1\). Some effort has, however, been devoted to the subject as part of more specialized works dealing with Seleukid institutions, society and economy\(^2\).

There is still a great deal that is unclear. For example, how did the Seleukid kings derive their revenue? What forms did taxation take and was the system generalized or was it adapted to the specific conditions of each region? On what sizes of population were tribute and taxes assessed? What was the resulting income for the kings? What other incomes accrued to them? How did the king exploit royal land? What role was played by the new city foundations and the temples? What expenses were incurred by the king directly and what at the level of his provincial administrations? What was the purpose of coinage in the economy and what considerations determined the denominations minted and levels of production at different mints? What was the organization that managed the finances of the empire and of the king personally? And finally, what was the bottom line? Was this a wealthy empire or did it live a hand-to-mouth existence, which developed into an acute financial crisis following the 15,000 talent indemnity imposed by the Romans after Magnesia (190)\(^3\).

This Dissertation is an attempt to put together a picture of the finances and the financial administration of the Seleukid empire. In time it deals with mainly that period when one can speak of an empire, i.e. up to the loss of Mesopotamia ca.129, but it also discusses briefly the situation down to the final extinction in 64. In geographic range it covers all the territories that at one time or another, if not concurrently, were ruled by the Seleukids, from the Aegean and the border with Egypt to Bactria/Sogdiane and the north-west frontier of India.

In Part I the different sources used are presented briefly. The existing classical literary and epigraphic material has been extended by much valuable cuneiform documentation,

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\(^2\) For example, the monographs by Bikerman(1938), Bengtson(1944), Musti(1965) and Kreissig(1978).

\(^3\) All dates are BC unless otherwise stated.
which throws new light on the Seleukid empire. A number of studies have already pointed to continuity between Seleukid administrative practice and that of the Achaemenids.\(^4\) This is looked into more closely, with the result that some older evidence can be confidently applied to the Seleukid period.

To these sources are added the results of on-going archaeological excavation and, particularly, settlement surveys. Die studies of Seleukid coin issues and hoard analyses provide useful information on the output of mints and circulation of coinage.

Part I continues with a brief historical summary, which concentrates on the extent of the empire at different times and the problems it faced. This is essential so that its finances and financial administration can be seen from the proper perspective.

Finally, the cardinal problem faced by the early Seleukid kings is presented and the measures which they took to solve it are outlined. The remainder of the Dissertation addresses these in detail.

Part II is an overview of the underlying economy of the empire. To understand the system of taxation, one needs to know what forms economic activity took and the possibilities open to a governing power to extract a surplus for its own needs. The physical characteristics of different regions are presented along with the results of settlement surveys, which give some idea of population levels and trends. A rough estimate of population by wider region is also attempted. Agriculture and animal husbandry, natural resources, trade and industry are all considered in order to establish their potential for generating taxation revenue for the administration. Of particular interest is the establishment of prices for different commodities, which are useful in linking production estimates to taxation revenue levels.

The exploitation of royal land comes up in this Part in connection with the founding of new cities and land-grants to individuals and temples.

Part III deals with the surplus that was extracted from the economy as tribute and taxation by the king and his administration and its expenditure. Here I follow ps-Aristotle’s *Oikonomika* and each aspect of the royal and satrapal economies described there. This turns out to be very useful as the basis for a discussion dealing with the

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\(^4\) The chief proponents of continuity have been Briant (e.g.1979;1982c;1990), Kuhrt and Sherwin-White (e.g.1994a)
different sources of revenue for the empire, ‘incomings’ and ‘outgoings’ to and from royal
lands and treasuries and the major expenses of army, provincial administration and court.
The purpose and use of coinage is also examined at some length. The information derived
is put together in a rough quantitative model of the Seleukid royal economy, linking the
main parameters: population, production, revenue, expenditure and coinage.

Finally, a study of the system of financial administration is undertaken, based mainly on
epigraphic evidence, and is found to owe much to Achaemenid prototypes.

Any discussion of economic matters cannot really be useful unless it is quantified. It is no
good talking about taxation revenue, for example, unless one can say what the total
amount may have been. With regard to the Seleukid empire, here is a labour historians
tend to shy away from, because they consider that ‘the information is miserably
inadequate'. Despite the uncertainty associated with numbers derived from the scanty
evidence, I make an attempt to quantify at every stage. To begin with, some figures, e.g.
a population estimate, may appear very shaky indeed, but in the course of the discussion
these are tested against new estimates made from different data. The more the results
converge, the more confidence there is that the numbers are roughly correct. When the
final model is presented, it will be seen that its various parameters fit together reasonably
well, which, I hope, will provide support to the ideas and conclusions of this Dissertation.

The theme that is developed throughout is that the early Seleukid kings paid particular
attention to developing the economic resources of their empire. They and their
successors tapped these in an efficient manner so as to generate the funds required to
maintain themselves in power, which they were successfully able to achieve for more than
two centuries.

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5 Rostovtzeff(1941:422).
PART I. PRELIMINARIES

1. SOURCES AND METHODS

1.1 Classical literature

A full list of the classical writers used as sources is not given here as this has been adequately covered by others.¹ One major difference is that more attention has been paid to reports concerning the Achaemenid empire (e.g. in Herodotos, Xenophon, the Alexander historians, Athenaios) because of the considerable degree of administrative continuity that, as I hope to demonstrate, existed between this and its Seleukid successors.

1.2 Ps-Aristotle's *Oikonomika, Book II*

This economic treatise has been attributed to the school of Aristotle and is fundamental in any study of the economy of the Hellenistic world, despite its brevity and difficulty of detailed comprehension. A short theoretical section deals with the four types of financial administrations ('economies') that could be observed at the time, in decreasing order of importance, those of a kingdom, satrapy, city and household. This is followed by a presentation of stratagems by which rulers or administrators solved specific financial problems.

In Chapter 7 the theoretical section is translated and discussed at some length, including the question of its date. In subsequent chapters (8-11) the evidence from the Seleukid period for the different aspects of the royal and satrapal economies, as outlined by ps-Aristotle, will be presented and analysed in some detail.

1.3 Greek inscriptions, papyri, parchment and ostraka.

Much of the evidence concerning the different forms of taxation and methods of financial administration in the Seleukid empire comes from the inscriptions of Greek cities. Nowhere is the information direct, of course, as the intention of an inscription was not to provide a manual of current administrative practice, but to record something of particular

¹ Rostovtzeff(1941); Preaux(1978); Will(1979,1982); Davies(1984); Shewin-White/Kuhrt(1993).
interest to the city, e.g. a royal order or concession affecting it, the correspondence of officials called upon to implement the order, a decree honouring a citizen or Seleukid official etc.

The epigraphical evidence is heavily weighted towards the cities of Asia Minor, because these have been on the whole more thoroughly excavated than elsewhere and also simply because of the ‘epigraphic habit’ of the Greeks. However, one does have sufficient data from other areas, e.g. the important Ptolemaios dossier from Skythopolis in Palestine, the Baitokiake land-grant from northern Syria, the Ikadion letter from Failaka in the Persian Gulf, the royal order for the appointment of a high-priestess from Laodikeia-Nehavend in Media etc., which will all be referred to, to be able to perceive similarities between the methods of administration in different parts of the empire.

Papyri are an extremely rare source for the Seleukid economy, the most important being one from Doura-Europos. However, papyri relating to Ptolemaic Palestine and Phoenicia or Ptolemaic possessions in Asia Minor can help to indicate financial structures which were left in place by the later Seleukid administration in these regions.

Parchment is also rare. Of most interest is the early 2nd-century administrative text on leather from Baktria with details of a transaction probably involving tax.

A neglected ostrakon from Babylon may provide the key to military pay in the Seleukid army. A few from Baktria perhaps show tax-collection in operation.

One problem with all Greek documents is that translations can vary considerably. The Greek language possesses considerable variety in the use of many words, whose meaning ultimately depends on the context. This may be quite unclear to the translator, often a philologist called upon to deal with a military or economic text. For this reason, all Greek texts used have been translated by me afresh. As objective a translation has been given as I could manage, without imputing preconceived ideas as to its meaning. Sometimes a less specific expression has been adopted than that used by other translators, which gives the text an impression of somewhat imperfect English, but serves the purpose of leaving

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3 Rea/Senior/Hollis (1994); Bernard/Rapin (1994); Rapin (1996). Also Minns (1915) for a parchment from Avroman in Kurdistan.
4 Sherwin-White (1982).
5 Rapin (1983).
open the precise meaning until the analysis has been completed. A cardinal point, for example, is the use of the terms 'ἐξαγόμενα' and 'ἐσταγόμενα' in the Oikonomika, which have been crudely, but more generally, rendered as 'goods that may be sent out' or 'goods that may be brought in' rather than the more elegant, and, in my view, incorrect, 'exports' and 'imports' that have typically been used in translations of this text.

1.4 Local language sources

Previous studies of the administration and economy of the Seleukid empire have relied almost exclusively on classical sources, both literary and epigraphic. Increasingly, however, cuneiform texts in Akkadian from the Mesopotamian core of the empire are being transcribed and translated and help to throw light on administrative practices in this region in the Seleukid period.

Of these texts, particularly important are the Babylonian Astronomical Diaries for a study of commodity prices. Of equal interest are the two collections of tablets known as the Persepolis texts. Other cuneiform documents from Mesopotamia parallel the Greek inscriptions found elsewhere or provide what is almost totally lacking in classical sources, i.e. details of specific legal and administrative transactions.

The Persepolis Texts

During the excavations of Persepolis in the 1930’s, two archives of cuneiform tablets, written in the Elamite language, were discovered. They are a product of Achaemenid administration in the Persian homeland, the later Hellenistic satrapy of Persis.

The larger of the two archives, the Persepolis Fortification Tablets (PFT), consists of 2120 published texts and at least as many unpublished ones and deals mostly with the collection, storage and distribution as rations of various commodities at storehouses in an administrative area centred on Persepolis between years 13 and 28 of Darius I, i.e. 509-494. The recipients of the rations were the king, members of the royal family, officials,

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6 Rostovtseff(1941); Bengtson(1944); Musti(1965;1966;1984); Kreissig(1978).
7 Kuhrt(1996).
travellers, animals and, principally, workers engaged in many activities, not least the construction of the royal palaces at Persepolis. Included are 96 larger tablets which contain either lists of the individual commodity issues of particular storehouses in a given year (Journals) or summaries of movements in and out of the storehouse and balances remaining (Accounts) or, occasionally, both types of information.

The smaller archive, the Persepolis Treasury Tablets (PTT), contains 129 texts dating from between year 30 of Darius I and year 7 of Artaxerxes I, i.e. 492-458. Each text details payments made in silver to officials or workers in lieu of part of their barley, wine or meat rations.

One may be justified in asking what these two sources, nearly two centuries older than the start of the Hellenistic period, have to do with Seleukid financial administration. I hope to demonstrate in Chapters 9 and 13 that the PFT especially, but also the PTT, show continuity between Achaemenid and Hellenistic administrative practice and help throw light on what, in their absence, would be rather uncertain interpretations of a number of Greek documents.

The information in the PFT has been recorded in a computerised database of some 40-45,000 data items. Its analysis is part of an ongoing study of Achaemenid administration that is independent of this Dissertation, but many of whose findings seem to be directly applicable.

The Babylonian Astronomical Diaries.

These important cuneiform texts are precisely dated records of meteorological and astronomical observations compiled in the temples of Babylon between 652 and 61. They frequently contain market prices for five agricultural commodities and wool and sometimes note political, social or economic events. There is a heavy concentration of data in the Seleukid period, with some price(s) quoted in 245 separate months of 90 regnal years.

9 Cameron(1948).

But first there is the question of the purpose of the Diaries. The astronomers who recorded their observations were, it is clear, primarily interested in establishing over generations a set of data from which astronomical predictions could be made and probably also forecasts of good or bad harvests. They were not interested in political or economic events as such but in their possible relationship with natural phenomena. If an event did not occur in Babylon itself, it was carefully recorded with the phrase ‘It was heard’. The Babylonian astronomers, with no political axe to grind, come through as completely dispassionate writers, with absolutely no reason to falsify the record, in particular with regard to what interests one most here, commodity prices.

In Chapter 5.6 commodity prices from the Diaries will be plotted graphically and trends observed throughout the Seleukid period. Changes will be noted that may be due to political events or administrative decisions, which will be dealt with in Chapter 13.10.

**Legal and administrative cuneiform tablets from Babylonia**

A number of such tablets, written in Akkadian, have been found in official or clandestine excavations in Babylonia, but by no means the larger number has been translated and published. A reasonably comprehensive review of these sources is available until December, 1986.

Most of this material comes from two centres, Babylon and Uruk, though other Babylonian cities also provide some evidence. The essential difference between the two is that Babylon has mainly produced administrative documents and Uruk legal texts. This is quite a serious shortcoming, as one does not have a comprehensive picture of what went on at each centre and administrative and legal procedures may have differed somewhat in different cities. What interests one, however, is whether they were applied under a common Seleukid administrative ‘umbrella’.

A few cuneiform texts from Babylonia play exactly the same role as inscriptions do in Greek cities, i.e. they constitute a public record of privileges or commitments granted to a city or temple (in Babylonia these were inextricably linked).

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11 Spek (1993a) for the Diaries as a source for Seleukid history.

12 Oelsner (1986).
Other documents

An interesting indirect source for the Seleukid empire is a Sanskrit work, the *Artasastra*. This is a treatise on administration by, reputedly, Kautilya, the prime minister of Chandragupta, the Maurya emperor. Taken in conjunction with fragments of Megasthenes appearing in Strabo, Diodoros and Arrian’s *Indika*, it can throw light on how similar problems were managed in a contemporary imperial state.\(^\text{13}\)

An early source is the Murashu archive from Nippur, which describes the activities of a family of agricultural contractors of the late 5\(^{\text{th}}\) century, who leased land from absentee Persian landlords, fief-holders and other property owners, together with water rights from the administration, and sub-leased them to farmers along with the necessary equipment. The Murashu also undertook to pay taxes on the land to the royal exchequer in silver. The archive gives us some idea of the economy of Mesopotamia at this time and the relative costs of agricultural production, which may be applicable to the Seleukid period.

1.5 Archaeology

Settlement surveys

A settlement survey in a particular region attempts to locate areas of habitation and cultivation and to define periods of occupation and use at these. Its tools range from the study of ceramics found on the surface by controlled traverses of the area on foot to stereoscopic air photography and satellite imagery.

The method is, by definition, approximate. Pottery types may be inadequately known for precise dating and lower occupation levels may not show up in surface remains, in particular from rural sites covered by an expanding urban center. If the survey traverses are spaced too far apart, smaller sites may be missed entirely. The time period is necessarily a long one, typically a few hundred years, and the problem arises that not all sites uncovered are likely to have been occupied concurrently. Since ceramic remains are typically found over the entire area of the survey because of the scatter of human and

\(^\text{13}\) Stein(1922). Sharma(1988:4) notes that there are different opinions as to the author and date of the work, but with the consensus view for Kautilya.
animal waste used as fertilizing material, a threshold intensity has to be set somewhat arbitrarily above which one may define a settlement. For this reason the area occupied in a surveyed site, or cultivated around it, is rather approximate. Finally, even assuming settlement areas may have been determined with some accuracy, it is difficult to convert these into population figures.14

Despite all these faults, settlement surveys are, in my view, a valuable tool for observing general population and economic trends, particularly in the countryside, which is an area archaeological excavation deals with less and historiography rarely touches upon.

In Chapter 4 the results of some settlement surveys in the regions and period of interest have been noted. Here it might be well to establish three general points, the first two concerning the area and density of habitation of settlements and the third the population that could be supported on a given area of cultivated land.

For the reasons noted earlier the settlement area measured in a survey probably represents a minimum, though a detailed survey will miss only the very smallest sites, which may not have contributed much to total population. However, there is the problem that all the sites in the survey area may not have been occupied at the same time. In that sense they represent a maximum. The shorter the period of time covered by the survey, the more chance of simultaneous habitation at its sites. To some extent these two opposing factors cancel each other out.

With regard to density of occupation, one has two lines of approach. In one, modern settlements can be studied in the region concerned. For example, an analysis of 54 rural sites in the Susian plain15 has shown that population density at the village level decreased slightly with the size of settlement, as presumably more land was set aside for communal needs. It ranged from 267 persons/hectare in the smallest 18 villages of average size 0.4 hectares to 159 persons/hectare in the largest 18 villages of average size 2.5 hectares. A figure of about 200 inhabitants/hectare seems to be have been the mean or, in other words, a family of four occupied an area of some 200 sq.m. This would cover a small house, a vegetable garden and a space devoted to a few domestic animals. One can

14 Cherry(1983) for the advantages and limitations of settlement surveys.
probably use this as a rough figure for antiquity up to the level of a small town, conventionally occupying not less than 10 hectares and so a population of about 2,000 inhabitants.

Beyond this one enters the sphere of urban centers where different and complex relationships hold and another approach becomes necessary. There the need for defense becomes more important and encircling walls cut off the town from the surrounding region. A larger proportion of the town’s inhabitants are not involved with the production of food and have to rely on the countryside. Fewer gardens can be afforded and some multi-storey housing makes its appearance. Despite the increase in area of administrative and public buildings and open spaces, it is probable that some established ancient cities were more densely occupied than villages. For example, Tyre is reported to have had a circumference of 2.75 Roman miles (Pliny *NH* 5.15.77), or an area of about 100 hectares, and Alexander is said to have slain 8,000 of its inhabitants after his successful siege of the city and enslaved 30,000 (*Arr.Anab*.2.24.4-5). If one accepts these figures, the population density works out at about 380 persons/hectare, though it may have been inflated because of the siege.

An ancient city’s population was not totally determined by the circumference of its walls as settlements would tend to cling to it outside, particularly along its approaches. But this might also work in a reverse manner. Though walls existed, areas devoted to cultivation might be included within their perimeter. Furthermore, a city might find itself in a phase of population and economic decline and be more sparsely inhabited than in earlier periods. There is no indication, for example, that the population of Babylon was nearly as high in the Seleukid period as before, particularly as some of its inhabitants may have moved to Seleukeia-Tigris after that city was founded ca.305, as the centre of gravity of Mesopotamian administration and economy shifted eastwards to the Tigris.\(^{16}\)

In some cases one does have population estimates by ancient authors as well as indications of areas of cities. The shape of Alexandria has been described by Diodoros(17.52.3-6), Strabo(17.1.7-10) and Pliny(*NH* 5.11.62) as an outstretched Macedonian *chlamys* between the sea and Lake Moeris with a diameter of 30 or 40 *stadia*, a width of 7 or 8 *stadia* and a circumference of 15 Roman miles, which would give

\(^{16}\) See Chapter 6 for a discussion.
an area of at most 1,700 hectares. Diodorus also informs us that in his time, ca.60, the city had 300,000 free inhabitants which, when a certain number of slaves are added, should correspond to a population density of at least 200/hectare\textsuperscript{17}. But if one accepts Pliny’s statement \textit{(NH 5.11.62)} that ‘one fifth of the site was devoted to the King’s palace’, or Strabo’s (17.1.8), who gives this as one fourth or even a third, the density of habitation may have been much higher.

For the purposes of this study I shall take the average population density of a town or city at 200 persons/hectare, the same as for a village, recognizing that it may in some cases have been appreciably lower or higher.\textsuperscript{18}

With regard to the area of cultivated land needed to support a person in a basically agricultural economy, there seems to be a general consensus at between 0.5 and 1 hectare.\textsuperscript{19} Irrigation farming would tend to the lower figure and dry farming to the higher. If, for example, a settlement survey uncovers an ancient irrigation system and comes up with a certain area of irrigated land, a population will be calculated based on ½ hectare/person.

Any figures for population derived from settlement or irrigated areas will be taken as somewhat on the low side to allow for missing sites and rounded up.

Site excavations

Archaeological reports of Seleukid-period cities are particularly useful when they provide outlines of fortifications, which enable one to make estimates of city surface areas and populations (Chapter 6.1).

\textsuperscript{17} Fraser(1972:Ch.2, n.358) estimates Alexandria at 1 million and tries, unconvincingly in my view, to reconcile this figure with Diodoros’ 300,000 free residents by assuming these to be males only and adding in 400,000 slaves. Beloch(1886:259) for \frac{1}{2} million inhabitants in the Hellenistic period.

\textsuperscript{18} Adams/Nissen(1972:28): 200 persons/hectare as the norm both at different times and for settlements of widely varying gross size in Mesopotamia; Doxiadis/Papaioannou(1974:52): 200 as a global average in antiquity for village built-up areas; Sumner(1986:12): 40 (urban) and 100 (rural) for the Persepolis plain (but this is probably too low); Alcock(1994:183) implies 125-300 for rural Bahrain; Marchese(1986:307-321): 125 for urban centres in the Maiandros flood plain, but concedes that the figure may have been higher; Marfoe(1986:43): 100-200; Kramer(1982:168): 100-150 for settlements in central Iran but more in the Mesopotamian alluvial plain, though city densities could be appreciably higher; Pastor(1997:9): a rather high 450 for settlements in Israel.
The material remains of a city may also be useful in establishing likely industries operating there and patterns of trade (Chapter 5.4,5), though it is not the purpose of this Dissertation to deal with the underlying economy in other than outline form.\(^{20}\)

**Clay sealings from Mesopotamia**

The practice of attaching to a papyrus or parchment roll one or more clay sealings of the shape of a medallion or enclosing the roll in a *bulla*, a sort of clay ‘napkin-ring’, is well attested in Seleukid Babylonia.\(^{21}\) The documents have all perished, but the seal impressions left on the medallions and bullae provide one with some insights regarding Seleukid financial administration.

A number of collections of such sealings have been found in excavations in Uruk and Seleukeia-Tigris and published\(^{22}\). The most impressive collection, however, numbering 30,000 or so sealings from the so-called Archives Building of Seleukeia-Tigris, has not yet been studied extensively from the point of view of administrative practice, but mainly regarding the iconography of the private and official seals used.\(^{23}\)

**1.6 Numismatics.**

Because of the paucity of literary sources for the Seleukid empire, the evidence from coinage has often proved invaluable in recreating political history and studying royal ideology. The manner and date of the secession of the satrapy of Bactria/Sogdiana, for instance, have usually been linked to the gradual change of iconography and legends in the coinages of Antiochos II and Diodotos from the Bactrian mint(s) (Chapter 2).

Here I am interested in the use of coinage as a factor in the Seleukid economy and specifically what role it played in Seleukid fiscal policy.

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\(^{20}\) Rostovtzeff (1941:1200-1301) for a fuller discussion of trade and industry in the Hellenistic world.

\(^{21}\) McDowell(1935:1-10) for a discussion of sealings and sealing technique.

\(^{22}\) Rostovtzeff(1932); McDowell(1935). Also Wallenfels (1994) for a study of cuneiform tablets at Uruk and their sharing of seals with bullae.
Coin catalogues

The starting point is a determination of what Seleukid mints operated, what coinage issues they produced and when. The pioneering works of Newell (1977=WSM; 1978=ESM), which provide this information, have been extended and corrected, where necessary, through the efforts of other scholars.²⁴

A new comprehensive catalogue of all Seleukid mints, denominations, coin types and control marks is clearly required and is now in the final stages of preparation by Arthur Houghton and Catherine Lorber.²⁵ In conjunction with the catalogues of Newell, this is potentially a very useful source for the Seleukid economy.

Die studies

The focus of Seleukid numismatics in recent years has been the area of die studies. Though far from complete, a picture is gradually emerging of the obverse and reverse dies used in coinage issues at different mints. From the number of specimens of a particular issue that have been found in relation to the number of obverse dies used for it, the so-called index figure, statistical methods²⁶ allow one to predict the total number of fully-used obverse dies in the issue, including those that have not been discovered as yet. The greater the index figure, the greater the accuracy of the prediction. At around 5-6 there is a 95% chance that all fully-used obverse dies have been accounted for.²⁷ The proviso in using any statistical approach is that the sample be fairly random, e.g. not influenced by one major hoard, where coins struck from a particular die predominate.

The method used here is that proposed by Esty, which takes into account variability in die life, with a pattern that has some short-lived dies (presumably faulty ones), most dies in a relatively narrow range of usage and a few lasting longer than expected. The result is a best estimate of the total number of dies plus a low and a high estimate between which

²³ Invernizzi(1994).
²⁴ Mainly Mørkholm, Le Rider and Houghton (see Bibliography).
²⁵ The authors have been kind enough to provide me with a draft of the first volume dealing with the coinage of the Seleukid kings to Antiochos III, for which I thank them.
there is a 95% statistical chance that the real solution will lie. All the figures within this range do not, however, have an equal chance of being correct. As one approaches the best estimate the probability of a correct answer increases markedly28. Though some scholars avoid using these methods for die prediction when the index figure is less than three29, it is permissible to do so as long as one recognizes that the answer is a range of figures, with a certain degree of uncertainty, and not a single exact figure.

Once the number of obverse dies in a coinage issue has been determined, the next question is what was the average number of coins produced per die. Clearly this will depend upon the material and denomination of the coin, the quality of the die and the skill of the mint workers.30 The surviving gold is all of a high quality standard, probably for prestige reasons, and may have required die replacement sooner. For bronze issues, on the other hand, there is generally very much less concern about appearance and it is possible that a die may have been used for much higher levels of production. With regard to silver, most Seleukid tetradrachms are of a high standard, while the difficulties of engraving and striking smaller denominations show up in the comparatively lower quality, but whether this means more or fewer coins per die is not clear. As will be seen in Chapter 11.3, the striking of small silver was mostly discontinued after the first Seleukids and so it is mainly the tetradrachms which are of interest and which constituted the bulk of the currency in circulation.

The only firm evidence for average production from an obverse die gives between 23,333 and 47,250 for silver staters from Delphi ca.33531 and 30,000 for a particular issue of

28 Esty(1986:204-207). An unequal distribution of die lifetimes is assumed, negative-binomial with parameter 2, coinciding with Carter’s (1983) gamma distribution. Essentially what this means is that a fair number of dies will have a shorter lifetime than the average, while relatively few dies may have quite long lifetimes. The expected total number of obverse dies (k2') is calculated using the formula given by Esty (H1). Next the corresponding number of equal-lifetime dies (k') that would give the same total output is determined (H6) and the 95% confidence limits for this (C2), which are then translated into corresponding 95% confidence limits for the unequal lifetime case (H5).


Roman *denarii*.\(^{32}\) Between 20,000 and 30,000 is what is normally considered now for a Hellenistic coinage, with 30,000 the favoured number.\(^{33}\)

An average figure of 30,000 coins from an obverse tetradrachm die, equivalent to 20 talents, will be used here. It will be shown (Chapter 11.5) to be fairly consistent with what the sources indicate expenditure to have been at times when tetradrachm issues were required. Indeed, it may be slightly on the low side.

For gold issues, the information is lacking. Common sense would suggest that less was produced from a stater die not only because higher quality was desired, but also simply because gold, being in shorter supply, was likely to run out before the die reached the end of its useful life. Somewhat arbitrarily, only half the average production of a tetradrachm die is considered here for a gold stater die, so 15,000 coins, equivalent to 50 talents of silver at a gold:silver ratio of 1:10.\(^{34}\)

**Coin hoards**

In addition to die studies, important numismatic sources that can throw light on the Seleukid economy and financial administration are the Inventory of Greek Coin Hoards (IGCH), the Coin Hoards updates (I to VIII) and numismatic publications for the details of the hoards contained in these summaries as well as those that are more recent. A computerised system has been developed to store information concerning the location, date of burial and content of coin hoards within Seleukid territory. Its key results are given in the Supporting Data as Coin hoard lists 1-3. With these it is possible to go some way towards analyzing patterns of circulation in both space and time.

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\(^{33}\) Hopkins(1980:107); Mørkholm(1991:16); Price(1992:66); Callatajy(1995:299-300). Buttrey(1993;1994;1997) rejects the idea that a meaningful average can be calculated at all, but not the statistical approach for estimating the total number of dies, provided the sample is large enough.

\(^{34}\) Callatajy(1995:298) estimates that mean productivity of a gold die was far lower than for a silver die.
2. HISTORICAL SUMMARY

The finances and financial administration of the Seleukid kings can be understood better against a historical background of the major events of their reigns, particularly those affecting the extent of their territory (and revenue) or requiring considerable military effort (and expenditure).

Seleukos I (312-281)

The Seleukid empire is considered to have been founded with the return to Babylon in 312 of Seleukos Nikator. That is how Seleukos' son, Antiochos (I), saw it when he inaugurated dating by the Seleukid era.

In 312 Seleukos controlled hardly more than Babylonia, i.e. southern Mesopotamia, and almost immediately faced a threat from Antigonos Monophthalmos, who had just concluded a peace treaty (311) with his major rivals, Ptolemy, Kassandros and Lysimachos, and was now free to turn his attention east. The subsequent war between the two Successors is not described in classical sources, but cuneiform documents attest to its ferocity, as Antigonos invaded Babylonia (310) and ravaged the land. In 308, in a final battle, Seleukos was victorious and probably extended his rule into northern Mesopotamia at this time.

In the next few years, free from problems in the west, Seleukos marched east and took over one by one the satrapies of Alexander's empire that, in the turmoil of the clashes of the Successors, had been left free more or less to fend for themselves. Most of the Indian territories had, however, already been lost to Chandragupta, the founder of the Maurya empire, a few years earlier and the attempt to recover these was unsuccessful. In a peace treaty (303), the Indian satrapies, as well as Paropamisadae and at least parts of Arachosia and Gedrosia, were ceded to Chandragupta and Seleukos received (possibly) 500 war-elephants in exchange.

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1 Sherwin-White/Kuhrt(1993) for the history and institutions of the Seleukid empire; Will(1979;1982) for a political and military history, with full references.

2 Austin(1981:no.138) for a Babylonian king-list giving dates of reigns according to the Seleukid era, which started on 1 Nissan (April) 311 in the Babylonian calendar and 1 Dios (October) 312 in the Macedonian.

3 Grayson(1975:no.10).
Strengthened by the resources of his new possessions in the east and the elephants, Seleukos moved west to join the coalition against Antigonos. The fruits of victory at Ipsos (301) may have proved somewhat disappointing, as only northern Syria fell to his lot. Koile Syria\(^4\) should also have gone to him, but Ptolemy had made a preemptive occupation of this province and Seleukos was reluctant to take up the issue then. The problem remained, however, a festering wound in Seleukid-Ptolemaic relationships.

In Asia Minor Seleukos now faced his erstwhile ally at Ipsos, Lysimachos, with Pleistarchos’ buffer-state of Kilikia in between. Kilikia was occupied ca.294 and most of Asia Minor and part of Thrace were added to the empire in 281 after the victory of Korupedion. At this point in time the Seleukid empire had reached its greatest extent. The southern parts of Kappadokia and Armenia were also subject to its rule.

Meanwhile, Seleukos had inaugurated his great building projects. Of his major cities, Seleukeia-Tigris is likely to have been founded as a capital ca.305\(^5\) at the time when he took the title of king. The Syrian tetrapolis of Antioch, Seleukeia-Pieria, Laodikeia and Apameia was created ca.300 and numerous smaller foundations appeared all over the empire (Chapter 6.1).

### Antiochos I (281-261)

The assassination of Seleukos far from his main centres created a period of turmoil until his son, Antiochos was able to consolidate his rule, even though he had been co-ruler with his father, responsible for the East, since ca.291/0.\(^6\) Taking advantage of his problems, Ptolemy II managed to acquire a foothold in Asia Minor and effectively controlled the southern coast and parts of the western coast with a string of naval bases. While conceding these losses and perhaps those parts of Kappadokia and Armenia that had been gained by his father, Antiochos kept the Ptolemaic forces at bay where it really mattered,

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\(^4\) This term will be used to cover southern Syria, Palestine and Phoenicia.


\(^6\) In the Astronomical Diaries, Seleukos is shown by the dating formula to have been sole ruler at least up to Aug-Sep.292 (Sachs/Hunger 1988:no.-291). The first appearance of Antiochos as co-ruler with his father is in Sep-Oct.289 (Sachs/Hunger 1988:no.-288). But even before this, as crown prince, Antiochos played an active administrative role in the East. A Babylonian text (Grayson 1975:26-27, no.11) shows him dealing with the Erišnugalu temple at Ur, the construction at Seleukeia-Tigris (possibly), certain undetermined affairs of Babylon and a treaty of some sort.
on the borders of northern Syria in the first Syrian War (274-271). An able ruler, Antiochos continued the city-building activity of his father with even greater intensity. He should probably be given credit for the measures that had the greatest impact on Seleukid finances and financial administration, which provided the basis for the strength and longevity of the empire (Chapter 13.10).

Antiochos II (261-246)

Another able ruler, Antiochos II faced a Ptolemaic threat immediately upon his accession to the throne, but was able to counter it successfully in the second Syrian War (261-256). Indeed, it is probable that he recovered for the empire parts of Ionia, Pamphylia and Kilikia Tracheia.\(^7\)

In the East, however, the situation may not have been so rosy and the secessionary tendencies of Diodotos, satrap of Baktria, could well have started in this reign. The date of the loss of Baktria is highly controversial. A ‘high’ date, as early as 255, has been proposed\(^8\) based on the sequence of Baktrain coinage issues that first depict the head of Antiochos II on the obverse and the ‘Thundering Zeus’ type of Diodotos on the reverse, then the legend \(\text{ΒΑΣΙΛΕΩΣ} \ \text{ΔΙΟΔΟΤΟΣ}\) replacing \(\text{ΒΑΣΙΛΕΩΣ} \ \text{ΑΝΤΙΟΧΟΣ}\) and, finally, the portrait of Diodotos himself on the obverse. Since no coins of Seleukos II were ever issued in Baktria, it is suggested that he cannot have reigned there.

It is difficult, however, to find a suitable political background for these changes, such as a serious weakening of the central power that might have induced a satrap to revolt. The only such opportunity may have been the period of the second Syrian War, when Antiochos was otherwise occupied, but it is difficult to see why he would have made no attempt to reassert himself in Baktria once his hands were free again. In any case, a rebellious satrap would be unlikely to show that he still maintained ties with his erstwhile, but still living, sovereign by using the latter’s portrait on his coinage. And if this were not a revolt, but a concession of joint-kingship by Antiochos to Diodotos, this would be totally against the practice of Seleukid kings with adult sons available for this role in the East. Thus a ‘high’ date for Baktrian secession is most unlikely. On the other hand, a

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\(^7\) Will(1979:239).

The 'low' date, as late as 239, does represent the end of a period in which a gradual loosening of ties did indeed take place and is to be preferred. This will be discussed further below.

Seleukos II (246-225)

Upon succeeding his father, Seleukos II faced the immediate and serious threat of a rival claimant to the throne, the infant son of his father's second wife, Berenike, daughter of Ptolemy III. The third Syrian War (246-241) was initiated with a Ptolemaic invasion of Kilikia Pedias and northern Syria, which reached as far as Mesopotamia. From his base in western Asia Minor, Seleukos was able to launch a counter-offensive and eventually recover the lost provinces, with the exception of the area around Seleukeia-Pieria. Seleukos had to pay a price, however, for support received from his brother, Antiochos Hierax, who was appointed viceroy in the west, but soon asserted his independence and took control of Seleukid territories in western Asia Minor. An attempt by Seleukos to curb his brother met with defeat at the battle of Ankyra (239). At the same time an expanding Attalid kingdom began encroaching on Seleukid possessions in western Asia Minor, eventually ousting Antiochos Hierax.

In the eastern satrapies, the situation must have appeared confused, with rival claimants to the Seleukid throne engaged in constant warfare far away to the west, too preoccupied to pay attention to local affairs. We are told (Strabo 11.9.2-3; Justin 41.4; Appian Syr.65) that Andragoras, the satrap of Parthia, was the first to revolt, but later succumbed to the Parthians. Diodotos of Baktria apparently followed soon after and this set off a general secession of other provinces. I would interpret the sequence of Diodotos' numismatic issues referred to earlier as a kind of fence-sitting, with the satrap waiting to see which way the balance would tip in the clash between Seleukos and Ptolemy III. By retaining the portrait of Antiochos II on issues of the Baktrian mint(s), Diodotos was apparently playing safe with his loyalties.

When Seleukos continued to be occupied with his brother, it was safe to lay a tentative claim to kingship, but still under the protective umbrella of the portrait of the last

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10 Holt(1999:58-60) for a discussion of the texts relating to Baktrian secession and the numismatic evidence.
recognized Seleukid king, Antiochos. The inhabitants of Baktria would get used to the idea in due course, but once Seleukos had been decisively defeated at Ankyra (239), there was no longer any need for pretence and Diodotos' portrait, type and legend on his coins set out his claim of kingship. Thus, though Baktria may have formally seceded from the empire in 239, the Seleukid hold on the province had probably been effectively loosened at the very start of the reign of Seleukos II in 246, and this probably meant loss of revenue too.11 No wonder then that Seleukos, once he had made peace with his brother after Ankyra, set out to recover the lost eastern provinces of Parthia and Baktria. As we know, this expedition proved unsuccessful.

With the Parthians now controlling the exit from the Caspian Gates and the principal route to the East12, Margiane is likely to have gone the way of Baktria. Perhaps northern Aria did too at this time, if not slightly later, since Euthydemos, a Greco-Baktrian king, is found putting up resistance there in 208 against Antiochos III on his Anabasis of reconquest. Southern Aria could, however, be accessed from Mesopotamia via Persis, Karmania and Drangiane and it is likely that this group of satrapies remained Seleukid. The evidence from the Anabasis suggests that Antiochos traversed this region peacefully on his return.

The status of Persis does, however, present a problem. As in the case of Baktria, there is a dispute about when it acquired its independence from the Seleukids, if it ever did. A local dynasty, centred on Persepolis, is evidenced by the coins it issued. The number of rulers who minted these coins is sufficiently large to support those who see an early date for the founding of the dynasty, perhaps just after the death of Seleukos I (281). On the other hand, there is evidence in the sources for Persis as a satrapy in the reign of Antiochos III (Pol.5.40.7). Furthermore, in describing Persis, Strabo refers to its history as one in which Parthian rule succeeded Macedonian (15.3.24), which would have taken place in the 140's. It is possible to reconcile these views by considering that the Seleukids exercised suzerainty over local dynasts in central Persis throughout this period13, much as they did with other such dynasts in Asia Minor and elsewhere, as part of a satrapal

11 Also Lerner(1995/6:103).
administration. There is no way of knowing the precise relationship, but one can assume that some tribute was levied and Persian troops called upon when required, as they were, for example at Raphia in 217 (Pol.5.79.6).

In the reign of Seleukos II, then, the Seleukid empire suffered its first serious territorial amputations at its two extremities, Asia Minor in the west and mainly Parthia and Baktria in the east. The southern coast of Asia Minor, including Kilikia Tracheia, remained firmly in the hands of the Ptolemies.

Seleukos III (225-223)

An attempt to retake western Asia Minor was initiated by Seleukos III, but without tangible results.

Antiochos III (223-187)

At this low point of its territorial extent, the Seleukid empire was fortunate in acquiring a young ruler with considerable administrative and military capabilities, whose long reign, after a difficult start, constituted a series of important conquests and reconquests in all directions, that mostly came to naught after one crushing defeat.

Many of the original Seleukid territories of western Asia Minor were retaken early in Antiochos' reign by an army sent out under Achaios, only to be lost again when Achaios decided to take the diadem for himself. The revolt of Molon in Media and parts of Mesopotamia (222-220) was crushed after a few false starts. A first expedition of conquest against Ptolemy IV in Koile Syria was brought to a halt by the defeat at Raphia (217), but its one tangible gain was Seleukeia-Pieria. After this Antiochos turned his attention to western Asia Minor, where he defeated Achaios and retook Sardeis (216-213).

Antiochos next embarked upon his great Anabasis to the East. Armenia (212-211) was his first reconquest. The long and unsuccessful siege of Baktra (208-206) must have been something of a set-back, but Euthydemos of Baktria may have recognized Seleukid suzerainty in the end, though this was probably short-lived.\footnote{Bernard(1994:478); Sherwin-White/Kuhrt(1993:198-199).} It is possible that the
Greco-Baktrian kings may also have controlled Aria and Arachosia at this time. Sophagasenos of Paropamisadai also submitted peacefully and the return journey via Drangiane, Karmania and Persis went without incident, suggesting that these territories were Seleukid anyway. In 205 Antiochos is found on an expedition in the Persian Gulf asserting Seleukid power with the foremost Arabian city there, Gerrha, and receiving tribute and, more important, ensuring that more of the lucrative Arabian and Indian trade was channeled through Seleukid territory.

With the east apparently under control, Antiochos could now set his sights on the west again with a preliminary expedition to western Asia Minor to see how matters stood there. The time was not yet ripe, however, for any major action in this area.

In the south such an opportunity had arisen with the death of Ptolemy IV and the accession of a minor, Ptolemy V, to the throne. In a sense, the Ptolemies were paid back in the same coin for the trouble they had caused at the start of the reign of several earlier Seleukid kings. The fifth Syrian War (202-198), highlighted by the victory at Panion (200), brought all of Koile Syria, a rich and populous province, into the empire for the first time.

The Ptolemies were given no respite and a combined land and naval force moved along the southern and western coasts of Asia Minor taking one Ptolemaic possession after another and bringing most Greek cities under Seleukid sway. This operation was paralleled in the interior until ca.192, apart from a small Attalid enclave, virtually all of southern and western Asia minor was Seleukid and Antiochos had also acquired a foothold in Thrace. The Seleukid empire had once more reached a huge extent, not far short of what it had been under Seleukos I.

After the thirty-year struggle to achieve this position of power, Antiochos’ fall was sudden and sharp. The ill-fated expedition to Greece and the crushing defeat suffered at the hands of the Romans at Magnesia (190) put paid to Seleukid rule in western and much of southern Asia Minor. Those territories east of Media and Persis, that had been loosely held before, were probably lost irrevocably after the death of the king.15 Armenia too must have asserted its independence once again. But these losses were not as

15 Also Will(1994:445-446).
catastrophic as has been sometimes made out\textsuperscript{16} and were offset to some extent by the gain of Koile Syria.

\textbf{Seleukos IV (187-175)}

There was no change to the position under Seleukos IV. This was one of the rare, mostly peaceful, periods of Seleukid history.

\textbf{Antiochos IV (175-164)}

The situation changed drastically under Antiochos IV after a quiet start. The sixth Syrian War was launched against the Ptolemies\textsuperscript{17} and, after a victorious first invasion of Egypt(169), Antiochos was checked in his second attempt by the ultimatum delivered to him by the Roman legate, Popilius Laenas, at Eleusis (168). Frustrated in the west, Antiochos turned his attention eastwards where the Parthians were now beginning to make incursions into Media and the tribes of the Zagros seem to have thrown off the Seleukid yoke. The \textit{pompe} at Daphne (166) has been presented as a megalomaniac’s attempt to reassert his authority after the humiliation suffered at Eleusis, but it is more likely to have been a celebration as part of the preparations for the eastern expedition, which Antiochos perhaps saw as another Anabasis. The Maccabean revolt, which broke out at about this time, became a thorn in Seleukid flesh and was only dealt with successfully after the bulk of the army had returned from the east after Antiochos’ death.

\textbf{The later kings (164-64)}

The century after Antiochos IV is characterized by internecine warfare between rival houses laying claim to the Seleukid throne, destabilizing interventions by Rome and the Ptolemies in favour of one or another claimant and constantly increasing pressure from Parthia on the eastern borders. The resources of the empire were weakened and the critical moment arrived when first Media ca.150 and then Babylonia, the economic

\textsuperscript{16} Also Briant(1994a:459).

\textsuperscript{17} Austin(1986:461): perhaps a response to the loss of Asia Minor.
heartland, ca.140 were overrun by the Parthians.\textsuperscript{18} A valiant last-ditch attempt by Antiochos VII to recover the lost territories was initially successful but finally foundered in defeat in the mountains of Media (129) and Mesopotamia was irretrievably lost.

In the west, the Jews had essentially asserted their independence by 129 and were embarking upon a period of expansion of the Hasmonean kingdom, while, one by one, the links subjecting the Phoenician and Palestinian coastal cities to the Seleukids were being cut, as issues of independent silver coinage show (Tyre 126/5, Sidon 112/1, Askalon 104/3, Tripolis ca.100\textsuperscript{19}).

From 129 onwards one can no longer speak of an empire, but first of a kingdom centered on northern Syria and Kilikia and then of rival principalities and occupation by a foreign invader, Tigranes of Armenia (89-69). Finally, in 64, Rome took over what remained of the Seleukid state.

\textsuperscript{18} Also Sherwin-White/Kuhrt(1993:Ch.8), rather than any centrifugal tendency of a mosaic of cultures.

\textsuperscript{19} Mørkholm(1984:103).
3. THE POSING OF A PROBLEM

In 312 Seleukos Nikator returned to Babylon with the aim of carving out a territory for himself, much as the other Successors were doing at the time. His first priority was to defend himself against Antigonos Monophthalmos and consolidate his position in Mesopotamia, his second to add the Iranian satrapies to his realm and his third to join the coalition against Antigonos, which yielded him northern Syria in 301 (Chapter 2). At this point the resources available to Seleukos were a huge territory with a large population and productive resources ( Chapters 4 and 5), but essentially an economy where, with the exception of Babylonia, commodity-based exchange was the norm and where the Achaemenid king’s revenue and expenses had been primarily in kind. Seleukos was now in contact with a Mediterranean world where a different political game was being played, which relied on gold and silver in coin for the payment of the armies with which a contender promoted himself against his rivals and safe-guarded his own conquests. Seleukos’ problem was that he probably had insufficient silver revenues and reserves with which to play this game.

Alexander’s capture of the stored bullion of the Achaemenid empire, reputedly to the value of 180,000 or more talents-worth of gold and silver (Strabo 15.3.9), had not materially changed the picture in the Asian territories, with the exception of the Mediterranean fringe. Coined mainly at Babylon and Mediterranean mints towards the end of his reign and immediately afterwards¹ and issued mostly as settlement payments to disbanded soldiers and pay to mercenaries, it is questionable how much could actually have been expended in Asia. The Achaemenid system of taxation (mainly) in kind was still in place and there would have been more than enough from this to feed the army. Much of the 50,000 talents-worth of bullion said to have remained at Alexander’s death (Justin 13.1.9) must have been rapidly coined for the needs of the Successors in the next decade or so.²

The evidence of the Astronomical Diaries suggests that underlying commodity prices in Babylon remained remarkably stable for nearly two hundred years from the end of Achaemenid rule, influenced temporarily only by dire shortages caused by political events

² For instance, Antipatros sent Antigenes to collect the remaining treasure from Susa (Arrian Succ. 1.38).
and war, by good or bad harvests and by the time of the year in relation to the harvest (Chapter 5.6). No general increase in prices is observed of an inflationary nature, such as could have been caused by a large influx of gold and silver. So it is probable that there was no such influx and, even had there been the possibility of one, the markets of the East may not have been able to respond immediately with the necessary products or services required by the Greeks. Thus it is likely that the coins which found their way into soldiers’ pockets remained there to some extent or were mostly expended in the Aegean world. That some of the precious metal circulating ended up in the Ptolemaic treasury as a result of the grain export drive and import restrictions of the Ptolemies is well known. That some of it remained in treasuries under Seleukos’ control is also likely, but how much is questionable.

The situation, as Seleukos Nikator may have viewed it towards the end of the 4th century, was perhaps this. Some royal revenue was collected in silver but most was still in kind. On the other hand, the military and other payments that were envisaged for the future were likely to be overwhelmingly in silver. Consequently, a significant imbalance existed, or would shortly exist, regarding precious metals, which would impose a serious drain on the treasury. Some gold and silver was available from mines in Baktria and Karmania (Chapter 5.3), but it is unlikely that this could have made up the difference, while the resources of Asia Minor were at this time in the hands of Lysimachos. Therefore it was necessary to devise some method for permanently stopping the drain of silver and ensuring that the treasury always had an adequate supply for its needs.

It is my contention that Seleukos introduced six complementary policy measures, all of a financial nature, which were followed up and extended by his son and successor, Antiochos, and maintained by other Seleukid kings well into the 2nd century. Some had already been initiated by Seleukos’ predecessor in Asia, Antigonos. This is not to suggest that there was anything like a detailed long-range plan or even any systematic thinking on how to administer a newly-acquired empire. What emerged were probably common-sense solutions to a crucial problem that was quite evident: how to increase silver revenue and survive in the post-Alexander world. In subsequent Chapters each measure the Seleukid kings took will be discussed at length.

The first measure was increasingly to require tax payments, especially from the agricultural sector, to be made in coin. For the peasant this meant converting his
commodity surplus into silver, as can be seen from the tribute assessment of villages in western Asia Minor (Chapter 8.1) or the sale of grain from royal land (Chapter 9.2).

This measure could not work well unless the peasant had a market in which to sell his produce, an urban market. The old towns and cities of the empire, e.g. those along the coasts of Asia Minor and Phoenicia, or in Babylonia, or the satrapal capitals, already provided such markets, but there were huge areas in northern Syria and Mesopotamia and the Upper Satrapies with scant urban development (Chapter 4.1-3). This is where the second measure, the founding of new cities in little-urbanized regions with rich agricultural potential came in (Chapter 6.1). Markets were thereby provided which could deal in coinage. The kings' grants of land to cities, temples and individuals were conditioned largely by the desire to find in each case the most efficient means of generating precious-metal revenue (Chapter 6). With this aim, any commodity surpluses from royal land were also disposed of for silver, if possible (Chapter 9).

The third measure was to maintain an adequate supply of coinage. This was achieved by locating mints in almost all the satrapies to serve the needs of their respective populations. On Alexander's death, there was only one mint in the east, at Babylon, and perhaps a second at Susa. Under Seleukos and Antiochos mints were opened up in several major cities. Seleukid coinage will be discussed at length (Chapter 11) and also the relationship between the output of a mint and the population and production of the region it served (Chapter 12).

The fourth measure was to ensure that coinage circulated. This could be achieved by switching increasingly to coins as the medium in which the administration made its payments. This was absolutely necessary for the Greco-Macedonian soldiers and western mercenaries that made up the bulk of the Seleukid armies and probably constituted the most important area of expenditure (Chapter 10.1). The pay the soldiers now received in coin could be expended in city marketplaces and would eventually find its way back to the royal treasury in rents and taxes.

The fifth measure was to search out systematically every area of activity where tax or rent could be imposed at as high a level as was feasible, commensurate with considerations of policy, in order to maximise royal revenue. The sale of natural resources monopolized by the king was one aspect of this (Chapter 8).
The sixth and final measure was to create an efficient financial administration, answerable directly to the king (Chapter 13).

It remains to be seen in what follows whether Seleukos and his successors solved the problem they faced.
PART II. THE UNDERLYING ECONOMY

4. GEOGRAPHY AND POPULATION

At its peak the Seleukid empire stretched from the Aegean to the borders of India. In this vast area existed regions with quite different physical characteristics and climates, which naturally had a bearing on the sizes of population that could be supported and their economic activities.

For the purposes of this study five major regions are considered (see Map), which not only had a certain uniformity within themselves, but also some continuity in their association with the Seleukids. The original core of the empire was Mesopotamia. To this were soon added the Upper Satrapies, i.e. the eastern regions as far as India. Then followed northern Syria and Kilikia. Asia Minor did not have a continuous Seleukid history and the last major region to be acquired was Koile Syria, i.e. southern Syria, Phoenicia and Palestine.

Because of the scarcity of evidence, the analysis that follows is rather sketchy, but it aims at rough regional estimates of population, which was one of the determining factors in the Seleukid economy.

4.1 Mesopotamia

Most of central and southern Mesopotamia lies below the 200 mm rainfall line, which is the minimum required for dry farming. Thus economic life in antiquity was almost totally dependent on the great rivers, the Euphrates, the Tigris and their tributaries. Only a relatively narrow region in the north between the Euphrates and the Tigris, the Jazira plain, and another east of the Tigris in the foothills of the Zagros were not dependent on irrigation.

Peaceful conditions in the Achaemenid and, especially, Seleukid periods brought about a revival from the significant decline in settled area and level of urbanisation that had taken place earlier in the 1st millennium.¹ In southern Mesopotamia (Babylonia) many of the great urban centers along or near the Euphrates continued to flourish, e.g. Babylon, Uruk,

Sippar, Nippur, Borsippa, Cutha, Larsa, Kish and others\textsuperscript{2}, if not at the level of their previous glory. Of all the major cities, a decline is noticeable mainly in Ur, affected by a shift in the course of the Euphrates\textsuperscript{3}. But, starting at the end of the 4\textsuperscript{th} century, there seems to have been a definite movement of economic activity eastwards to the lower Tigris and its tributary, the Diyala, probably due to the establishment of the capital at Seleukeia-Tigris, and of other cities further east, and the corresponding extension of the irrigation networks fed by these rivers (Chapter 6.1).

A detailed survey of the central Euphrates flood plain, the area centered on Babylon\textsuperscript{4}, showed an increase in number of settlements from 221 in the Achaemenid period with a total area of 1769 hectares to 415 in the Seleukid-Parthian period and 3201 hectares. The ‘urban’ sites, defined as having an area of at least 10 hectares, had reached 55\% of the total area. At 200 persons/hectare (Chapter 1.5) and rounding up, this would yield a population approaching 1 million.

In southern Babylonia, the survey of an area of roughly 2,800 sq.km centered on Uruk showed a several-fold increase of population from the low reached in the Middle Babylonian period. Neo-Assyrian and Neo-Babylonian documents attest to a populous region comprising 80 towns and 700 hamlets (though of what size is unclear) and there is a flowering of Uruk in the Seleukid period\textsuperscript{5}, with the city probably occupying about 300 hectares at this time\textsuperscript{6}, or a population of 60,000 or so. But there are indications that the population was still low in relation to the potentially arable area\textsuperscript{7}. Assuming cultivation of 0.5 hectares of irrigated land/person for subsistence (Chapter 1.5), this would yield a population of around \textfrac{1}{2} million.

Between these two survey areas lay Nippur. The sources refer to 189 settlements in this area, mostly adjacent to canals, but there could have been more\textsuperscript{8}. Indeed there is no reason why this well-irrigated region of some 6,000 sq.kms (though there is some overlap

\textsuperscript{3} Kuhrt(1990:187); Oelsner(1986:73ff).
\textsuperscript{4} Adams(1981:177-179).
\textsuperscript{5} Oelsner(1986:77ff).
\textsuperscript{6} Potts(1997:287).
\textsuperscript{7} Adams/Nissen(1972:55-57).
\textsuperscript{8} Zadok(1978:326).
with the surveyed areas), situated as it was on the roads from Babylon to Susa and from Uruk to Seleukeia-Tigris, should have been any less-densely populated than that of Uruk further south. There is evidence of extensive occupation in the Seleukid period. A population figure of the order of ½ million is indicated.

For Strabo(15.3.5), the entire region along the Euphrates from Babylon to its mouth was ‘well-populated’.

A third detailed survey along the Diyala tributary of the Tigris east of Baghdad showed an ‘immense expansion’ in the Seleukid period from the previous Achaemenid levels in settlement area (15-fold), extent of irrigation and degree of urbanization, clearly fueled by the presence of the capital at Seleukeia-Tigris (immediately to the west of the survey area) and Greek foundations such as Artemita and Antioch in this region named Sittakene initially and Apolloniatis later, which Strabo (16.1.17) calls ‘extensive and fertile’. The total settlement area of 1,507 hectares given by the survey suggests a population, rounded up, of the order of ½ million.

The excavations at Seleukeia-Tigris indicate a walled area of at least 550 hectares, enough to have supported a population of 100,000 or so initially, though probably considerably more in time. As in the case of other major urban centres, the city would have attracted to it the many rural settlements and small towns needed to feed it. The region of Seleukeia-Tigris may thus have supported a population of up to ½ million, or even more eventually.

In the southeastern corner of the Mesopotamian plain lies Susiane, modern Khuzestan. After the devastation caused by Ashurbanipal in 648, the region showed a period of economic growth with the establishment of an Achaemenid capital at Susa, refounded by the Seleukids as Seleukeia-Eulaios. A survey of the major part of the Susan plain has produced an Achaemenid settlement area of only 141 hectares, apart from the city of Susa

9 Spek(1992:239); Oelsner(1986:100ff).
11 Tscherikover(1973:97).
13 The figure of 600,000 by Pliny(NH 6.122) in his time cannot be trusted.
14 A similar pattern is noted at Susa (Wenke 1975/6:110) and Al Khanoum, whose plain has shown at least 500 rural sites, with a gravitation of population towards the city (Gardin/Lyonnet 1978/9:137-138).
itself, with no indication of any increase in the Seleukid period. This is surprising in view of the extremely high productivity that Strabo (15.3.11) assigns to the Susan plain. No large urban centres other than Susa have been identified, suggesting that the city attracted the resources of the entire area.15 The total population of the Susan plain in the Seleukid period, including Susa itself, is likely to have been small, under \( \frac{1}{4} \) million. Further to the east, Elymais, astride the Royal Road to Persepolis, may have been administratively linked to Susiane. The Persepolis Fortification Tablets show how economically active this region of successive fertile valleys was16. A number of Seleukid foundations are attested in this general area.17

Moving up to the middle reaches of the Euphrates in northern Mesopotamia, there is no extensive settlement survey and one has to rely on the evidence of Xenophon, which suggests a rather sparsely populated region with few towns and large semi-desert stretches along the river (Anab.1.5)18, but where small cities were founded by the Seleukids (Chapter 6.1).

On the other hand, the east bank of the Tigris, which Xenophon followed on his return march, appeared to him to be more fertile and populous, with rich villages and some large Achaemenid estates (Anab.3.4.24; 3.4.31). He also noted a considerable city on the left bank (Anab.2.4.28). At this point the Tigris traverses the heartland of Assyria, with Hellenistic Adiabene to the east. The earlier-held image of total devastation of this region following the collapse of the Neo-Assyrian empire in 612 is certainly false and some of the old urban centers continued to be inhabited, if not at earlier levels19. Arbela, for example, is mentioned as an Achaemenid regional capital20 and possible treasury21, as a city by Arrian (Anab.6.11.6) and as the later administrative centre of Arbelitis22. The region saw

15 Wenke(1975/6:94,102-112). Boucharlat(1985:79): Hellenistic Susa was not significant until the end of the 3rd century, when there was strong commercial activity. This can be associated with the opening up of the Gulf trade by Antiochos III.
16 The number of commodity storehouses in Elam in the PFT is comparable to that in the Persepolis plain (Koch 1990:247ff). See also Aperghis(1996) for the Royal Road and the boundary between Elam and Persis.
20 Driver(1965:no.6).
the establishment of a number of Hellenistic settlements, Alexandreia of Adiabene, Demetrias-by-Arabela and others\textsuperscript{21}.

In northernmost Mesopotamia between the Euphrates and the Tigris, the Jazira plain is ‘quite fertile’ according to Strabo(16.1.23) and rainfall agriculture is possible, but the conditions are generally more suitable for pastoral activity\textsuperscript{24}. A survey in a relatively small area of 475 sq.kms produced 76 small Seleukid-period settlements, none urban\textsuperscript{25}, though this may have been an accident of the particular area investigated. The region had suffered a population decline earlier, with the Assyrian collapse, and the establishment or refounding of Greek cities, e.g. Edessa/Antioch-Kallirhoe, Karrhai, Nisibis/Antiocheia-Mygdonia and others\textsuperscript{26}, is an indication of policy-determined growth in an underpopulated region.\textsuperscript{27}

Finally, along the shores of the Persian Gulf, a Seleukid garrison is attested archaeologically on Ikaros (Failaka) and there is a possible presence on Tylos (Bahrain)\textsuperscript{28}. The foundations attributed to Seleukos I, Arethusa, Chalkis and Larissa (Pliny \textit{NH} 6.32.159), may have lain somewhere along the western shore of the Gulf, but could simply have been nothing more substantial than bases for the Seleukid fleet safeguarding the Indian/Arabian trade route. The Oman peninsula is once referred to in a combined land/sea battle involving Seleucid forces at the straits of Hormuz (Pliny \textit{NH} 6.152), but this probably indicates no more than a temporary military presence. The creation of the satrapy of the Erythraean Sea is evidence of the heightened interest of the Seleukids in this area, because of the exotic trade goods passing through, from the time of Antiochos III’s expedition to Tylos and Gerrha in 205 (Pol.13.9). Overall the picture in the Gulf is

\textsuperscript{22} Kuhrt(1990:185-6).

\textsuperscript{23} Tscherikover(1973:96-97) and Chaumont(1982) for the possible Hellenistic foundations in Adiabene and Khalonitis further south.

\textsuperscript{24} Smith/Cuyler Young(1972:23).


\textsuperscript{26} Tscherikover(1973:84-90).

\textsuperscript{27} A survey near Urfa, ancient Edessa, by Marfoe(1986:44-45) showed a steady increase of settlements in the Hellenistic period.

\textsuperscript{28} Alcock(1994:183-184) supports the idea of a Seleucid naval base on Bahrain.
one of smallish military establishments rather than colonization on any scale\textsuperscript{29}. The Arabs of the desert fringe were independent but may have had an obligation of military service.\textsuperscript{30}

The settlement surveys and new Greek foundations considered above constitute a partial picture of Seleukid Mesopotamia. Some regions seem to have benefited at the expense of others, the Seleukeia-Tigris and Diyala areas certainly, and probably also the Jazira plain in northern Mesopotamia, the Tigris valley and districts to the east. The traditional Babylonian heartland may have come out a relative loser. A population of Mesopotamia during the Seleukid period (312-129) in the region of 5-6 million appears likely.

4.2 The Upper Satrapies.

All the Iranian territories from the Zagros eastwards to the borders of India are included in this term. The provinces of Persis, Karmania and Drangiane comprised a southern band and Media, Hyrkania, Parthia, Margiane, Aria, Baktria and Sogdiane a northern. Further east, Alexander’s Indian provinces and the Kabul valley (Paropamisadae) were lost early on (303) in the settlement with the Maurya Chandragupta\textsuperscript{31} and most, if not all, of Arachosia and Gedrosia.

The 200 km-wide Zagros constitutes the western border of the Upper Satrapies, extending some 1,000 km in a southeasterly direction from the junction of the Armenian mountains with the Elburz range through Media to Persis. It is a land of alternating mountains and valleys parallel to the range axis, with one major transverse valley penetrating the chain, that of the Diyala river, along which ran the important route linking Babylon and Susa to Seleukeia-Tigris and thence to Ecbatana, the capital of Media.

Classical sources depict the relationship of the Achaemenid empire with the peoples of the Zagros as one in which the former paid tribute in order to be allowed to use the through routes, though this is a misunderstanding of the voluntary annual gift-giving practice of

\textsuperscript{29} Salles(1987), Le Rider(1989) and Potts(1990) for an overview of the Persian Gulf in the Seleukid period.


\textsuperscript{31} Sherwin-White/Kuhrt(1993:Ch.3) for a summary of political developments in the Upper Satrapies in the 3rd century.
the Persian kings in return for a state of peace and the provision of troops.\textsuperscript{32} Alexander tried to change this to a condition of tribute\textsuperscript{33}, but probably with only temporary success, as Antigonos Monophthalmos was compelled to fight his way through against the \textit{Kossaioi} (Diod.19.19.2-8), and it is questionable whether the Seleukids ever exercised full control over the area, or even wished to do so given its relative economic unimportance, as long as the roads remained open and contingents of tribesmen could be called upon to serve in the royal army when required.\textsuperscript{34}

In \textit{Persis} the Achaemenid settlement pattern in the Persepolis plain has been the subject of a detailed survey\textsuperscript{35}, which identified sites with a total area of 675 hectares. It estimated that the population was only 43,600 on the basis of densities of 40 persons/hectare (urban) and 100 persons/hectare (rural). This appears far too low. With 200 persons/hectare the population would be nearer 150,000. In any case, this area represented only the central core of Persis. The evidence of the Perspolis Fortification Tablets points to numerous storehouses and settlements in the south-eastern part towards Neyriz, the Pasargadae area to the north-east and especially the western regions bordering on Elymais\textsuperscript{36}. This entire region Strabo(15.3.1) characterised as ‘all-productive and plain, excellent for the rearing of cattle and abounding in rivers and lakes’, contrasting it to the mountainous area to the north and the hot unproductive seaboard to the south. The 20,000 Persians recruited by Peukestas from his satrapy for Alexander, not including contingents from the marginal parts (Arr.\textit{Anab.}7.23.1), point to a substantial population.

In the other regions, until one reaches Bactria and Sogdiane, there are no extensive site surveys to rely on.

Taking the southern band first, Strabo(15.2.14) described Karmania as a large and ‘all-productive’ country. Gedrosia, on the other hand, differed little from the barren coast of the Ichthyophagi. Drangiane constituted the fertile region surrounding lake Hamun, well-watered by the river Helmand and on the main route from Media through Aria to the

\textsuperscript{32} Briant(1982b: 81-94) on the mountain tribes of the Zagros and their relationships with the Persian king.

\textsuperscript{33} Arrian (\textit{Anab}.3.17.6) on tribute from the \textit{Ouxioi}; (\textit{Anab}.7.15.3) on the reduction of the \textit{Kossaioi}.

\textsuperscript{34} Sherwin-White/Kuhrt(1993:17): the arrangement under the Achaemenids was probably confirmed by the Seleukid kings.

\textsuperscript{35} Sumner(1986:11-12).

\textsuperscript{36} Koch(1990:247 ff); Aperghis(1996).
Kabul valley and India beyond. This route continued up the Helmand and its tributary, the Arghandab, into Arachosia, a region of hills and fertile river valleys between the Hindu-Kush to the north and the Registan desert to the south. Though population density in these regions may have been generally low, the total area is substantial and the population supported should not be underestimated.

Along the northern band of provinces, only the southern part of Media was ever Seleukid, as Atropatene had acquired its independence shortly after the death of Alexander. Strabo (11.13.7) wrote that the country was mostly mountainous but that towards the east it was low-lying and fertile. In this area, Rhagiane, he noted numerous cities and 2,000 villages (11.9.1). Greek cities were established here too along the main route to the east (11.13.6) and Ekbatana was in the Seleukid period an important administrative center.

East of the Caspian Gates there is the problem of when the provinces of Parthia and Hyrcania were lost to the nomadic Parnii, the later Parthians (Chapter 2). Parthia was, according to Strabo(11.9.1), not large and, in addition, mountainous and poverty-stricken, but he is here referring only to the northernmost parts. The southern districts of Khorene and Komisene, with the capital Hekatompylos, were clearly different, a string of fertile oases between the mountains and the Dasht-i-Kavir desert further south, astride the main route to Bactria and India. Hyrcania was a totally different world in the south-eastern corner of the Caspian, ‘exceedingly fertile, extensive, and in general level, distinguished by notable cities’ (Strabo 11.7.2).

Further east lay Margiane, centered on its huge oasis and the valley of the Murghab, whose political fate may be linked with that of Baktria. The fertility of the oasis was noted by Strabo(11.10.12). He gave its circuit as 1,500 stadia which works out at some 300,000 hectares of area. With perhaps 0.5 hectares of irrigated area needed to support a person (Chapter 1.5), this could mean a population of the order of ½ million. Antioch-Margiane, an Alexandria refounded by Antiochos I in the oasis, had an outer fortification enclosing an area of roughly 340 hectares, a huge city of possibly more than 50,000

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37 Bernard(1985:Ch.3) considers that Paropamisadace, Gedrosia and Arachosia were lost to the Mauryas before the settlement of 303.
38 Masson(1982:141): an estimate of 60 sq.km for the Merv oasis, twice as much.
inhabitants. A large population for Margiane is not unreasonable, as Strabo (11.10.1) calls this province and Aria 'the most powerful districts in this part of Asia'.

South of Margiane was the region of Aria on the route to Drangiane and India. The northern part may have been lost early on to the Greco-Baktrian kings, but the southern probably remained Seleukid until the end of the reign of Antiochos III. There is nothing in the way of surveys that could help one estimate its population, but there is Strabo's view above (11.10.1) of its importance.

Furthest east lay Baktria/Sogdiane, for which a 'low' effective date of secession ca. 246 has been considered (Chapter 2) The northern border of Baktria was traditionally set at the Oxos in ancient sources (e.g. Strabo 11.11.2), with Sogdiane extending beyond this river to the Jaxartes. In practice, the area north of the Oxos as far as the Hissar mountains was, from an economic/cultural point of view, identical to Baktria. Settlement in this wider region was conditioned primarily by the Oxos and its tributaries flowing down from the Hindu Kush, the Pamirs and the Hissar range, and the extensive irrigation networks that relied on these. In some cases the smaller rivers were not strong enough to reach the Oxos channel and ended up forming oases, as at Baktra (Balkh). In between, the semi-arid steppe and mountain piedmonts could support only limited pastoralism.

That Baktria was quite densely populated in the Hellenistic period emerges from classical sources, from archaeological excavation of some major cities, e.g. Baktra, Ai-Khanoum, Termez, Samarkhand and others, and from settlement surveys that have covered much of the Oxos basin.

The foundation of a major Hellenistic city, such as Ai Khanum, stimulated settlement, irrigation and cultivation in the vicinity. There are nearly 500 rural sites in the Ai Khanum plain. There appears also to have been a marked increase in settlements in other areas of

41 Strabo (11.11.4) for Alexander's reputed foundation of eight cities in Bactria/Sogdiana; Justin (41.4.5) for the '1,000 cities of Bactria'; Strabo (15.1.3) for the '1,000 cities' of the Greco-Bactrian king, Eukratides, (though the term 'settlements' would be more appropriate); Diodoros (18.7.1-9) for the Greek colonists who revolted after the death of Alexander and were so many that they could raise 20,000 foot soldiers and 3,000 horse, but Holt (1993:91) discounts the idea that these settlers were massacred by the Macedonians.
42 Staviskij (1986) for the archaeological and survey information.
Baktria, with about 300 sites showing Hellenistic remains, whereas Achaemenid cultural traces are practically non-existent\textsuperscript{44}.

The survey information dates mainly to the Khushan period (1\textsuperscript{st} century onwards), but is useful in quantifying what must have been to a considerable extent earlier developments. Urban sites in the Oxos basin number 4 large cities of over 100 hectares each, 12 smaller cities of from 15-80 hectares each and 21 towns of from 5 to 14 hectares each, i.e a total urban area of probably not less than 1,000 hectares. The irrigated area centred on these cities and towns is estimated at about 320,000 hectares and contained numerous rural establishments\textsuperscript{45}. A more detailed survey of a small part of this region, the Aï Khanoum plain, for the period after Baktrian independence (ca.246) yielded an irrigated area of about 100,000 hectares\textsuperscript{46}. With approximately 0.5 hectares of irrigated land needed to feed a person, the Oxos basin alone could have supported a population approaching 1 million.

Further north, there were significant population centers in oases, such as those of Bokhara and Samarkhand, and along the left bank of the Jaxartes (e.g. Alexandria-Eschate). The Hellenistic fortifications of Samarkhand (modern Afrasiab) enclose an area of some 220 hectares\textsuperscript{47}, suggesting around 40,000 inhabitants.

A total population can be estimated for Hellenistic Baktria/Sogdiane of about 2 million\textsuperscript{48}. It is difficult to arrive at a figure for the remaining Upper Satrapies, but, given the huge area involved, it may have been two or three times that of Baktria/Sogdiane.

4.3 Northern Syria and Kilikia.

Northern Syria is situated in a strategic position between the Mediterranean and the Euphrates west to east and Asia Minor/Kilikia and Palestine/Egypt north to south. It was acquired by Seleukos I after Ipsous (301) and immediately became the focus of his colonising activities. The establishment of the four major cities of the Seleukis and of

\textsuperscript{44} Lyonnet(1990:86).


\textsuperscript{46} Lyonnet(1994:544).

\textsuperscript{47} Rapin/Isamiddinov(1994:548).

\textsuperscript{48} Bernard(1973:111) suggests a population for Bactria alone of more than 1 million in the 2\textsuperscript{nd} century.
other foundations in a region which was hardly urbanised under the Achaemenids⁴⁹ undoubtedly gave impetus to rural districts as well, since more area was needed under cultivation to feed the new cities. It remained the heartland of the dynasty to its fall in 64.

Several settlement surveys have been conducted, but none are very detailed. They concentrate mainly on the northern and central areas, whereas the mountains, coast and south are omitted altogether. The surveys clearly show an increase in settlements and population, and an expansion of settled area eastwards at the expense of the Syrian desert⁵⁰.

The sizes of the Syrian cities are of interest and are discussed in detail in Chapter 6.1. Antioch, Seleukeia-Pieria, Apameia and Laodikeia were all in the 200-300 hectare range, followed by Kyr rhos, Chalkis, Beroia and Seleukeia-Zeugma in the 65-100 hectare range and several smaller foundations.⁵¹ At 200 persons/hectare, these cities would have been initially planned for at least ¼ million inhabitants in total and would have needed several times that number in the surrounding rural districts to support them. A Roman census of AD 6 of the civitas Apamenorum recorded a population of 117,000⁵², whereas the 205-250 hectares of the city itself may have been designed for 40,000 - 50,000 inhabitants. Antioch was the only Seleukid foundation seemingly to exceed its planned bounds repeatedly during the Hellenistic period and Strabo(16.2.4-5) placed her nearly on a par with Alexandria and Seleukeia-Tigris.

In northern Syria, rather than observing shifts of population, as may have been the case with Mesopotamia (to the Tigris-Diyala area) or Bactria (to Ai-Khanoum), there are indications of genuine growth from outside and rapid urbanization fueled by Greek

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⁵¹ For the Syrian cities: Downey(1961); Millar(1987); Grainger(1990a).

⁵² Millar(1993:250) discusses the evidence in Julian Ep.58 but considers that the census was unlikely to have reached every inhabitant of the territory of Apameia, so that the actual population may have been ‘several hundred thousand’.

colonization. A significant increase from the Achaemenid period is likely, perhaps to 1 ½ -2 million\textsuperscript{53}.

In the northern part of the region Kommagene follows the line of the Euphrates. It may have begun asserting its independence ca.162.\textsuperscript{54}

To the northwest, the large, well-watered and fertile plain of Kilikia Pedias, washed by the sea and protected by the semi-circle of the Tauros, Anti-Tauros and Amanos ranges, could support a large population in antiquity. A considerable number of Hellenistic cities are referred to in the sources and by their coinage\textsuperscript{55} and a settlement survey has shown an increase in sites from the Persian period and dense settlement in the Hellenistic\textsuperscript{56}. In Kilikia Tracheia to the west, the larger Hellenistic foundations were restricted to the narrow coastal plains formed by the rivers flowing down from the Tauros, the best-known being Seleukeia-Kalyskadnos. A population estimate for Kilikia can perhaps be made by analogy with northern Syria, which was substantially inferior in both agricultural area and density of settlements, at least initially. A figure of around 2 million is possible.

4.4 Asia Minor.

Seleukid Asia Minor varied in extent from the time of its conquest by Seleukos I after Korypedion (281) to its irrevocable loss after Magnesia (190). At its maximum extent, ca.281, it comprised the regions of the Troad, Mysia, Aiolis, Ionia, Lydia, Karia, Lykia, Pamphylia, Phrygia, Lykaonia and Pisidia. Western and southern districts and major Greek coastal cities were lost to and gained from the Attalids, Ptolemies or usurpers with the fortunes of war, until Antiochos III briefly recovered nearly the entire territory. Southern Kappadokia acknowledged direct Seleukid rule only to the mid-3\textsuperscript{rd} century\textsuperscript{57}.

\par\textsuperscript{53} Grainger(1990a:100): nearly \( \frac{1}{2} \) million new inhabitants moved into northern Syria. Davies(1984:265): a substantial enough movement, but which should not be exaggerated. Millar(1987:113); a transformation of the map.

\par\textsuperscript{54} Mørkholm(1966:107).

\par\textsuperscript{55} The principal royal mint was that at Tarsos, but mints also operated in some periods at Soloi, Malloii, Seleukeia-Kalyskadnos, Alexandria-Issos and Magarsos. Such a scale of coining activity can, in part, be associated with the needs of a large population. Cohen(1995:353-372) for the new Hellenistic settlements.

\par\textsuperscript{56} Seton-Williams(1954:139); Alcock(1994:181).

\par\textsuperscript{57} Sherwin-White/Kuhrt(1993:45).
Parts of Armenia were subject to Seleukos I, and again later to Antiochos III until Magnesia, and, finally, for a few years to Antiochos IV.

From the mountainous regions surrounding the central Anatolian plateau major rivers, the Kaikos, Hermos, Kaystros and Maiandros, flowed west to the Aegean. Smaller rivers exited into the Propontis and the southern Mediterranean coast. These rivers constituted the chief factor in the economic development of the region, with the urban centers concentrated along their valleys and trade routes following their courses to central Anatolia, the Euphrates and beyond.

A survey of the Troad indicates that, immediately after Alexander, the region may have contained about 20 smallish Hellenistic towns with a total population of about 100,000. The reorganization initiated by Antigonos Monophthalmos with the founding of Antigoneia, renamed Alexandria-Troas by Lysimachos, eventually resulted through synoikisms in only 5-6 cities.

A survey of the lower Maiandros flood plain points to rapid urbanization in the interior regions of the Maiandros and its tributaries that continued through the 3rd and 2nd centuries, particularly as the trade route up this valley became the most important. Greek cities were well established by the 4th century nearer the coast, but several new foundations were added inland during the Hellenistic period and a number of Karian centers developed polis structures. This is not necessarily an indication of overall population increase, as many smaller communities seem to have simply been absorbed by their larger neighbours.

The cities in this region numbered at least 16 in the Hellenistic period and increased to 27 by the Roman, by which time virtually all the land had become part of some city’s territory. Only two cities seem to have had a sizable walled area, Tralleis with 140 and Magnesia-Maiandros with 100 hectares. The area of each city’s territory in the Roman

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58 Schottky(1989) for Greater Armenia and Media Atropatene to its east.
60 Cook(1973:363-368).
62 Discussion and tables in Marchese(1986:307-320). The total population figure is derived by taking Marchese’s upper estimate for urban population density.
Imperial period has been estimated, as well as the corresponding population, urban and rural, using densities of 125 persons/hectare for urban areas and 30 and 10 persons/sq.km. for arable and non-arable rural areas respectively. The resulting figures are about 30,000 for Tralles, 20-23,000 each for Magnesia-Maiander and Tabai, 10-20,000 for seven other sites and smaller populations for the remainder, yielding a total of 180,000. The likely total population of the survey region in the Roman Imperial period was estimated at 339,000 of which 113,000 urban. The Hellenistic poleis seem to have represented about 53% of this total, and native communities, that were to acquire polis status later, the remainder.

However, if the figure adopted of 200 persons/hectare is used for urban areas, and rural population density is increased to the maximum allowed by the survey, 36 persons/sq.km, the total population of the region would approach 450,000, Tralleis would reach 43,000, Magnesia-Maiander 32,000 and Tabae 29,000, while the average population of a city’s territory would exceed 15,000.63

These population figures above are all for the Roman Imperial period. For individual poleis they may have differed in the Hellenistic period, as cities expanded or contracted according to their political or economic fortunes. However, it is possible that the total population was not significantly different.

The two surveys summarized above cover areas of Asia Minor which come up quite frequently in the sources but constitute only a small part of a very large region. The number of Hellenistic cities in all of western and southern Asia Minor is considerable, at least 100.64 If the average population of 15,000 for a city and its territory from the Maiander region is taken as representative, the total population of the area controlled by Greek cities should be of the order of 1½ - 2 million. The lower Maiander basin was apparently heavily urbanized, with Hellenistic cities and their territories containing just over half the population (see above). Other regions, particularly Lykia, Pamphylia, Pisidia, Lykaonia and parts of Phrygia show relatively fewer Hellenistic foundations65 and probably had a greater proportion of native populations unattached to cities.

63 Cavaignac(1923:35) estimates populations of the older Ionian cities of 30-50,000 based on fleet sizes.
64 Cohen(1995:145-351) for the Hellenistic settlements of the region. Older Greek or native cities that were not refounded in the Hellenistic period are not included.
indications are that the total population of western and southern Asia Minor in the
Hellenistic period may have been around 5 million.

4.5 Koile Syria.

Three parallel bands of territory running north to south constitute this region: 1) a narrow
coastal strip widening into small plains each supporting a Phoenician or Canaanite city, 2)
the valley between the Lebanon and Anti-Lebanon ranges changing to the south into
alternating hilly country and small plains as far as the Negev desert and 3) the Damascus
oasis, the Hauran and the less fertile districts across the Jordan shading off into semi-arid
steppe.

Starting at the northern end of the coastal strip, each major Phoenician city, Tripolis,
Byblos, Sidon and Tyre, centered on a small coastal plain, controlled a number of
subordinate towns and villages and a territory that sometimes extended quite far inland.66
Further south a similar pattern held for the Canaanite cities, Ake-Ptolemaïs, Dor, Joppa,
Askelon and Gaza. Of what was probably the largest city, Tyre, there is mention in
Arrian (Anab.2.24.4-5) of the population besieged by Alexander, amounting to not less
than 38,000, but this is probably indicative only of the city and perhaps its immediate
environs, not of all Tyrian territory.67 Sidon rivaled Tyre in size and Ake-Ptolemaïs was
also considered a large city (Strabo 16.2.22,25). The territory of Joppa could supposedly
muster 40,000 men in time of need (Strabo 16.2.28). All told, a population of 1/2-3/4
million for the coastal strip seems reasonable.

Progressing north in Palestine, new settlements appeared in Idumaia in the Hellenistic
period, influenced by the development of trade through Gaza, and Marisa grew into an
important center.68

For the hill country of Judaea, centered on Jerusalem, a population estimate can be made
based on the recruitment capability of the Jews at times of emergency during the later
phases of the Maccabean revolt (152-143), which was about 40,000 (I
Macc.10.36,12.41). Allowing for some male adult non-combatants, the total population

of Judaea has been estimated at not less than 200,000 for an area of some 2,400 sq.kms, of which only about 2/3rds cultivable, which would indicate a relatively high population density and explain the Diaspora and the Hasmonean expansion as some form of release. Jerusalem itself, despite its prominence in literary sources, must have been rather small and poor, located off the main coastal and inland trade routes.

The Seleukid general Nikanor is said to have estimated that he could raise the 2,000 talents still owed to the Romans after Magnesia by enslaving the Jews of Judaea and selling them at 90 persons to the talent (II Macc. 8.10-11). This would work out at 180,000 prisoners. Presumably Nikanor had a fair idea of the total population (head taxes having been applied in Judaea in this period) and could make allowances for those who would be killed or escape. So a maximum figure of ¼ million for Judaea is not unreasonable.

Samaria shows evidence of colonisation and some population growth in the early Hellenistic period, as witnessed by the establishment of the Macedonian colony of Samaria. In the western part, the 1,200 or so field towers of the Seleukid period identified in site surveys have been associated mainly with wine production, but also storage generally, perhaps one tower to a military settler family. These field towers, the numerous oil press installations and the well-developed rural road system have been taken as indications of a flourishing market economy for wine and olives down to Hasmonean times, when there is some evidence of abandonment of settlements.

In inland Galilee archaeological survey shows a complete absence of early Hellenistic sites, perhaps because much of Galilee may have belonged to the king himself (royal land). A sudden expansion of settlements dates to the 2nd century. On the borders of Galilee and in the Golan the establishment of Greek cities such as Skythopolis, Philoteria, an Antiocheia and a Seleukeia point to some economic development of this area whose

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natural outlet to the sea was at Ptolemaïs-Ake, the capital of the province of Koile Syria-
Phoeinia, but population probably still remained low.

East of the Jordan the establishment of a chain of Macedonian military colonies, as a
breakwater against nomadic incursions from the desert, probably led to some population
increase in this sparsely-inhabited region, but this is not noticeable in a number of surveys
in this area.

The overall picture for inland Palestine from surveys and literary evidence points to a
population of only of 1/2-3/4 million.

Further north, in southern Syria, the valley between the Lebanon and Anti-Lebanon
ranges (Beka’a) was described by Strabo (16.2.16) as ‘fertile and all-productive’. To its
east lay the Hauran, a fertile district, and the oasis of Damascus, ‘accorded exceptional
praise’ (Strabo 16.2.20). This ancient city had probably served as the Achaemenid
satrapal center, but in the 3rd century lay too near the contested border dividing
Ptolemaic Koile Syria from Seleukid northern Syria and its economic importance may
have been somewhat reduced. For southern Syria a population of perhaps ½ million
seems reasonable, which would give a total of 1 ½ - 2 million for all of Koile Syria.

4.6 A different approach to population.

Any estimate of ancient populations is likely to be a hazardous one. What has been
attempted above using settlement surveys and some literary sources is probably open to
much disagreement. However, when assessing an economy, a population estimate is a
necessary step and an approximate figure is better than none. If population can now be
approached in an independent way and the results turn out to be similar, there will be
more confidence in them.

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74 Freyne (1980:104-138) for Hellenistic Galilee, stressing the development of industry and trade; also
76 Arav (1986:190,250) records only somewhat more than 200 Hellenistic sites that have been surveyed in
this area, with cities tending to be small, as measured by fortification perimeters, e.g. Samaria 2.5 km
(=30-40 hectares), Philoteria 2.75 km (=35-45 hectares), Jerusalem 1.7 km (= about 20 hectares).
Broshi (1979:7) considers a peak population of about 1 million in Palestine was reached only ca. AD 600.
A possible source for comparative populations in the Seleukid empire is the tribute list for
the Achaemenid empire given by Herodotos(3.89). The tribute assessment no doubt took
into account, in a general way, the productivity of the land, its natural resources and the
extent of industry and trade, but all these factors lead in the end to a certain size of
population that could be supported.77 True, we do know that Artaphernes measured the
land in Ionia in 493 and levied taxes on this basis (Hdt.6.42), and the Murashu archive
from 5th century Nippur points to an Achaemenid cadastral survey in a part of Babylonia
c.50078. Yet land area, by itself, cannot have been the dominant factor. On that basis
Egypt would have paid a tribute of roughly 270 drs/sq.km, Lydia 75 and Ionia 65.79
Clearly Egypt was agriculturally far more productive and so supported a denser
population, which justified the much higher tribute assessment.

I will assume that the Achaemenid tribute was roughly proportional to population and use
the tribute given for each of the 20 nomes in Hdt.3.89. When a nome cannot be
identified geographically by its peoples, their association with others serving in the same
contingent in Xerxes army (Hdt.7.62ff) may help locate them in adjoining regions.80

The Asia Minor nomes I, II and III paid respectively 400, 500 and 360 Babylonian
talents, but included Bithynians, Paphlagonians, Kappadocians and other peoples who lay
outside the limits of the Seleukid empire. If these are excluded, the total tribute from
western and southern Asia Minor may have amounted to around 1,000 talents.

Nome IV contained only Kilikia and was assessed for 500 talents.

Northern Syria, Koile Syria and, probably, Cyprus were included in nome V and paid 350
talents, or say 300 talents without Cyprus. In the Achaemenid period northern Syria was
apparently little developed in comparison to what it later became with the major Seleukid
foundations there (see 4.3). For this reason, the lion’s share of the tribute from this nome
is assumed to have come from the Phoenician cities, Damascus and Palestine, so say 250
talents from Koile Syria and only 50 from northern Syria.

77 When discussing Media, Strabo (11.13.8) compared it with Kappadokia and noted that the tribute paid
to the Persians seemed to be in proportion to the ‘size and productivity’ of the respective regions (‘πῶς ἐκ
μεγέθει καὶ τῆς δονάμει τῆς χώρας’). ‘Population’ is essentially the product of ‘size’ and ‘productivity’.
79 Andreades(1933:92).
Egypt with Kyrene comprised nome VI, and were assessed for 700 talents. The produce of Lake Moeris, the other component of Egyptian tribute in silver, yielded one talent per day or 360 talents annually (Diod.1.52). All told, the tribute of Egypt and Kyrene may have amounted to around 1,200 talents, of which Egypt itself probably owed the lion’s share, say 1,000 talents.

Nome VII is associated with NW India, outside Seleukid territory.

Nome VIII covered Susiane and contributed 300 talents, or say 200 talents without Elymaïs.

Mesopotamia, excluding Susiane, is covered by nome IX, yielding 1,000 talents.

Nome X, containing Media, was subject to 450 talents, but this included Media Atropatene, an important region, which was never Seleucid, so, say, 300 talents.

Bactria in nome XII was assessed for 360 talents.

Nome XIII is associated with Armenia, mainly outside Seleukid territory.

Nome XIV mentions the Sagartians, the Sarangians and the inhabitants of the Erythraean Sea amongst others. With a rather large assessment of 600 talents, this nome may have comprised most of Persis (apart from a tribute-free core), Karmania and Drangiane along with parts of Oman and the islands of the Gulf which, if excluded, could bring the tribute down to, say, 500 talents.

Nome XV is associated with peoples east of the Caspian, outside Seleukid territory.

Nome XVI mentions the Parthians, Sogdians, Arians and Chorasmians and 300 talents of tribute. The Hyrkanians seem to have been added in Hdt.3.117. If the Chorasmians are excluded, the tribute may come down to, say, 250 talents.

Nome XVII mentions the Parikanians and the Ethiopians of Asia and a rather large tribute of 400 talents. The latter people are associated with the contingent from India in Xerxes’ army (Hdt.7.70) and this nome may have covered Arachosia\textsuperscript{81} and Gedrosia, as well the much more populous lower Indus, all outside Seleukid territory after 303.

\textsuperscript{81} Vogelsgang(1985:79-80).
The Matienoi in nome XVIII are associated in Xerxes’ army with the Paphlagones, and
the Mares in nome XIX with the Colchoi. Both nomes may then be located in northern
Asia Minor outside Seleukid territory.

Finally, nome XX is clearly the upper and middle Indus region, outside Seleukid territory.

Relative amounts of tribute between regions will be taken as very approximate indicators
of relative populations. Even if this is true, it applies strictly speaking to ca.500. Only if
the percentage change across all regions was identical would the relative situation in the
Hellenistic period be the same. Clearly this could not be exactly so. Some regions, e.g.
northern Syria, may have been favoured by Greek immigration, while others may have lost
people for the same reason or because of warfare, e.g. Asia Minor. Nevertheless it will
do for an approximate analysis.

Egypt, though not a part of the Seleukid empire, is useful as a point of reference. A total
population of 7 million, including Alexandria, both in the time of Ptolemy I and in his own
time (mid-1st century) is given by Diodoros(1.31.7-8). The figure for the mid-1st century
is likely to be the more accurate of the two simply by virtue of the fact that it is
contemporary. Josephus (BJ 2.385) quotes a higher population of 7½ million, excluding
Alexandria, in the second half of the 1st century AD. Including Alexandria, the total may
have been in the region of 8 million. If a similar rate of increase is reflected in the
generally peaceful period prior to Diodoros, a total population of Egypt ca.300 of around
5-6 million is more likely, or, in any case, roughly equal to that of Mesopotamia.82

If each region’s population was to Egypt’s roughly in proportion to their relative tributes,
Asia Minor should have had 5-6 million inhabitants ca.300, northern Syria about ½,
Kilikia 2½-3, Koile Syria about 1½, Mesopotamia with Susiane 6-7, Bactria about 2
and the remaining Upper Satrapies about 6.83

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82 Cavaignac(1923:2): 5-6 million for Egypt under Darius I; Beloch(1886:258): not more than 5 million
under Tiberius; Préaux(1969:48) calculates revenue on the basis of 6-7 million in the Ptolemaic period.
83 Cavaignac(1923) estimated populations under Darius I: 6-8 million for the three Asia Minor nomes
(p.34), 3-4 for northern Syria and Koile Syria (p.17), 5 for Babylonia and 600,000 for Assyria (p.24).
Beloch(1886) estimated 4-4½ million for western Asia Minor, 2 for Asia Minor south of the Taurus, 2 -
2½ for Bithynia and Phrygia in the 2nd century (p.242), 7 million for northern Syria and Koile Syria in
the 1st century (p.252), 6-8 million for Mesopotamia and Susiane at the end of the Persian period (p.250-
251) and a sparse population on the Iranian plateau (p.252).
With the exception of northern Syria, these figures match the results of site surveys reasonably well. Northern Syria must have experienced a huge increase in population in the Seleukid period due to the establishment there of a capital and other major cities, and the associated Greek emigration to this area. A population of 1/2 million ca.300, reaching 1 1/2 - 2 million by ca.200 is likely.

4.7 Total population

In the Table below populations that can be derived from Achaemenid tribute comparisons are listed by region and compared with estimates from site surveys/literary sources.

<table>
<thead>
<tr>
<th>Region</th>
<th>Achaemenid tribute (talents)</th>
<th>Population from tribute (millions)</th>
<th>Population from surveys and literary sources (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesopotamia</td>
<td>1,000</td>
<td>5-6</td>
<td>5-6</td>
</tr>
<tr>
<td>Susiane, without Elymaïs</td>
<td>200</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Baktria</td>
<td>360</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Media</td>
<td>300</td>
<td>1 1/2</td>
<td></td>
</tr>
<tr>
<td>Elymaïs</td>
<td>100</td>
<td>1/2</td>
<td></td>
</tr>
<tr>
<td>Persis, Karmania, Drangiane</td>
<td>500</td>
<td>2 1/2 -3</td>
<td>4-6</td>
</tr>
<tr>
<td>Parthia, Hyrkania, Aria, Sogdiana</td>
<td>250</td>
<td>1 1/2</td>
<td></td>
</tr>
<tr>
<td>Northern Syria</td>
<td>50</td>
<td>1/2</td>
<td>1/2 to 1 1/2-2</td>
</tr>
<tr>
<td>Kilikia</td>
<td>500</td>
<td>2 1/2 -3</td>
<td>2+</td>
</tr>
<tr>
<td>W. and S. Asia Minor</td>
<td>1,000</td>
<td>5-6</td>
<td>5</td>
</tr>
<tr>
<td>Koile Syria</td>
<td>250</td>
<td>1 1/2</td>
<td>2-</td>
</tr>
<tr>
<td>Total</td>
<td>4,510</td>
<td>23 - 26</td>
<td>20-25</td>
</tr>
<tr>
<td>Egypt</td>
<td>1,000</td>
<td>5-6</td>
<td>?</td>
</tr>
</tbody>
</table>
Taking into account the political fate of different territories (Chapter 2), the graph below shows what the total population of the Seleukid empire may have looked like approximately at any time\textsuperscript{84}.

![Graph showing population of the Seleukid empire](image)

A peak of around 20 million may have been reached ca.281 just after Korypedion and another just short of this before Magnesia with the conquest of Koile Syria and the temporary reconquest of the eastern provinces and much of western and southern Asia Minor by Antiochos III. The critical moment for the empire, in terms of population, was not Magnesia (190) and the loss of Asia Minor, but the far more serious loss of Mesopotamia and the East to the Parthians by 129. For comparison, Alexander’s empire

\textsuperscript{84} Given the historical background (Chapter 2), reasonable assumptions about levels of Seleucid occupation are:

- Western and southern Asia Minor: 0% 312-281, 100% 281-280, 70% 281-261, 80% 261-239, 0% 239-213, 40% 213-197, 90% 197-190, 0% after 190.
- Kilikia: 100% 294-280, 90% 280-246, 0% 246-241, 90% 241-197, 100% 197-89.
- Northern Syria: 100% 301-246, 90% 246-219, 100% 219-89, 20% 89-64.
- Koile Syria: 100% 200-129, 50% 129-100, 10% 100-64.
- Mesopotamia, incl. Susiane: 100% 312-140, 50% 140-129.
- Baktria, Sogdiana, Margiane: 100% 306-246.
- Media: 100% 306-150.
- Persis, Karmania 100% 306-187, 50% 187-150.
included, in addition, Egypt and Kyrene, north-western India and the satrapies bordering on it, parts of northern and central Asia Minor, Media Atropatene and Armenia and, finally, Macedonia and Thrace. Its population may have been around 40 million.85

These population figures will be useful in assessing such matters as the level of income of the Seleukid administration and will be correlated with other evidence in Chapter 12.

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5. PRODUCTION AND EXCHANGE

In order to understand how the Seleukid kings derived their revenue, it is necessary to briefly describe the more important elements of the underlying economy of the empire: agriculture, animal husbandry, the exploitation of natural resources, industry and trade.

5.1 Agriculture

Types of farming

Subsistence farming seems to have been the basis of the economies of most regions of the Near East in antiquity. With the exception of the Mediterranean seaboard, where trade may also have played a not insignificant role, it is likely that agriculture was the dominant productive activity in the Seleukid empire.\(^1\) In ps-Aristotle's *Oikonomika*, revenue accruing to the 'satrapal' economy from agriculture is described as 'the first and most important' (Chapter 7.1).

Essentially two types of agriculture were practiced: irrigation-based and dry-farming. The former was the norm in areas with insufficient rainfall but traversed by large rivers. The Euphrates and Tigris and their tributaries, and the canals that branched off these, could bring water to most parts of the Mesopotamian plain. Seleukid-period irrigation networks, drawing from the Oxos and its tributaries in Baktria, extended pre-existing systems.\(^2\) The oases scattered throughout the east could be provided for in this way. Sometimes water was obtained by tapping distant sources and conducting it underground to the area to be irrigated so as to minimize evaporation, e.g. the *qanat* systems of northeastern Iran (see 5.3). Characteristic of the eastern parts of the Seleukid empire were, however, vast areas with insufficient rainfall for agriculture on any scale.

Along the Mediterranean seaboard and for some distance into the interior, depending upon the morphology of the terrain, rainfall was sufficient to permit dry-farming to be practiced. This was also possible in the hilly areas skirting the main mountain ranges, the Tauros and Anti-Tauros, the mountains of southern Armenia, the Zagros, the Elburz and

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1 Davies(1984:271) assumes that at least 80% of the population in the Hellenistic world was employed in agriculture.

the Hindu-Kush, and also in the mountain plateaus and valleys. Persis, for example, is described by Strabo (15.3.1) as densely-wooded and well-cultivated.

No doubt, in some dry-farming areas, irrigation supplemented the water supply, e.g. from the Maiandros river in western Asia Minor, the Orontes in northern Syria or the Kur in the Persepolis plain.

Produce

Cereals were the staple of the ancient Near Eastern and Mediterranean diet. In the Seleukid empire the main crop, as in mainland Greece at this time, was barley rather than wheat. Under dry-farming conditions barley can grow wherever the minimum annual rainfall is more than about 20 cm, whereas wheat requires not less than 30 cm, which is seldom exceeded in the Near East. Irrigation can, of course, provide an adequate water supply most of the time, but in Mesopotamia, for example, the dissolved salts carried down for centuries by the great rivers from the surrounding mountains had increased salinity in the soil to such an extent that wheat could only grow with difficulty, whereas barley had no such problem and could also withstand disease better. There is no direct evidence for other irrigated areas, but increased soil salinity is likely to have been a general problem wherever there were elevated temperatures and consequent high rates of evaporation, as in much of the Near East.

Characteristic of irrigated cereal cultivation is its much higher productivity. This is principally due to the water supply, which is not only more plentiful but can be directed to the crops at the right time. The potential this offers of a greater yield (ratio of crop to seed) can then be realized through more labour-intensive cultivation practices, which involve direct sowing in narrowly-spaced furrows, e.g. by means of a seed-drill, and careful weeding, though the greater density of planting also inhibits weed growth. Whereas barley yields in the Mediterranean dry-farming world were normally around 6:1, those in irrigated Mesopotamia were far higher. In late 6th century Uruk yields of as much

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As 30:1 are noted\(^5\), while 13-15:1 or more can be deduced from the Murashu texts from Nippur.\(^6\) Even in the 1st century Strabo could declare that the crops of barley in Mesopotamia were larger than in any other country, ‘300-fold they say’, though he clearly did not believe a figure that high (16.1.14). It might not be too rash to suggest that Mesopotamian barley yields may have been 2-3 times those of the Mediterranean, apart from Egypt.\(^7\)

The importance of high yields in Mesopotamia, and those other areas of the Seleukid empire where large-scale irrigation agriculture was practiced, is as follows from the point of view of a governing power. Since cereals probably provided 70-80% of a person’s nutritional requirements, less cultivated land was required to support a person. Compared to approximately one hectare/person in Mediterranean dry-farming conditions, probably half a hectare would suffice in, say, Mesopotamia or along the Oxos or in the Merv oasis. But since the additional labour to cultivate a given plot of land was only somewhat higher than for dry-farming, it was possible not only to feed more people, but also to generate a larger surplus, if the available labour was utilized to the full. Taxation by a governing power could provide the motivation to cultivate more intensely and, since the potential surplus was large, the level of taxation could be correspondingly so. As will be seen in Chapter 8.1, the level of taxation on grain in Seleukid Mesopotamia may have been as high as 50%. Conversely, one would expect that in Mediterranean provinces, where the potential surplus from dry farming was smaller, taxation on grain might have been correspondingly lower.

What applied to barley also applied to other cereals, of which a variety were grown, but none had its economic importance. Conditions in western Asia Minor allowed more wheat to be cultivated, and this was the preferred staple for the citizens of Greek cities, barley being ‘poor man’s food’. But most wheat was obtained through imports, mainly from Egypt and the Black Sea region. Poor local harvests or difficulties in the supply of imported wheat frequently produced shortages.

In the Mediterranean provinces of the empire the other major products of agriculture were the olive and the grape. Olive oil served as the main element for the preparation of

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\(^5\) Cocquerillat (1968:29).
\(^7\) Potts (1997:6-86) on land and agriculture in Mesopotamia.
food and for lighting. It was also used extensively for body care and in the manufacture of perfumes and ointments. In the interior these roles were played by sesame. Wine was, of course, dear to the Greeks and attempts were made to introduce viticulture in regions where they had established themselves, e.g. in Susiane and Babylonia (Strabo 15.3.11). Vine growing was also more profitable than cereals, yielding up to five times the revenue on the same land. In the Near East the date provided an alternative food staple, which could be consumed both fresh and dry and which could be called upon at times of barley shortage. But the date also served to produce a drink, date wine, as Xenophon noted (Anab.2.3.15). Finally, fruit, in great variety, was a product equally of the Mediterranean and the interior, though no single kind had anything like the importance of the products that have been mentioned above.

From the point of view of the Seleukid administration all these fruit-like products of agriculture, typically referred to in the sources as ξύλινος καρπός, were of interest as they could be taxed. Given the fact that production was less labour-intensive than for grain, it was possible to extract a greater part of the crop as tax and still leave sufficient to the producer to satisfy his own needs (Chapter 8.1).

5.2 Animal husbandry

The conditions for large-scale animal husbandry were not present in much of the territory of the empire. The raising of animals in numbers requires extensive natural pastures, such as existed in only a few areas. Of these the best known are the uplands of Media, where the famous Nissaian horses were reared. The Jazira plain in the shadow of the Anti-Tauros and the mountains of southern Armenia also provided suitable conditions, as did a few areas of inland Asia Minor or northern Syria. In the Zagros, the Elburz and the Hindu-Kush and their foothills, on the other hand, local transhumance may have been an important activity to set beside small-scale farming in the upland valleys, but it was extremely difficult for an imperial power to control these areas and lay its hands on their

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8 Pastor(1997:27) for Egypt.
10 Several types of fruit, some of which cannot be identified, are noted in the Persepolis Fortification Texts as being produced, stored and distributed in the region of Persis (Hallock 1969).
production, as Antigonos had found to his cost when simply trying to traverse the region (Diod.19.19.2-8).\footnote{Also Briant(1982b:94ff).}

In the Near East, apart from the mountain ranges and their foothills and the land dedicated to agriculture, the remainder, which is probably the greater part, is classified as semi-arid steppe. It is suitable for only small flocks of sheep and goats that could provide a subsistence living for nomadic or semi-nomadic populations. To any imperial administration these resources may not have seemed significant enough to have been worth the cost and trouble of exploiting energetically for taxation purposes.

In agricultural areas, the use of animals was probably common. Oxen were required for cultivation but it is likely that a yoke covered the needs of several cultivators, as the expense of maintaining it in terms of feed-grain must have been prohibitively expensive for the small farmer. The Murashu texts give us the idea that plough animals and equipment were rented for as much as 30% or more of the grain crop in Babylonia.\footnote{Stolper(1985:128-130).} In other areas the horse might be used for ploughing, a cheaper but far less effective solution. The pack-animal par excellence in the ancient Near East was the ass, though camels were also reared for long-distance trade and service as baggage-animals in the army.

Most farmers probably possessed a few sheep and goats for their basic needs in milk products and wool, as is common practice today in the region. Larger flocks could probably survive in the vicinity of settled communities, living on natural vegetation and the stubble of grain fields in the right season. In Mesopotamia, in particular, the periodic flooding of the rivers produced stagnant pools of water in low-lying areas, whose surroundings, though not suitable for the growing of crops, could provide enough greenery to support small animals and, rarely, cattle. For the Seleukid tax-collector these small flocks and herds, attached as they were to settled communities and therefore more easily accessible, may have constituted a worthwhile target for the application of a tax. But, if the order of satrapal revenues in ps-Aristotle’s Oikonomika is significant (Chapter 7.1), that from animals was fifth in importance, which would fit in well with
what has been seen above as the relatively small scale of animal husbandry in the empire and the difficulty of assessment and collection of any tax.

5.3 Natural resources

In the *Oikonomika* (II, 1.4), revenue from natural resources belonging to the king is given second place in the satrapal economy, probably attesting to its importance. The items mentioned there as examples are gold, silver and copper and then ‘whatever is available in any particular place’. Clearly precious metals ranked foremost, followed closely by copper with its dual function of a utility metal and an ingredient of coinage. One is left to deduce from the sources what other natural resources may have been of interest to the Seleukid kings.

Precious metals

The evidence for gold and silver deposits in Seleukid territory is slight. The sources give only a vague and incomplete picture of the metal resources of the empire. Every ingredient required for producing coinage was present, however, and it may be that the quantities of gold and silver at least were sufficient to maintain a ‘replacement coinage’ as the initial ‘Alexanders’ wore out or were lost from circulation (Chapter 11.4).

Gold is mentioned by Strabo in Karmania (15.2.14) and southern Armenia (11.14.9). The gold dust brought down by the Paktolos near Sardeis had run out by his time (13.4.5) and little remained in the mines of the Troad (13.1.23). On the north-eastern border of the empire the land of the Massagetae apparently had ‘gold in abundance’ (11.8.6). The mint of Baktra produced more series of gold coins than any other (Chapter 11.3), suggesting a link with this source or perhaps with Siberia.

There were probably important silver mines in Baktria and Sogdiane, but the evidence comes from the 7th century A.D. and later, although it is difficult to imagine that the Seleukid mints at Baktra and Ai-Khanoum and those of the Greco-Baktrian kingdom

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14 Sherwin-White/Kuhrt (1993:63) for the probable use by the Seleukids of their own supplies of bullion; Bogaert (1977:380) for a sufficiency of precious metals.

produced their fine and extensive silver coinage without a local source of precious metal\textsuperscript{16}. Silver mines are mentioned by Strabo in Karmania (15.2.14), but there were deposits elsewhere in Iran in antiquity, though whether any were mined in the Seleukid period is unknown. Asia Minor seems to have been quite rich in silver ore. Accessible to the Seleukids at some time would have been the mines of the Tauros in northern Kilikia, probably mentioned in Hittite and Neo-Assyrian sources and still operational today, and those in the Troad and on Mt. Tmolos in Karia.\textsuperscript{17}

Other metals

Copper is present throughout the Near East\textsuperscript{18}. Syria and Palestine certainly possessed some, as did Oman, and there is reference to mining in antiquity, though none specifically in the Seleukid period. Further east, Strabo mentions Karmanian copper mines (15.2.14) and Afghanistan as a whole may have been a rich source, though the evidence is all later. The land of the Massagetae bordering on the north-eastern provinces is noted by Strabo (11.8.6) as possessing ‘copper in abundance’. In Asia Minor the more important copper deposits, that may have attracted the attention of the Seleukids, are concentrated in Armenia and the Tauros region.\textsuperscript{19}

Tin, necessary to produce bronze, seems to have been mined in Drangiane (Strabo 15.2.10), but whether this was sufficient for the needs of coinage cannot be determined. Imports from Spain and Cornwall, serving the Mediterranean basin, are likely to have found their way to the mints of Syria or Kilikia as easily as those from the East.\textsuperscript{20}

What seems to emerge from this review of likely sources of currency-producing metals is that there were very few in the heartland of the Seleukid empire, Mesopotamia and northern Syria. As long as the outlying provinces could be controlled, a limited supply was available, but probably only to ‘top-up’ the existing quantities, essentially the Persian

\textsuperscript{17} Jesus (1978:100-101).
\textsuperscript{19} Jesus (1978:98-99).
bullion captured by Alexander.\textsuperscript{21} Once these mining provinces were lost, recourse was necessary to an uncertain favourable balance of trade, but more so to stored bullion in both the royal treasury and ‘private’ possession, hence possibly the spate of ‘temple-raiding’ by the later Seleukid kings (Chapter 8.9).

Of the other major metals, lead was essentially to be found in the galena ore from which most silver was extracted in this region.

Iron seems to have been the one metal of which there may have been no shortage. Iron ore was present in several parts of Asia Minor (the Troad, Lydia, Karia, Lykia and Phrygia) and especially in the Tauros range. Syria and Palestine were also provided with a number of deposits and so was the East (Media, Persis, Karmania, Aria and Baktria).\textsuperscript{22}

As to the control of these metal sources, there is no direct evidence that proves royal ownership, though this must be practically certain, at least for the precious metals. The land was, after all, the king’s, ‘conquered by the spear’, unless he had conceded it to a city or an individual. It would be only natural for him to exploit the mines for his benefit, as had Philip II with Pangaion earlier or the Romans were to do later in Spain.

Wood

The sources indicate that the Seleukids controlled valuable stands of timber in Asia Minor and elsewhere. For the rebuilding of Sardeis after the damage sustained during the siege and retaking of the city by Antiochos III (213), the king authorized that timber be cut from the forests of Taranza, presumably on Mt.Tmolos (Document 9). Shortly afterwards, the Jews were authorized to acquire tax-free timber from the royal forests of the Lebanon and other places for the rebuilding of the Temple of Jerusalem, after it had suffered damage during the 5\textsuperscript{th} Syrian War (Document 12). One reason for Ptolemaic interest in southern Asia Minor was clearly the timber available there for ship-building. Much later, Antony granted the forests of Kilikia Tracheia to Kleopatra (Strabo 14.5.3), suggesting they may always have been royal property. Similar motivation probably attracted the Attalids to the region of Mt.Ida in NW Asia Minor, though the precious

\textsuperscript{21} Golenko(1993:77)

\textsuperscript{22} Forbes(1950:385-387).
metal mines there also undoubtedly played a role. A *senatus consultum* granted the forests of Mysia to Eumenes II after Magnesia (Livy 37.56.1).

Good construction wood was in short supply in the populous Mesopotamian heartland of the empire, where the date-palm had to serve as the ubiquitous building material (Strabo 16.1.15) for beams and lintels, bridges and quays, and hollowed out to channel water, but was unsuitable for making planks. However, a plentiful supply of timber was available in the Zagros ‘in the countries of the Kossaioi and other tribes’ (Strabo 16.1.11) and it is likely that the Seleukid kings controlled, if not the supply, at least its export to Mesopotamia.

And one should not forget the trees grown in the *paradeisoi* of the Achaemenid kings, scattered throughout the empire, which were, no doubt, inherited by Alexander and the Seleukids.

Salt

Salt was a vital commodity in antiquity for the preservation of food and for human consumption. One might change from one staple to another, e.g. from barley to wheat or barley to dates, but water and salt were irreplaceable. Salt was produced from brine, sea-water, rock salt and the ashes of certain plants.

Not all areas possessed salt. Along the coasts, there was normally no problem, as salt-pans could easily produce whatever was necessary. But it was difficult for an administration to monitor this production. When Lysimachos had tried to impose a salt tax in the Troad, the demand for salt in the region mysteriously disappeared (Athenaios 3.73d), suggesting that the inhabitants, with the sea nearby, had easy recourse to small-scale salt-making operations, which were difficult to detect.

Inland, the situation was different. Mesopotamia was fortunate in that it possessed huge salt resources. Rock salt was present in the ‘salt hills’ mentioned in ancient texts. More

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23 Cocquerilllat(1968:31).
25 Potts(1984:229) for a (modern) requirement of about 6gr per person daily on a mainly vegetable diet in a temperate climate.
importantly, the Euphrates and Tigris and their tributaries carried with them dissolved salt in high concentration. When they overflowed, briny lakes and salines formed in low-lying areas where, because of the compacted fine-grained silt and high water table, the water could drain away only very slowly. Evaporation of the water in the hot Mesopotamian sun produced crystalline salt. Palmyra, towards the end of the Seleukid period, began building its commercial prosperity on a trade in salt. Much later, in Ottoman Iraq ca.1890, twenty state-owned salines yielded many thousands of tonnes annually.27

Elsewhere, there was almost certainly salt production from the Dead Sea, but one may reasonably hypothesize that wherever in the eastern regions of the empire there existed a combination of river, oasis or lake together with a hot sun, evaporation would leave behind crystalline salt to be collected and used. Rock salt may also have been present.

Salt, because of its importance, was a likely candidate for control by the Seleukid state.

Water

The main natural resource in Mesopotamia was water. The Persian king is known to have owned important canals and leased water from these to farmers through a distinct branch of the administration. The evidence comes from the Murashu archive (Chapter 1.4). It is not unreasonable to suppose that Alexander, and after him the Seleukids, inherited this key factor of Mesopotamian agriculture. This might explain Alexander’s concern to repair the Babylonian canal noted in Arrian(*Anab*.7.21).

Much of Iran relied on *qanats*, underground tunnels to save on evaporation, leading from aquifers to the land to be irrigated.28 The Persian king controlled many of these, if not all, and charged a price for their use (Hdt.3.117; Pol.10.28).

From elsewhere there is no specific information, but it is probable that large irrigation networks, expanded and maintained by the royal administration in Baktria or Margiane or any other arid region that possessed a vital source of water would be treated as a royal monopoly.29

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Special products

Wherever a special product existed of some commercial or strategic value, it is likely that the Seleukid kings would wish to exploit it directly. Dry asphalt, used for construction and boat-building, was to be found in Mesopotamia and Susiane (Strabo 16.1.15) and also in the Dead Sea, where its gathering at certain times of the year had been entrusted by Antigonus Monophthalmos to Hieronymos of Kardia (Diod.19.100.1-2). Balsam was only to be found on ‘paradises’ (paradeisoi) near Jericho associated with a palace (basileion) (Theophrastos Enq.9.6.1; Strabo 16.2.41). The valuable purple die produced from murex shells may also have been the subject of royal control (Chapter 8.2 for a porphyrikon tax).

5.4 Industry

Production for basic needs

Every city and town certainly had its craftsmen, catering for the daily needs of the urban population and, to some extent, the surrounding countryside. This was a normal part of the symbiotic relationship between an urban centre and its dependent rural areas. Even in large villages, basic crafts must have been practiced, e.g. potter, mason, carpenter, textile worker, metal worker etc., though much work would be done by individual householders. Fundamentally, however, the urban economy was founded on a transformation of agricultural products, e.g. the production of amphorae for oil or wine, the manufacture of ploughs and harnesses etc.

Given the high level of urbanization in many parts of the empire - e.g. 55% or more in Mesopotamia or the probably comparable figure in northern Syria - it is likely that the number of craftsmen working for the local market was large and their output significant. Given the very small scale of most operations, however, and their execution on an almost daily basis, it must have been almost impossible for the administration to monitor them

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30 Rappaport/Pastor/Rimon(1994:76-77): this points to Achaemenid royal estates initially, probably taken over by succeeding rulers.
closely so as to impose a tax on production, unlike agriculture, where the harvest could be measured fairly reliably once a year. This explains why there is no evidence of a tax on production. Rather, it may have been simpler to impose a tax on producers, the χεπονάξιον referred to in the ps-Aristotle’s Oikonomika (Chapters 7.1 and 8.6).

Production for export

In a few cities there is evidence of production of specialized goods that reached a wider regional or international market. The Babylonian cities were famous for their textile industry, mainly woollen clothing and furnishings. This may appear surprising, but temperatures drop considerably in winter in Mesopotamia and frost is not uncommon. Borsippa also manufactured linen in great quantities (Strabo 16.1.7).

The initial spate of pottery imports from the old Greek world was soon curtailed as production became decentralised. Seleukeia-Tigris, for example, developed workshops which, to begin with, imitated western prototypes but then developed in original directions, modifying western shapes and functions and combining them with a traditional Mesopotamian stock of commonware, glazed ware and high-quality egg-shell ceramics. After a while western imports became rare.

Certain cities or regions became famous in the Roman period for their products, e.g. purple stuffs and dyes from Tyre, glass from Sidon, linen from Kilikia, Syria and Phoenicia and textiles from Asia Minor and it is possible that much of this reputation was earned earlier.

There is no evidence in any of these cases that the Seleukids attempted to exercise control over industry. Whether they possessed their own royal workshops, as the Ptolemies and Attalids did, is unknown. Certainly, the Achaemenids before them operated royal workshops, as the Persepolis Fortification texts amply demonstrate. So it is not unlikely that the Seleukid kings did so too, at least for the basic needs of their court.

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5.5 Trade

Local trade

Much trade was probably local, with a triangular pattern linking three participants: an urban centre, its rural hinterland and the representatives of the administration in the area, e.g. provincial or district governors, financial officials, garrisons etc. The diagram below illustrates a rather simplistic global model of the flows of food, urban products, services, money and taxes in a silver-based economy.

In this economy the rural areas sold food to urban centres and only spent a relatively small part of their silver earnings for purchases of urban products and services or in rents to urban dwellers. The rural areas also sold food to the administration. Most, if not all, their silver was soon collected in rents and taxes by the administration. The urban centres earned more by supplying the administration with products and services than they did the rural areas. Their net earnings served to pay their taxes. The administration, finally, paid for food, products and services with taxation receipts. Any silver surplus was accumulated in royal treasuries, to be used on occasions when expenditure was higher than normal, e.g. for a major military campaign (Chapter 11.7). Both urban centres and rural areas also conducted some trade in silver internally.

A parallel commodity-based economy also existed, in which town and city dwellers and the king and members of the administration, who were owners of rural land, received food

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\(^{38}\) Hopkins(1978:18): in Roman Italy only a very small proportion of a peasant's income was used to purchase manufactures in towns.
from land they managed themselves or leased to tenants for rents in kind. The temples of Babylonia were, for example, probably the largest landowners after the king in Mesopotamia and fed their numerous personnel partly with produce from their agricultural estates. Likewise, a substantial part of the produce of royal estates may have gone towards feeding members of the administration and army. The outflow of food from rural areas was not balanced in this economy by anything tangible, but rather the ‘service’ of providing a living, peace and security.

It has been suggested (Chapter 3) that the Seleukid kings made strenuous efforts to shift rapidly from a commodity-based economy to a silver-based one for the reasons given there.

There is no evidence in the sources for the volume of local trade. If the triangular model described above is correct, it must have been substantial in more highly-urbanized regions, such as Mesopotamia, northern Syria and Kilikia, where cities and towns required their food supplies. A simple calculation will show this. If, say, the degree of urbanization was 50%, as in Mesopotamia, then half the agricultural produce of the countryside needed to be transferred to the town or city. If only a silver economy existed, this produce would have been sold in the marketplace and would have represented half the value of agricultural production. Depending on how much was the share of the commodity economy would have reduced this volume of local trade. The larger the urban centre, the greater the trade with the countryside, and also internally and with the administration, since, presumably, a large city could generate greater flows of goods and services than a small town, particularly as it is likely that it would have been serving as an administrative centre.

Local trade was the perfect vehicle for silver to be collected by the administration. As will be seen (Chapter 8.1), tax rates on agriculture were probably high, as much as 50% of the value of the crop, which meant that the peasant needed to sell a great deal of his produce in order to collect the necessary silver to pay his taxes. This put pressure on him both to create a large surplus and to sell it in city and town marketplaces.

Intra-regional trade

Intra-regional trade covers, in theory, all exchange within a particular region, but here only that part will be considered that cannot be covered by the definition of local trade given above, i.e. essentially the trade between urban centres within the region, but not exclusively.

The existence to any significant extent of this form of intra-regional trade depends on three factors: low transport cost, a certain diversity of products and a relative instability of supply across the region. High transport costs definitely inhibit trade, though they do not prevent it. But, even when transport costs are low, one of the other two factors must be present.

Mesopotamia is a good test case. Trade within Babylonia and Susiane relied almost entirely on the network of rivers and canals, which facilitated the transport of bulk agricultural goods. Because of the low gradient of the major rivers and slow current, sailing or rowing upstream would not have presented a serious problem, especially on the Euphrates, except at times of flood or very low water levels. So transport costs were probably low and local agricultural produce could easily be brought to towns and cities. Yet neither of the other two factors was present. There was almost complete uniformity of agriculture and industry across the region and, since Mesopotamia depended on the water of the great rivers for irrigation, a high or low flow affected all areas more or less equally. Thus a good or bad harvest was likely to be region-wide rather than local. That is not to say that all areas would be equally affected by a poor harvest, as some might possess adequate reserves and others not. In such cases this could lead to a certain amount of intra-regional transport of commodities. But, overall, one cannot consider Mesopotamia a good candidate for intra-regional trade.\(^4\)

The situation in the Oxos basin in Baktria might be considered similar.

A different situation held in the Mediterranean coastal area that was at any time Seleukid, stretching from the Hellespont to the borders of Egypt. Here too there was no great

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\(^4\) Le Rider(1965:299): commerce was not so active between Seleukeia-Tigris and Susa until the reign of Antiochos III, when the increase noted was probably due to long-distance trade via the Gulf. McEwan(1981:199): there is no evidence that the Babylonian temples, for all their wealth, were engaged in commercial enterprises. Only one text (Beaulieu 1989:no.3) mentions allocation of silver by the Bit Reš temple at Uruk to merchants, but this could just as easily have been for the purchase of goods needed by the temple.
diversity of agricultural produce (cereals, olive, vine) or manufactured goods, with those exceptions already noted. But transport by sea was relatively cheap and there was a certain instability of supply. Since this was a dry-farming region, the amount of rainfall and its timing during the growing season dramatically affected the quality of the harvest. Thus one area might experience a glut in a particular crop, while its neighbours suffered a dearth. So the right conditions were present for some intra-regional trade.

In the inland areas of the empire, where there were no river systems to facilitate transport, the movement of bulk commodities would have been expensive and was probably quite restricted. Whatever intra-regional trade existed is likely to have involved more specialized products and operated on a relatively small scale.

The overall conclusion is that, apart from a very significant local trade between urban centres and their rural hinterlands, trade within regions may have been restricted to a few specialized products, if they existed, and the satisfying of temporary local shortages, particularly of coastal cities.41

Inter-regional trade

The same factors that have been discussed above for intra-regional trade apply equally to trade between regions. Again, high cost of land transport was the main inhibiting factor for the movement of bulk commodities, though it did not prevent absolutely necessary goods from being carried. For relatively lightweight, luxury articles, transport costs would be no obstacle.

For example, Mesopotamia had no metals or good timber. Traditionally, metals had been imported from the Tauros, the mountains of Armenia and Oman, while timber was available relatively close at hand in the Zagros. Mesopotamia’s exports had always been textiles and the products of metal-working.42 No sources tell us that this trade continued in the Seleukid period, but one may suppose that it did, for how else would Mesopotamia

41 Crawford(1987:41): when the surplus needed for taxation is large, relatively small volumes of goods move from one area to another unconnected with the needs of the state. Berlin(1977:84-85): Phoenician semi-fine ware was distributed inland, but demand probably came from Phoenicians settled in these areas.
42 Potts(1997).
have obtained its vital supplies of metal and wood? There is also some evidence for fine pottery exports to adjacent regions.\textsuperscript{43}

Another possible item of inter-regional trade for Mesopotamia was wool. Given the very large sedentary population, and its need for wool for clothing, and the difficulty of maintaining flocks in the cultivated areas, it is very likely that trade was conducted with nomadic herders in the semi-desert fringes and also with the populations of the Zagros, who practiced animal husbandry on a large scale and obviously needed a suitable market.

What applied to Mesopotamia must have been to some extent true of other populous agricultural areas bordering on mountainous regions or semi-arid steppe, in both of which types of terrain animal husbandry could be practised and a symbiotic relationship set up with the agriculturalists. Since much of the Seleukid empire exhibited this alternation of plains and oases with mountains and deserts, it is likely that this was common and provided for trade between adjacent region e.g. Kilikia Pedias and the Tauros, northern Syria and the Syro-Mesopotamian desert to the east, Rhagiane in eastern Media and the Elburz to the north, the Dasht-i-Kavir desert to the south, etc. In all these cases there is likely to have been some inter-regional trade, but mostly between adjacent symbiotic regions and so relatively short-distance.

Manufactured products from the old Greek world initially found their way to the East, but most were soon replaced from local workshops (see \textsuperscript{5,4}), though some speciality items continued to filter through.\textsuperscript{44} Neither is a trade in consumables much in evidence, to judge from the very few stamped amphora handles that have been found.\textsuperscript{45}

There is only one area where inter-regional trade may have had both greater importance and a longer carry and that is the Mediterranean coastal regions. This has already been discussed in terms of intra-regional trade, influenced by low transport costs and the variability of supply and demand. The movement of traders along the coast, with all types of good for sale, including bulk commodities\textsuperscript{46}, has been described as a kind of Brownian

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\textsuperscript{43} Hannestad(1984:75): the finds of glazed ware and egg-shell ware on Failaka point to Mesopotamia.

\textsuperscript{44} Rostovtzeff(1941:1206).

\textsuperscript{45} Börker(1974:46): only 40 stamped amphora handles have been found in all of Mesopotamia, compared to hundreds at Mediterranean centres.

\textsuperscript{46} Casson(1984:Ch.3) on the grain trade; Bogaert(1977:377-381) for wine, oil, salted fish, salt, honey, dried fruit, nuts, wood, pitch, firewood, works of art, slaves and metals. Davies(1984:282-283): the slave
movement in which trader constantly sought out the latest areas of high supply and demand so as to transport the desired goods between the two.  

Long-distance trade

Here one must consider the major trade routes that crossed the empire, bringing high-price products from the East to the markets of the Mediterranean, with some naturally being dropped off for sale along the way.  

The principal land route from India and the one from Baktria and Central Asia (later to become the Silk Road) came together at Artakoana in Aria (near Herat), skirted the Dasht-i-Kavir desert on the north, crossed the Zagros via Ekbatana and arrived at Seleukeia-Tigris. A secondary land route from India, but more difficult, reached Susa after traversing Arachosia, Drangiane, Karmania and Persis, and continued on to Seleukeia-Tigris.

The sea route to India along the coast of Baluchistan and into the Persian Gulf had already been in use for centuries by the Seleukid period and was in the hands of the Arabs. The port of the city of Gerrha (perhaps Thaj) seems to have been its main terminus.

From southern Arabia two caravan routes brought frankincense and myrrh to market, as well as products that originated from East Africa, principally ivory. The first ran up the western side of the Arabian peninsula to the Phoenician ports and Gaza. Until the conquest of Palestine in ca.200, this route was well beyond the reach of the Seleukids and only served Egypt and the Mediterranean. The second caravan route cut across the Arabian desert to Gerrha, which thus became a nodal point for both Indian and Arabian trade.

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50 Potts(1990:85ff).
From Gerrha and its port there were two main possibilities: a caravan route across the Arabian/Syrian desert to the Phoenician ports and a sea route to the upper reaches of the Persian Gulf where a Seleukid port, Alexandria, later Antioch-on-the-Erythrean Sea, had been established. A sea-going vessel or river transport could continue up the Euphrates or Eulaios as far as Babylon or Susa\(^{51}\) or unload onto river transports, which could reach Thapsakos (Strabo 16.3.3) but it is likely that the bulk of the goods were transported by caravan to Seleukeia-Tigris, which became the greatest *emporion* in the East (16.3.2). A less-used route was by caravan up the coast from Gerrha to the Euphrates and then onwards.

It seems that the Gerrhaians must have preferred the caravan route which bypassed Seleukid territory and, presumably, customs duties and tolls. It took the naval expedition of Antiochos III in the Gulf in 205 to compel them to redirect part of their lucrative luxury trade to the empire.

From Seleukeia-Tigris the trade goods collected from Arabia and India travelled west to Antioch and thence to Laodikeia and Seleukeia-Pieria for Mediterranean destinations\(^{52}\) or traversed Asia Minor to arrive at the Aegean ports, principally Ephesos and Smyrna.

The volume of this eastern trade through the Seleukid empire has possibly tended to be exaggerated, certainly before Antiochos III captured more of it.\(^{53}\) There is perhaps a tendency to confuse the large-scale operation of the Roman period, especially after the sea route came into regular use in the 1st century AD, with what went on before.

An indication of the magnitude of the eastern trade may be given by the output of the mint created at Antioch-on-the-Erythrean Sea in the reign of Antiochos IV, which was probably intended to serve it. The volume of coinage, as measured by the total number of obverse tetradrachm dies that may have been used there over about 30 years, was relatively small, only 2/yr on average, or about 40 talents-worth.\(^{54}\) Naturally coins from

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\(^{51}\) Le Rider\(1965:267\): the Seleukids linked Susa to the sea. Its prosperity was mainly due to eastern commerce (Boucharlat 1985:26).

\(^{52}\) Seyrig\(1970:292\): it was on the enormous profits of this trade that the prosperity of northern Syria was based (which I question).

\(^{53}\) Shipley\(1993:283\): long-distance trade was probably increasing, but only accentuating existing trends. Commerce was not the main concern of the Seleukid kings.

\(^{54}\) Mørkholm\(1970:31ff\) gives 23 obverse dies from 37 specimens from Antiochos IV to the first reign of Demetrios II. Using the method described in Chapter 1.6 and discussed more extensively in Chapter 11.5, the best estimate for the total number of obverse dies used is 48.0, with 95\% confidence limits of
other mints, Seleukeia-Tigris, Antioch, Susa, would also have been used for eastern purchases, and of course one does not know how many. However, one wonders how much all this might have amounted to for the royal economy, despite customs duties and tolls all the way to the Mediterranean (Chapter 8.3,4), compared to the 4,000 or more talents annually that the king probably earned from agriculture in Mesopotamia alone (Chapter 12.3). It is perhaps significant that the Antioch-on-the Erythraean Sea mint was opened to help promote trade with the East at a time when traditional Seleukid revenues had taken a dip after Magnesia and the loss of Asia Minor, and because of trouble in the remaining eastern provinces.

Another indicator is provided by an analysis of bronze coin finds at Susa, which showed not more than 10 from Seleukeia-Tigris for each of the earlier reigns, then a sudden increase to 314 under Antiochos III, 109 under Seleukos IV, 49 under Antiochos IV and a rapid fall-off afterwards. Bronze shows the movement of merchants, not merchandise.\textsuperscript{55} This pattern fits the historical fact of the coercion of the Gerrheans by Antiochos III for more of the eastern trade. It also points to the relative insignificance it may have had earlier.

Of course, by the time any eastern goods had reached the Mediterranean, apart from those dropped off on the way, the prices had become significantly inflated by the administration’s various exactions and the profits of all the carriers and middlemen. So local economies on the way undoubtedly profited, particularly those of clearing-house cities and ports, but most areas were left quite untouched.

From a global point of view, considerably more silver probably entered the Seleukid empire in receipts as a result of the eastern trade than was expended in payments. A positive balance of trade is indicated by the fact that very little Seleukid coinage has been found in other regions, whereas much foreign currency apparently circulated inside the empire, as evidenced by coin hoards (Chapter 11.4).\textsuperscript{56}

\textsuperscript{23.7 to 87.2. With the best estimate, the total value of coinage produced was only about 1,250 talents, or roughly 40 talents a year.}

\textsuperscript{55} Le Rider (1965:446-447).

\textsuperscript{56} Mørkholm (1984:105).
5.6 Prices

Commodity prices in the Seleukid empire are of interest because they enable one to determine the value in silver of many different types of transactions, e.g. a grant of grain to a city, a soldier's rations or even the total agricultural production of a satrapy as the basis for tax assessment (Chapter 12.3). At the same time a comparison of prices with those of the Mediterranean region can show to what extent the Seleukid economy was integrated or not with the rest of the Hellenistic world.

The evidence of the Babylonian Astronomical Diaries

These valuable texts have already been discussed in Chapter 1.4\textsuperscript{57}. Prices at Babylon for five agricultural commodities and wool were recorded for much of the Seleukid period. There is frequent mention of a market suggesting that these were indeed market prices.\textsuperscript{58}

A good way to look at prices is with a graph, and shown is one for barley (Fig.1) for about 200 years, from ca.350 to ca.140, i.e. from the late Achaemenid period down to the end of the Seleukid in Mesopotamia.

![Fig.1 Barley prices](image)

Firstly, the graph does not represent price but the inverse of price, i.e. how many *sut*, (=nearly six litres) one could buy for one shekel of silver. When the graph goes up, prices

\textsuperscript{57} The individual tablets (Diaries) are referenced as in the three volumes of Sachs/Hunger.

\textsuperscript{58} Strongly supported by Slotsky(1992:31, now published 1997) and Vargyas(1997:34).
come down. One Babylonian shekel weighed 8.3-8.4 gr, or almost exactly 2 Attic drachms. Secondly, since there is a range of prices in some years, the graph is considered to pass through the mid-point. Though this is an approximation to the average, it is good enough for our purposes, since any tendency to be too high one year will be counterbalanced by being too low another year. Over the 90 years for which there is data in the Seleukid period, this evens out.

What strikes one immediately are the very high prices for barley (lows on the graph) recorded in six years between 325/4 and 307/6 BC. But if one looks at the years in question, one finds that in each there was a serious disturbance in Babylon at the time. In many cases the Diaries themselves confirm this.

Thus, in May 325 (Diary -324) prices shot up and the market was actually closed for a time. This may be connected with the flight of Harpalos, Alexander’s boyhood friend and treasurer, from Babylon with whatever he could lay his hands on to feed the 6,000 mercenaries he took with him (Diod.17.108.4-6). In 323, after Alexander’s death in Babylon, the Macedonian cavalry blockaded the city in order to impose its will on the infantry. Once the succession issue had been resolved, troops and supplies were collected there to suppress the revolt of the Greek settlers in Bactria and then one enters upon the continuous warfare of the early period of the Successors.

Between spring 310 and late 308 Seleukos fought for his survival in Babylonia against Antigonos Monophthalmos. The so-called Diadochi Chronicle tells us of the devastation suffered by Babylonia, which Antigonos ravaged as enemy country.

So between 325/4 and 307/6 there is data for six years, with barley prices seriously distorted by political events. There is no knowing what the prices may have been in the intervening years, but they are also likely to have been high in the climate of war and uncertainty. If one ignores the affected years, however, one is left with an underlying price trend for barley which is surprisingly flat for 200 years at about 20 sut for a shekel of silver, equivalent to nearly 60 litres for an Attic drachm. Anything below or above this probably reflects the impact of a good or bad harvest.

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59 Grayson (1975: no.10).

60 The price stability noted also by Aymard (1938:25).
Note that the average price of barley was the same both immediately before and a short time after the conquest of Alexander. It has been suggested that the release onto the market of the accumulated Achaemenid treasure, valued in the sources at 180,000 talents of silver or more\textsuperscript{61}, produced price inflation. For the Mesopotamian staple, barley, at least, there is no evidence of such inflation. As postulated in Chapter 3, the Achaemenid bullion probably did not find its way as coinage into the pockets of Babylonians but mainly into those of Macedonian veterans and Greek and Balkan mercenaries, who did their spending much further to the west in the Greek world.

Other abnormally high barley prices in the Diaries are probably evidence of trouble in or near Babylon, though one may also be seeing the occasional crop failure, and the Diaries do refer to famine and locust attacks from time to time.

Sesame (Fig.2) behaved in much the same way as barley, with an underlying price of about 4 $\frac{1}{2}$ sut for a shekel. So too did cardamon/cress, at around 9 sut for a shekel (Fig.3).

\textsuperscript{61} A total of 180,000 talents is said to have been collected eventually at Ekbatana from the different Persian treasuries (Strabo 15.3.9).
Wool also showed exceptionally high prices in the early period of troubles in Babylonia of around 1 Babylonian mina (about 1/2 kg) for a shekel (Fig.4). Then the price gradually fell to 4 as flocks recovered slowly, but probably not to the level of abundance of the end of the Achaemenid period when the price of wool had been considerably lower, at around 6 minas to the shekel. For more than a century the price oscillated around 4 but ca.158 it increased rapidly to only 2 1/2 minas to the shekel.

This sharp price change can, again, be explained by war. This time it was the Parthian invasion, which culminated in the loss of Babylon in 141, and, more importantly, the raids
of the king of Elam which are mentioned with horror in the Astronomical Diaries. In November 145, for instance, the Elamites

' marched around victoriously among the cities and rivers of Babylonia, they plundered this [...] and carried off their spoil. The people [...] their ... their animals ... for fear of this Elamite to the house(?). There was panic in the land'. (Sachs/Hunger III, 144)

For any invading army bent on plunder, herds and flocks in the countryside would be a prime target, with resulting shortage in the cities and corresponding price increases.

There are now two commodities where something unusual appears to have taken place.

The graph for dates (Fig.5) shows a dramatic decrease of average prices from 1 or 2 to about 20 sut for a shekel after the troubles of 311-308, possibly as destroyed date plantations were replaced, but the price never reached the Achaemenid low of 40. Then quite suddenly, sometime between 208 and 205, there was a dramatic price drop to about 40 sut for a shekel, or half of what it had been before. This cannot be explained by a single good harvest because the price seems to have oscillated about this new level for the next 70 years or so.

![Fig.5 Date prices](image)

Looking at mustard prices (Fig.6), the graph shows similar behaviour, a decrease after 311-308 to about 40 sut for a shekel and then a sudden drop to around 80 some time on or before 208.
Taking dates and mustard together, 208 seems to be the key date. A possible explanation for such dramatic price changes is administrative intervention, and this will be considered in Chapter 8.1.

But, apart from this, there is a remarkable stability of commodity base prices in Babylon under Seleukid rule. Whether this picture was true elsewhere in the East is unknown, but the possibility that it held in Mesopotamia, where cheap water-borne transport could even out price differentials, is high.

**Comparative prices**

In the regional economy of Delos barley prices were considerably higher at this time, varying between 2 and 5 drachms/medimnos (1 Attic medimnos = 52 litres) between 282 and 174.\(^{62}\) In Egypt, prior to a period of inflation after ca.222, the average price of barley was around 1.2 drachms/artaba (1 Ptolemaic artaba = 40 litres), or the equivalent of about 1.6 drachms/medimnos.\(^{63}\) These prices can be compared to the just under 1 drachm/medimnos at Babylon. Clearly the Mesopotamian grain market was not affected by conditions in the Mediterranean and was less expensive.

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An assessment of Mesopotamian commodity price levels

The lower prices in Mesopotamia probably reflect the higher agricultural productivity of the region and the relatively low cost of transport compared to the Mediterranean region. The fact that commodity prices did not rise in almost two centuries indicates that there was no shortage of land. If population increased in some areas, more land could easily be brought under cultivation to feed it by an extension of the canal network. Similarly, the fact that commodity prices did not fall suggests that any population decreases that may have occurred, e.g. along the Euphrates to people Seleukeia-Tigris and the other new foundations, were evenly balanced between cultivators and urban residents.
6. THE GRANTING OF LAND

It was suggested in Chapter 3 that the founding of new Greek cities by the first Seleukid kings and the policy of land-grants to cities, temples and individuals were part of a systematic effort to intensify economic activity and generate more silver revenue.

The starting point is the arrival of Alexander in Asia. In his edict to Priene\(^1\) Alexander made clear to a Greek city what he considered the status of land in his realm would be:

\[\text{Βασιλείως Ἀλεξάνδρου, τῶν ἐν Ναυλόχωι κατοικοῦντων ὅσοι μὲν εἰσὶν Ἰονιαῖοι, αὐτοῖς νόμος εἶναι καὶ ἐλευθερούς. Ἐξοντάς τὴν τὴν γῆν καὶ τὰς οἰκίας τὰς ἐν τῇ πόλει πάσας καὶ τὴν χώραν, ὡς ὁ πρῶτος Ἰονιαῖος αὐτοὶ εἰς τὸ δὲ καὶ ἰδίᾳ γῆς καὶ Πεδείεων ἐκαστος} \]

\[\text{'From King Alexander. Of those residing in Naulochos, those who are Prienians will be autonomous and free, possessing all their land and houses in the city and the countryside, just like the Prienians themselves as to what they might desire. The .. and the .. of the Myrselieis and Pedieis I make known to be my land and those that live in these villages will pay tribute. I free the city of the Prienians from the syntaxis ..' }\]

A distinction was made between a city’s land, which would remain in the possession of its citizens, and everything else, which was to be royal land. But this was a concession, a grant by the king that preserved the tradition of a city’s autonomy within the empire, but only because the king so desired.\(^2\)

6.1 The new cities

The prevailing view is that the new Seleukid foundations were created primarily to satisfy political and military needs, in order to control population centres or areas with important resources or strategic routes, though commercial considerations may also have played a part.\(^3\) But there are problems with this view.

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1 OGIS 1; cf. Sherwin-White(1985).
2 Briant(1996:427-430): in the Persian empire all land belonged to the king and any grants were revocable.
Firstly, the Achaemenid empire did not require Persian settlements for control. It administered quite adequately for about two centuries a larger territory, relying on a minimal presence of Iranian settlers, but with a strong satrapal administration, an extensive network of military garrisons, little interference in local affairs and co-option of the non-Persian elite into government. In the background there always lurked the threat of military intervention by the central power.4

Secondly, the pattern of many new Seleukid cities does not seem to fit the criteria expressed in the prevailing view. An investigation into where cities were located and of what size might help resolve the issue.

City locations5

Northern Syria, for example, at the time of the foundation of the major Greek poleis there (Antioch, Seleukeia, Apameia and Laodikeia), was not a major population centre, perhaps only a tenth in size in comparison to Mesopotamia (Chapter 4.1.3), but rich in agricultural potential. It did indeed control two strategic routes from Mesopotamia, one to Asia Minor via the Kilikian Gates and the other to Egypt, at a time, just after Ipsous (301), when this was a vulnerable frontier area, but surely four large cities plus several medium-sized ones (e.g. Chalkis, Beroia, Kyrrhos, Seleukeia-Zeugma) were far more than required for this task?

In Babylonia, with its major population and economic centres strung out along the Euphrates, not a single new Greek city was created, excepting only for the inclusion (perhaps much later) of Greek communities in Babylon and Uruk, whose presence there may have been primarily for commercial reasons.6 In fact, a relatively non-urbanized fertile region to the east along the Tigris and its tributary, the Diyala, was selected for development, with the foundation of a capital, Seleukeia-Tigris, and other Greek cities, e.g. Apollonia, Artemita and Antioch-Sittakene.

4 Tuplin(1987b), Briant(1996:Chapters 9-12) for the administration of the Achaemenid empire.

5 Cohen(1978) for the Seleukid colonies; Cohen(1995) for the Hellenistic settlements of Asia Minor; Tscherikover(1973) for all Hellenistic foundations (but needs updating); Grainger(1990a) for the cities of Seleukid Syria.

The urban centres of northern Mesopotamia had suffered during the Assyrian collapse and at the start of the Seleukid period. The region was relatively sparsely populated (Chapter 4.1) but it was fertile and dry farming was possible (Chapter 5.1). A number of Seleukid foundations appeared in this area.7

If ever a region required supervision, it was the Persian heartland. Why was no Greek city founded in the Persepolis plain, for example, if it was felt necessary to control this region by means of a city?8 In fact, this part of Persis probably acquired some form of independence, albeit under Seleukid suzerainty, quite early on (Chapter 2)

In Media, Susiane and Baktria there existed major population centres at the satrapal capitals, Ekbatana, Susa and Baktra. The Seleukid administration quite happily used these, as had the Achaemenids earlier, from which to govern the respective satrapies. Though Susa did receive the dynastic name Seleukeia-Eulaios, there is no indication of any overwhelming Greek settler presence there or in any of the other cities, that might have been considered necessary for military reasons. Instead one hears of new foundations in the remoter areas of these same satrapies, in small plains or on rivers, e.g. Laodikeia-Nehavend and Apameia-Rhagae in Media, Seleukeia-Hedyphon and Apameia-Seleia in Susiane, Antioch-Tarmita and the city known by its modern name, Al-Khanoum, in Baktria.

In Parthia, cities were founded in the chain of fertile oases south of the Elburz and Kopet Dag and north of the Dasht-i-Kavir desert and also in the fertile Hyrkanian plain, e.g. Hekatompylos, Apameia-Choarene, Syrinx.

And one might continue in this vein. In the examples given above, a common thread emerges, that the new Greek cities were founded in regions which were relatively little urbanized, but with agricultural potential or, if this was insufficient, with access to the sea or a river system.9 Conversely, well-developed inland areas seem to have been avoided or important existing cities there simply refounded with dynastic names, e.g. Tarsos became Antioch-Kydnos, Kelainai became Apameia. Thus, most of the new Antiochs, Seleukeias, Apollonias and Stratonikeias in western Asia Minor have been attributed to

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7 Tscherikover(1973:84-90,96-97); Chaumont(1982).
8 Polyainos(7.40) refers to the slaughter of 3,000 colonists in Persis, but where these were established is unknown, only the fact that they were led to a populous area, where the act was committed.
9 Also Leriche(1987:59-61).
Antiochos I as founder, but none is actually certain\textsuperscript{10} and some may have been the work of later Seleukid kings.\textsuperscript{11}

But one should not consider that the early Seleukids searched for virgin territory for their new foundations. All the new cities seem to have been established on the sites of existing towns and villages.\textsuperscript{12} And even though, in my view, economic reasons were foremost in their thinking, there is no doubt that political/military considerations also played their part.

City sizes

Why was a new city built with a particular size?

Doura-Europos on the middle Euphrates, for example, was a foundation of Seleukos I. The city's plan can be traced on the ground. It is roughly rectangular, with an area enclosed by fortifications of some 45 hectares. One wall follows an escarpment running parallel to the river, but the other three do not utilize any natural features. They were simply laid out to enclose an area of a desired size. Doura is probably one of the smallest Seleukid city foundations that can be traced on the ground. With a population density of 100-200 persons/hectare (Chapter 1.5), Doura would have contained 5-10,000 inhabitants.\textsuperscript{13} A maximum population of 10,000 would have required about 5,000 hectares of irrigated land (Chapter 1.5) to feed it, or 50 sq.km. This much cultivable land is not available alongside the Euphrates in the immediate vicinity, but river transport could bring in the necessary foodstuffs from further along the river without any difficulty. Another Hellenistic urban site on the middle Euphrates at Djebel Khaled has an area of about 50 hectares.\textsuperscript{14}

\textsuperscript{10} Cohen(1995:418) for Apollonia-Salbake as definite (though, in my view, doubtful) and about ten probable/possibles.
\textsuperscript{11} e.g. Kosmetatou(1997:21): all colonies in Pisidia or on its borders later; also Sartre(1995:40).
\textsuperscript{13} Will(1988a:320-321) for a population of 5-6,000.
\textsuperscript{14} Leriche(1994:533).
At the next level up were city foundations about twice as large, at around 65 to 100 hectares, e.g. Kyrrhos, Chalkis, Beroia and Seleukeia-Zeugma in northern Syria.\textsuperscript{15} Populations may have ranged from 10-20,000.

In a different class of 25-50,000 inhabitants were likely to have been the major cities of the north Syrian tetrapolis, remnants of whose fortifications from the Hellenistic period give us an idea of what their approximate areas were: Seleukeia-Pieria 250-300 hectares, Antioch 225 initially and expanding later, Apameia 205 - 250 and Laodikeia 220.\textsuperscript{16} One can observe a certain uniformity in these sizes, any differences simply being those that would naturally emerge from the use of natural features.

There is some independent evidence to suggest that these figures are about right. Seleukeia-Pieria, when retaken by Antiochos III ca.219, had 6,000 free (male) inhabitants (\textit{ελεύθεροι}) and more were added from the exiles who returned (Pol.5.61.1). Malalas(\textit{Chron}.201.12-16) gives 5,300 as the initial number of settlers for Antioch, presumably adult males, so 20-25,000 with their families. Finally, it may not be a coincidence that Plato considered that his ideal \textit{polis} should have 5,040 citizens (Laws 737E). Hellenistic city-planners were no doubt well aware of the sizes of existing cities in the Greek world.

A new city foundation did not possess only Greco-Macedonian citizens and their families and slaves, but also a non-Greek population. Of the two quarters originally built by Seleukos for Antioch, roughly 150 and 75 hectares in area, the second was for ‘the multitude of colonists’ (Strabo 16.2.4: \textit{τῶν πληθυντῶν τῶν οἰκητάρων ἐστὶ κτίσμα}, which has sometimes been interpreted as a native quarter.\textsuperscript{17} If Antioch had 5-6,000 Greco-Macedonian citizens initially, as discussed above, or 25,000 with their families, it is quite possible that slaves and non-Greeks made up a substantial part of the population if it approached the 50,000 mark.\textsuperscript{18}

\textsuperscript{15} Grainger(1990a:92); Algaze(1991:206).

\textsuperscript{16} Downey(1961:78-79); Grainger(1990a:91-92); Will(1988b:261-263), with less for Antioch. Also Downey(1961:82) for 17-25,000 as the initial free population of Antioch; Grainger(1990a:100) for well over 50,000 free inhabitants for each of the major Syrian cities.

\textsuperscript{17} Downey(1961:78). Briant(1978:88-89) considers separation of Greeks and non-Greeks within the cities likely.

\textsuperscript{18} Kreissig(1976:240): Antioch and Seleukeia-Tigris became large not because of the influx of Greeks, but of non-Greeks.
On a different scale altogether was the design of Seleukeia-Tigris, intended as a capital when it was founded ca.305. The area enclosed by the fortifications has been estimated at 550 ha\(^1\), yielding a population of probably 50,000 to 100,000, about twice that of the cities of the Syrian tetrapolis. This could imply a citizen body of perhaps 10,000, though the non-Greek population may have been proportionately larger than in the Syrian cities.

What one may observe from these figures is a rough geometric progression in city size in multiples of two. It is unlikely that this could be pure coincidence, but rather it smacks of planning. It is as if decisions were consciously taken that cities should be built for civic bodies of standard sizes, around 1,250, 2,500, 5,000 and perhaps, even 10,000 adult male citizens.\(^2\)

City viability

To reach a decision on location and size Seleukid planners must have given some thought to the viability of a city of a certain size in a particular area. That meant looking to the surrounding land, royal land in the main, which needed to have both sufficient agricultural potential and no prior need to supply other major urban centres.\(^2\) Alternatively, if the land was inadequate, there should be an easily-accessed source of supply further afield.

One can see that this held true for all the large foundations. Seleukeia-Tigris was positioned in essentially virgin territory along the Tigris, with the Diyala flood-plain ripe for development to the east and plenty of scope for growth. Antioch had the rich resources of its fertile plain to draw upon and Apameia of its plateau and the middle Orontes valley, both of which regions could support large cities.\(^2\) Similarly, Aï-Khanoum was well placed at the junction of the Oxos and Kochba to take advantage of the extensive plain they formed, where agricultural production could be markedly improved. The oasis surrounding Antioch-Merv, offered some 300,000 hectares of irrigable land and was ripe for a large city. Even the Syrian ports of Seleukeia-Pieria and

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\(^1\) Will(1988b:259) at more than 400 hectares, Invernizzi(1993:235), conducting the Italian excavations of the city over several years, at 550 hectares.

\(^2\) Also Downey(1961:82).

\(^2\) Briant(1978:61): the land of Hellenistic cities was agricultural, whatever the later commercial development.

Laodikeia, despite their relatively small coastal plains, could rely on easily-transported supplies by sea.

For the smaller cities, one almost gets the impression that the Seleukid planners attempted to fill in every available piece of under-developed land with a city of the appropriate size\(^{23}\), as long as they could be assured of a supply of settlers. For example, the landscape of northern Syria was dotted with such foundations, placed in the gaps left in the zones of influence of the larger cities along the coast (e.g. Balaneia, Paltos, Gabala) or the Orontes valley (e.g. Larissa, Arethusa), but especially north and east of the Orontes to the mountains, the middle Euphrates and the desert (e.g. Chalkis, Kyrrhos, Beroia, Nikopolis, Doliche). Even along the middle Euphrates, with its relatively narrow cultivable strip of land, small cities of the size of Doura (e.g. Ichnai, Nikephorion, Anthemos) could be positioned at appropriate intervals along the river and be viable.\(^{24}\) Inevitably, as each city in northern Syria grew, its economic hinterland would eventually infringe upon that of its neighbours. Either growth of both cities would be arrested or one would yield to the other. In the event, Antioch was the only Seleukid foundation that seems to have expanded steadily in the Seleukid period at the expense of all the others.

On the other hand, Kilikia Pedias was already, from the Persian period, a populous region with a broad range of both urban and rural settlements. Here there seems to have been no space for a major new city and older ones were simply refounded instead (e.g. Tarsos to Antioch-Kydnos, Magarsos to Antioch-Pyramos, Adana to Antioch-Saros, Mopsuestia to Seleukeia-Pyramos\(^{25}\)), which probably made little difference to the local economies.

In Mesopotamia the cultivable band of land in the north between mountains and desert, extending from the Euphrates to the Tigris, and beyond to the Zagros mountains and down their western flank, had been, to some extent, denuded of urban sites following the Neo-Assyrian collapse and had never fully recovered in the Achaemenid period (Chapter 4.1). Smallish cities seem to have been spaced out at intervals to take advantage of the available land (an Alexandreia, a Demetrias and perhaps two Seleukeias), while Edessa and Nisibis were refounded. Further to the south-east, the Tigris and Diyala flood-plains have already been described as a region of substantial new development in the Seleukid

\(^{23}\) Also Grainger(1990a:108).

\(^{24}\)Cumont(1926:xxiv): exchange was also possible with the nomadic populations of the desert.

period (Chapter 4.1). Seleukeia-Tigris no doubt attracted many of the agricultural resources of the area, but there was room for more cities (Apollonia, Artemita, an Antioch). Even in the far south-eastern corner, the old Achaemenid capital, Susa, continued to play an important role, but there was apparently scope for further development of Susiane and the mouth of the Persian Gulf with new city foundations. And along the Gulf itself, there were at least two cities of some importance, Antioch-Persis and Antioch-on-the-Erythraian Sea, which was a refounded Alexandria, and some minor sites. The picture for northern Syria and Mesopotamia is thus one of extensive city building that started almost as soon as Seleukos I had consolidated his hold on these regions and was continued by his son, Antiochos.

A similar pattern is observed in Baktria and Margiane, though perhaps a little later, after Antiochos was dispatched there as viceroy to the Upper Satrapies ca.291/0, (e.g. Antioch-Merv, Antioch-Termez). It is tantalizing that we do not know the ancient name of Ai-Khanoum, but its growth probably also belongs to the early Seleukid period.

Our information concerning the remaining Upper Satrapies is much scantier. In Media, Laodikeia-Nehavend was positioned off the strategic route from Babylonia to Ekbatana on an extensive plateau in the Zagros, while Apameia-Rhagae took advantage of eastern Media’s fertile plain (Strabo 11.9.1). In both cases an existing town was refounded as a Greek city. There is a blank in the sources for new foundations in Aria and Drangiane and this is perhaps due to the fact that the only sizeable oases in these areas were already taken up by Alexandrias (Artacoana and Phra), which probably continued to serve. One draws a complete blank on Karmania, but the terrain there is similar and space for a new city likely to have been insufficient. In the heartland of Persis too no new foundation is recorded. The most likely area, the Persepolis plain extending south to Shiraz, was already quite densely inhabited, as the Persepolis Fortification texts also make clear (Chapter 4.2).

In Asia Minor a somewhat different pattern emerges. This was an area conquered at the very end of Seleukos’ reign and immediately thereafter subjected to almost constant turmoil, with the Seleukids competing for its possession with Ptolemies, Attalids, Antigonids, Galatians, native kingdoms (Bithynia, Kappadokia, Pontos, Armenia), independence-minded Greek cities and one another (Antiochos Hierax, Achaios). Very soon, most of the coastal area had been lost and much of the central Anatolian plateau,
leaving mainly a strip of territory extending from Kilikia to Lydia via Lykaonia, Phrygia and the northern parts of Pisidia, Lykia and Karia. Eventually this too was lost until temporarily regained by Antiochos III. No large new Seleukid foundations are known from Asia Minor, though several existing cities seem to have been refounded (e.g. Seleukeia-Tralles, Apameia-Kelainai). This is probably because the region was already urbanised to a considerable degree and available land must have been somewhat at a premium.

It is perhaps for this reason that the Seleukid kings adopted the policy of creating mainly smaller Greco-Macedonian settlements in this area, not cities but colonies (κατοικίαι). It has been suggested that this was due to the fluid frontier situation with the Attalids and other powers of Asia Minor, because of which a city could easily shift its allegiance, whereas a military colony would be more likely to stand firm. It has generally been considered that κατοικίαι were military settlements, established primarily so as to control vulnerable regions. But there is no conclusive evidence that all the inhabitants of κατοικίαι were military settlers or that they had a duty to respond to a call-up by the king. Furthermore, one hardly hears of κατοικίαι outside Asia Minor and surely there were borders to defend elsewhere, in northern Syria or along the desert fringes of Mesopotamia or the north-eastern steppes? Thus the economics of available land probably determined, more than anything else, the foundation of mainly small new settlements in Asia Minor.

Seleukos as a founder compared to Alexander

Seleukos was credited in antiquity (Ammianus Marcellinus 14.8.6) as having been the founder of many cities. Appian(Syr.57) notes 34 foundations with dynastic names and 25 others as examples of the sort of name given. This has been dismissed by modern scholars as fiction, resulting from the inclusion of foundations of Alexander and other Seleukid kings, re-foundations and a great deal of exaggeration. However, before these

27 Marchese's survey of the Maiandros flood plain (1986) pointed to at least 16 cities in this area in the Seleukid period, showing how densely it was occupied. Furthermore other large settlements also existed, which eventually turned into the 11 additional cities of the Roman period (pp.307-320).
28 Cohen(1978:51-52); Bikerman(1938:82).
figures can be dismissed so lightly, one may consider what massive city building took place in northern Syria alone in the few years immediately after its acquisition, or in northern Mesopotamia or along the middle Euphrates or in Baktia in the reigns of the first two Seleukids. These are the regions the sources speak of. The silence from elsewhere may not be a silence of construction but of documentation.29

One may also consider how many of these cities grew and flourished in antiquity because of their sound economic base compared with Alexander’s foundations. Apart from Alexandria in Egypt, which was clearly intended from the very start to be a very large city with a commercial future, most of the other Alexandrias seem to have been conveniently-located sites where veterans could be settled in order to both avoid the expense of repatriation and also provide additional security along Alexander’s lines of communications to India, though economic considerations also undoubtedly played a part. The short life of many of these ‘cities’ shows that they may not have been truly envisaged as long-term projects. In several cases it required refoundation by Seleukid kings for an Alexandria to survive (e.g. Antioch-Margiane, Antioch-on-the-Erythraean Sea etc.).

Model of city creation

The creation of a new city, or the upgrading of an existing town or village, undoubtedly had a significant impact on the surrounding area, the more so the larger the new foundation. For example, the establishment of Seleukeia as a capital on the Tigris probably gave the Diyala area to the east of the river such a powerful boost that its population increased several-fold in the Seleukid period.30 While the traditional Mesopotamian cities on the Euphrates continued to flourish, they became, in a sense, peripheral to this new ‘core’.31

For a new town or city, at least the nucleus of an urban population had to be imported, those specialized providers of services and manufactured goods who could not normally be found in rural settlements. A city such as Seleukeia-Tigris could easily draw upon the old Babylonian centres for the necessary urban skills, and it is possible that some

30 Adams(1965:63).
population transfer from those nearest, e.g. Babylon, Borsippa and Cutha, took place, perhaps not only when Seleukeia was founded (ca.305) but also later.\textsuperscript{32}

In northern Syria the situation was quite different when the four major cities were created by Seleukos ca.300. This was a region with a low level of urbanization during the Achaemenid period (Chapter 4.3). The solution, as evidenced in the sources, seems to have been threefold: 1) immigration from the Greek world now that the Seleukid empire had access to the Mediterranean, 2) use of veteran soldiers in the aftermath of Ipsos (301), including those who had already been settled in northern Syria by Antigonos, and 3) inclusion of non-Greek populations. Also, one should not exclude the possibility that neighbouring Kilikia, with its numerous established and semi-Hellenized cities, may also have served as a population reservoir for northern Syria once Kilikia became Seleukid ca.294.

But a town or city also requires an agricultural hinterland to feed it (Chapter 5.5). Villages in the region must generate the surplus required for the city’s survival. Though part of the urban population may itself be involved in agriculture and animal husbandry, there will be another part, increasingly important the larger the city, that lives off trade and industry or belongs to the administrative superstructure. For the surrounding villages, there can be both a ‘natural’ growth in activity and a ‘mandated’ one.

In the ‘natural growth’ model, the villager is attracted to the possibility of barter with the urban dweller, his agricultural produce in exchange for some specialized manufacture or unusual product of trade. But there is a limit to how much the surrounding villagers need and a city will grow only at the rate at which these needs can be increased. Obviously a city may rely on longer-distance imports of food-stuffs for its growth, but then it is still serving the needs of producing villages, albeit in remoter areas.

The observed pattern is one of increasing density of rural settlements as one approaches the urban centre. Those villages are favoured which are nearest and can bring their produce to market more economically. As the urban centre grows, agriculture and animal

\textsuperscript{32} The original idea that a forced transfer from Babylonian cities had taken place (e.g. Briant 1978:84; Spek 1987:66; Invernizzi 1993:236) was based on the incorrect interpretation of an Astronomical Diary (Sachs/Hunger 1988:no.-273). Spek(1993a:98-99) has now shown that there is no evidence for such a transfer, followed in this by, for example, Kuhrt/Sherwin-White(1994:323) and Potts(1997:281). This does not mean that inhabitants of Babylonian cities may not have been invited to settle in the new foundation in the same way that Greeks were.
husbandry are intensified in the villages closest to it, attracting inhabitants from further away, until the available land is fully utilized, with the result that the more remote settlements decline and are sometimes abandoned.33

In the ‘mandated growth’ model, the village is compelled to create a commodity surplus by the authority in command, which then extracts it as taxation. In the Achaemenid empire this was also the case, but the surplus was to a large extent stock-piled and used to feed the king, his administration and his army.34 This did not contribute materially to the growth of cities, virtually the only exceptions being the Achaemenid capitals.

Economic motive

Following the discussion above, I would suggest that the primary motive for Seleukid city-building was not political or military but economic, the desire to open up relatively undeveloped land to economic exploitation.35 There had already been experience in Macedonia under Philip II and Alexander of what it meant in terms of the royal economy to found new cities in rural areas, transfer populations to these and exploit local agricultural and other resources.36 It is unlikely that this lesson was lost on Seleukos and his successors. But, no doubt, the idea that Greek settlers were potential soldiers and supporters of the dynasty was not forgotten either.

6.2 Land-grants to individuals

In the Achaemenid empire the king regularly granted land to members of his family and deserving officials, an estate comprising agricultural land, a series of native villages or even towns and cities. It is generally accepted that these land-grants were made in

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33 Gardin/Lyonnet(1978-9:147-138) for Baktria.

34 The Persepolis Fortification texts are a good example of the procedure of collecting commodity taxation in satrapal storehouses and issuing it out again as rations.

35 Without suggesting that the economic was the primary motive, Jähne(1978:141-147) considers that the really new thing in the East was the establishment of the Greek cities, which acted as a catalyst for a growing market economy, where the use of coinage was most important.

36 Hammond(1992:177-178) for the growth of the Macedonian economy under Philip II, which was based on the founding of new towns, the movement of people, the expansion of agriculture with irrigation works, flood control and land reclamation, and the exploitation of precious-metal mines. Also Hammond(1995; 1997:657-671).
usufruct, i.e. that only the revenue of the land was transferred, and that there was nothing to prevent the king from reclaiming the land itself when he saw fit, either because the beneficiary’s term of office had been completed or because he or she had fallen out of favour or because of the death of the recipient. Indeed it was customary for a new monarch to review and, in some cases, reinstate the land-grants of his predecessor.  

Much the same practice continued in the Hellenistic kingdoms, the Seleukid empire being no exception. It was in many ways simpler for the king to make the land grant rather than pay a salary or a stipend to an official or a member of the royal family. In this way he saved the expense and trouble of managing royal land and, at the same time, passed on any risk of a poor harvest or other potential problem to the grantee. As there was always the threat that the king could take back the property, this was also a good way of ensuring the loyalty of the official or relative concerned.

What is then puzzling is why in some cases the king conceded land with the right of attachment to a city. Once the land had become city land, the king no longer exercised direct control over it, as it effectively became private property. It is true that he considered himself, and was so regarded in the prevailing ideology of the period, as ‘owner’ of all the land of the empire, but there were serious practical limitations on his freedom of action with regard to the land both of the subject cities and of the major sanctuaries in the empire. So why then did the king make such concessions, which his Achaemenid predecessors had not made before?

One reason that has been put forward is that kings who acted in such a manner did so because they found themselves in situations of weakness and sought to attract the political support of cities and temples in this way. But this line of argument breaks down when one considers that even under ‘strong’ Seleukid kings, such as Antiochos I and II, land grants with the right of attachment to cities were also made.

Another possibility is that by permitting attachment, the king was in effect increasing the value of his grant. But this is hardly the best way he could have chosen to do this.

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37 Briant(1985) for details of land-grants in Asia Minor.
39 For example, the Aristodikides grant by Antiochos I (Document 2) and the Laodike ‘sale’ by Antiochos II, which could be passed on to a third party (Document 3).
Increasing the amount of land in the grant would have worked equally well without a loss of royal control. So this is unlikely to be the true reason.

In order to arrive at a solution, the first thing to consider is whether the attachment to a city was mandatory in such cases or left to the discretion of a grantee. In other words, was the grantee permitted to retain private land within the confines of royal land or not?

Aristodikides dossier (Document 2)

In his first letter (no. 10) to his official, Meleagros, Antiochos (I) issued orders that the first tract of land to be granted to Aristodikides be attached to either Ilion or Skepsis, whichever Meleagros thought best (δεδώκαμεν ... προσενέγκασθαι ... οὐ ἂν δοκιμάζης). In this transaction the attachment to a city was clearly mandatory and the grantee had absolutely no say in the matter.

In the second land-grant (no. 11), concerning the village of Petra, the king ordered, with regard to Aristodikides, that he be allowed to attach the land to a subject or allied city of his choice (καὶ ἐδόσει αὐτῶν προσενέγκασθαι πρὸς ἕμι ἄμο βούληται πόλιν τῶν ἐν τῇ χώρᾳ[ι] τε καὶ συμμαχίαι). There were some improvement here for Aristodikides as he was now being given bargaining power to negotiate concessions for himself and his land with the cities. As Meleagros’ covering letter to Ilion (no. 13) makes clear, cities were indeed vying for this land and offering payment (crowns) (πολλῶν αὐτῶι καὶ ἑτέρων διαλεγόμενων καὶ στέφανον διδόντων ..). Meleagros himself strongly recommended that Ilion should not fall short in the concessions race (καλῶς δ’ ἂν ποίησαι ψηφισάμενοι τε πάντα τὰ φιλίαθρον αὐτῷ καὶ καθ’ ὑπ’ ἂν συνχωρήσῃ).

Throughout, there is no indication that Aristodikides had received the right to either attach his land-grant to a city or not. Taken in conjunction with the first letter, the situation, in my view, becomes clear. The attachment to a city was mandatory and what was conceded by the king was only the choice of city. Does this mean that no private land could be held outside city (and temple) land? Certainly this is the opinion of some scholars, but the point will be discussed further below.

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40 For no private land outside a city: Rostovtzeff(1910:249; 1941:495); Cohen(1978:66); Haussoullier(1901:32). For Kreissig(1978:69-70): the existence of private land outside a city is not proven, but possible (γῇ ἐωισμένῃ).
In the case of the first parcel of Aristodikides’ land the choice was possibly to be a political one, to be made by the king’s representative in the region. For the second parcel, the king was effectively increasing the value of his land-grant by opening up the way for concessions from the cities. In the event, the second land-grant fell through, as the land had already been conceded to another, and so the king replaced it with an equal area elsewhere (no.12).

The total area of land conceded to Aristodikides was 5,500 plethra, mostly cultivable (ἐργασίμου γῆς), or about 600 hectares. Its value as a grant had been enhanced by the right given to the new landlord to attach the land to a city of his choice, but seemingly at a loss to the king.

Laodike grant (Document 3)

The case of Aristodikides is repeated in Antiochos II’s ‘sale’ of land to his estranged wife Laodike. She was also given the right to attach the land she was to receive to a city of her choice (no.18) (καὶ κυρία ἔσται προσφερομένη πρὸς πόλιν ἢν ἄν βούληται) and again, I interpret this as a right to make a choice of city and not to decide whether or not to attach.

In Laodike’s case, a clause in the agreement allowed her to sell or donate the land, in which case the right of selection of the city of attachment was passed on to the new landlord, unless Laodike had taken care of the matter herself (κατὰ ταῦτα δὲ καὶ οἱ παρ’ αὐτῆς πριάμενοι ἢ λαβόντες αὐτοῖ τε ἔξουσιν κυρίως καὶ πρὸς πόλιν προσίστονται ἢν ἄμβολωνται, ἐκατέρθον μὴ Λαοδίκη τυχάναι πρότερον προσενημένη πρὸς πόλιν, οὕτω δὲ κεκτήσωνται οὐ δὲ καὶ κυρία ἢ προσφερομένη ὑπὸ Λαοδίκης). In other words, Laodike was apparently given a grace period to settle matters with her land before she decided whether to hold on to or dispose of it.  

Obviously, passing on to potential buyers the right of city selection would considerably enhance the value of the land.

The particular way this land transaction was to be conducted may have been due to its special nature as a divorce settlement with an ex-queen. It will be argued (Chapter 8.1) that Laodike was being given the revenue of two harvests with which to pay a nominal purchase price, set at the valuation of the land for tax purposes. Until the payment had

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41 Haussoullier(1901:33): this did not invalidate the rule of mandatory attachment to a city.
been made, the land could remain part of royal land, as for any other land-grant which did not have the right of attachment to a city. In fact, there may have been some difference in the way grants of royal land were handled, as between those to members of the royal family and those to deserving officials. In Achaemenid practice, as seen in the Persepolis Fortification Tablets, these seem to have been distinguished as *ulhi* and *irmatam* respectively, though what the difference was is unclear, except that there must have been one. Possibly the former were intended to be life-time grants, the latter connected with an office.\footnote{Briant(1996:458-460).}

Note that once the attachment had been made by Laodike to a particular city, it was not revocable. If she sold the land, the new owner was not permitted to remove it from the city and attach it to another, as the king made quite clear. This is certainly evidence that in this case private land was not permitted to exist outside city land. Obviously the king could, if the political conditions allowed, himself confiscate land from a city and either retain it as part of royal land or pass it in some way to another city.

**Mnesimachos grant (Document 5)**

This inscription will be used several times and discussed more fully in Chapter 8.1. It is clear that the land-grant to Mnesimachos was in usufruct only, as there was the ever-present danger that the king could take back his land (line 13: ἐὰν δὲ βασιλεὺς ἀφεληται τῇ Ἀρτέμιδι διὰ Μνεσιμαχοῦ ..). This was the typical form of grant of the Achaemenid period (see above) and continued in the Seleukid, i.e land held in usufruct only.

**Ptolemaios grant (Document 4)**

So far one has seen royal land held in usufruct or made private by being transferred to a city. The question now is whether there could be private land within the royal domain and the case usually quoted is that of Ptolemaios, Antiochos III’s governor of Koile Syria, who referred in his letter to the villages he owned by right of inheritance and those that
the king had transferred to him (lines 23-24: εἰς τὰς ὑπάρχουσας μοι κώμας ἠγιγνήσει καὶ εἰς ἅς πατρικῶν καὶ εἰς ἅς σὲ προσέταξες καταγράψαι).\textsuperscript{43}

According to this view, ‘en ktesei’ refers to full ownership, while ‘eis to patrikon’ shows that the land was inheritable. No attachment to a city is noted, therefore this land of Ptolemaios was privately held within the confines of royal land.

But, this terminology does not in fact prove private ownership. A land-grant of Philip II was reconfirmed by Kassandros (Syll\textsuperscript{3} 332). Though the grantee’s grandfather had received the land in inheritable ownership (κεκτησθαί ἐν πατρικώς), and even with the right to sell (ἀλλάσσεσθαι, ἀποδόσθαι), reconfirmation by the new ruler was necessary, showing that this land had not truly become private property.

There is thus, in my view, no evidence that private land could be held outside city and temple land (see 6.3).

**Advantage to a city**

The eagerness of a city to acquire land can easily be explained. Here, in my interpretation of the texts, Aristodikides was offering about 600 hectares of agricultural land, enough to feed several hundred people.\textsuperscript{44} Laodike’s land, valued at 30 talents, may have comprised a cultivable area of the order of 6-7,000 hectares and so have been of huge interest to any cities in the vicinity.\textsuperscript{45}

The agricultural land of the *chora* of many a Greek city of western Asia Minor was too little to feed the city, which became dependent, sometimes heavily so, on grain imports. References to grain shortage (*σταδεία, στανοστία*) are numerous in the sources and cities were frequently forced to expend considerable sums of money on their provisioning, which they could hardly afford, or rely on the generosity of a benefactor or, finally, on the ‘benevolence’ of a Hellenistic monarch who could donate or sell them grain from royal

\textsuperscript{43} Hatzopoulos(1988) also refers to a land-grant of Lysimachos ‘en patrikois’.

\textsuperscript{44} At one person per hectare using dry-farming methods (Chapter 1.5).

\textsuperscript{45} In Chapter 8.1 it will be suggested that a typical village of the size of Mnesimachos’ may have controlled an area of about 1,600 hectares, of which about a third cultivable, valued at around 750 gold staters or 2 \(\frac{1}{2}\) talents. Laodike’s land was valued at 30 talents, 12 times more. Its total area may have amounted to around 20,000 hectares or over 220,000 *plethra*, cf. Hatzopoulos's estimate of 15,000 hectares (1988:52), a huge estate in any case. Of this over 70,000 *plethra* may have been cultivable. The 5,500 *plethra* received by Aristodikides seem puny by comparison.
land nearby. This 'benevolence' probably came with strings attached, a high price, pressure to buy from a near-monopolistic source, political dependence etc. In Antigonos Monophthalmos' letter to Teos (Document 1), for example, one can see how reluctant the Lebedians (and Teans) were to obtain grain from the royal stores and how unwilling Antigonos was to permit them to set up a fund to purchase from elsewhere.

For a Greek city in or on the borders of the Seleukid empire, the possession of enough land was not, in the end, a question of economics but of survival. Expansion of the city chora was at all times a major objective. Boundaries were disputed with neighbours, native villages were quarreled over with royal administrators, royal land-grants were competed for and even land-purchases sometimes made from the kings.

**Advantage to the king**

Outside city territories in royal land no such structural problem existed, though there might be an occasional bad harvest. As was noted earlier in the discussion on the Greek cities, rural areas were required to intensify agricultural production so as to be able to sell a surplus to nearby urban centres in order to acquire silver and so pay their taxes or rents to the royal treasury. A Hellenistic monarch would need to ensure that any excess commodity production from royal land over and above the rationing requirements of his administration and army could be speedily disposed of for silver (Chapter 9), as goods left in store would eventually spoil.

The position then was this. Compared to the Achaemenids, the Seleukid kings had less need of commodity production from royal land. As long as they could sell their surplus production to nearby cities and earn silver, there was no problem, but this was not always so easy, particularly in the world of the old Greek cities of Asia Minor. The independence-minded poleis or sanctuaries of Asia Minor and elsewhere would always be in search of less expensive or less politically-dominated sources of food supply, as the

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46 Préaux(1978:444-446) for a discussion and examples. Note also the case of Herakleia-Latmos (Document 10).

47 e.g. Priene’s disputes with Samos (Welles 1934:no.7) and Miletos (Welles 1934:no.46).

48 e.g. Apollonia-Salbake and its sacred villages (Document 7).

49 e.g. from Aristodikides (Document 2).

50 e.g. Pitane’s purchase of land from Antiochos I (OGIS 335).
case of Antigonos and Teos and Lebedos (Document 1) shows only too well. At the same time the king could not be seen to be forcing himself as a tyrant on subject cities.

In the face of such a problem, a good solution, if you could not dispose of your produce, was to dispose of your land. This seems to have been done on a huge scale for the new Seleukid foundations. The intensification of rural agricultural activity to feed the cities as well as the industrial and commercial activity of the cities themselves probably meant more silver revenue for the king from taxation of different kinds (Chapter 8). So, rather than becoming a loser by donating his land for the foundation of cities, the king probably came out a winner.

On a smaller scale the same might be achieved by selling-off royal land or allowing a grant to be attached to a city. The king lost only if the land was highly productive and he had had no difficulty in selling its produce up to then. If neighbouring cities were not turning out to be such a good market and the king was left with too much stock in his granaries and too little silver in his treasuries, he could pass on his administrative costs and problems to the cities. At the same time he need not suffer any significant loss in revenue. The tribute of a city could be justifiably raised because of the increase in cultivable land. For the city itself, if tribute were assessed at only 1/12th the nominal value of the land (Chapter 8.1), this might have appeared quite reasonable as it stood to gain much more. Where the royal treasury also collected certain city taxes (Chapter 8.4), these would also increase, as more land meant more agricultural production, market transactions, people, animals etc. So a land grant attached to a city was not necessarily a loss for the king. It could, in the end, have been what one calls today a ‘win-win’ situation in which both parties benefit.

6.3 The treatment of temples

Temples were, as economic units, very much like cities from the point of view of the Seleukid administration. In some cases temples were closely attached to cities, e.g. the sanctuary of Labraunda to Mylasa (sometimes), in others they were inextricably linked with them, e.g. the Temple of Jerusalem or the great temples of the Babylonian cities, in

others still they formed self-administered entities within the empire, e.g. Baitokaike in northern Syria. In every case the Seleukid administration maintained a watchful eye on the temples and treated them, their land and economic activities from the point of view of tribute, taxation and also support much as they did the cities.

The Babylonian temples

Very important in the economic life of Babylonia were the temples of the great cities: *Esagila* at Babylon, *Ezida* at Borsippa, *Emeslam* at Cutha, *Bit Reš* and *Irrigal* at Uruk, *Ebabhar* at both Sippar and Larsa, and others.

The temples were proprietors of buildings and arable land and owned slaves, livestock and other moveable wealth. They earned revenue in money and kind both from contributions by individuals in respect of cult and from their own property. They also received financial support at times from the kings, particularly for building and maintenance. Temple revenue paid for the cult of the gods and the maintenance of large numbers of personnel in the gods’ service, some of whom manufactured the goods and foodstuffs that were required. An important part of temple revenue went towards prebend payments to a variety of officials and others associated with the temples. Another part went towards ration allotments to officials responsible for certain functions. All these were typically shared amongst a number of persons and might not even require the performance in person of the duties associated with the corresponding functions. Prebends were, in essence the ‘shares’ of citizens of the cities in the enterprise ‘Temple’ and there was a lively market in the buying, selling and renting of fractions of prebends and ration allotments.

The land possessed by temples may have been extensive but it is not clear how much was owned outright and how much may have been revocable grants by the king to endow the temples with revenue.

A document from Cutha refers to a share of arable land standing in stubble, the gift of the king on the bank of the Euphrates which was claimed by the assembly of exorcists for one of its members. It appears that the assembly of exorcists wished this land to remain

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52 McEwan (1981:121).
as a prebend for one of its members upon the intestate death of another, and was making the corresponding request to the full assembly of the temple.

This is a case of land originally granted to a temple by the king. One should see the grant as one of usufruct only and not of outright possession, though in practice the use of the land might be inherited.

There may have been a net increase in temple land in the Seleukid period, though this is sometimes seen as the result of chance from the interplay between the interests of Babylonian cities and the kings. In view of what has been seen above for Greek cities and private estates, it is likely that the granting of lands to temples was also part of the Seleukid policy of reinforcing those productive units that could eventually generate more revenue through tribute and taxation in silver than could the royal land, though the political advantages of eliciting support from the powerful civic-temple communities may have played an important role.

A cuneiform text may shed some light on the policy of land grants in Babylonia.

Astronomical Diary -273

The first text is an extract from the Diary for 274:5

(36) ... That month, the satrap of Babylonia made the fields (arable land) which had been given in year 32 at the command of the king for sustenance of the Babylonians,
(37) Borsippaeans and Cuthaeans, (and) the bulls, the sheep and everything which [had been given][to the citie[s] and cult centers at the command of the king at the disposal of the citizens,
(38) [tributary to/confiscated property of(?)] the royal treasury....

Though temples specifically are not mentioned here, there is no reason to suppose that they were not included as part of ‘the people of Babylon’, as no real division may have existed between the civic authorities of a Babylonian city and the administrating bodies of the temples in Seleucid times.

54 Spek(1993b:76-77).
One view is that the text refers to a royal land grant, which was revoked after five years, and that the granting of land was an attempt by Antiochus I to elicit support at the troubled start of his reign (Chapter 2). The land may have lain beyond existing untaxed city land and was included within the untaxed limits in 279. In 274 Antiochus revoked this arrangement as he was, according to this view, in desperate need of funds for the Galatian war and also to finance his intended campaign against Egypt for Koile Syria. A second view is that the reclaiming of land was connected with a corresponding granting of land at Seleukeia-Tigris to citizens of the three Babylonian cities who were relocated there at this time.

One may reconcile these two views. Initially the land may have been attached to the cities of northern Babylonia to reinforce their economy, which no doubt attracted political support as well. The land had been taxed previously as royal land and was now transferred to cities where a lower rate of taxation applied on city land, unless exemption had been granted, much as for any Greek city about which we possess information (Chapter 8.1). But if a large number of the citizens moved to Seleukeia-Tigris, the cities could probably not use this land profitably any longer because of the lack of hands to work it. But the tax remained, imposing an unfair burden on the citizens. So the land was taken back by the king, whose responsibility it became once more to cultivate it. The policy of the Seleukids towards the Babylonian temples was generally a benevolent one, since they wished to be seen currying favour with the gods.

The Baitokaike grant (Document 15)

The grant of a village, its land and laoi to the sanctuary of Baitokaike in northern Syria by a King Antiochus has all the characteristics of a land-grant to an individual with the right of attachment to a city. The land was initially a grant in usufruct to a certain Demetrios and now it was given to the sanctuary for all time (.. ἐκρίθη συνχωρηθῆναι αὐτῷ εἰς ἀπαντὰ τῷ χρόνῳ οὗν καὶ ἡ δύναμις τοῦ θεοῦ κατέρχεται κόμητι τῆς Βαϊτοκαίκης, κηθήνι, ἣν πρῶτερον ἔσχεν Δημήτριος Δημήτριος τοῦ Μυσαϊοῦ ..), which may be interpreted as a permanent transfer, much as to a city.

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There is nothing to prove that this is a late Seleukid document, describing a grant of land by a weak Seleukid king attempting to purchase the support of priests, as in Egypt.\textsuperscript{60} On the contrary, the king may have judged that it was in his interests to reinforce the economy of the sanctuary, which he also did by providing tax-exemption for commercial fairs held there twice a month.

The problem of the laoi

At Baitokaike and in other land-grants, the peasants living on the land, the laoi, were transferred with it. There is an ongoing debate about the status of the laoi.\textsuperscript{61} Were they serfs, legally tied to the land? Or were they free peasants, at liberty to move, but practically constrained by their tributary ties to the king? Since the problem is essentially a social one, I will not deal with it here. In my view, it made little difference to royal revenue from whom the king extracted the agricultural surplus.

\textsuperscript{59} Spek(1985:546).
\textsuperscript{60} Welles(1934:282).
\textsuperscript{61} Papazoglou(1997) for the latest discussion of the question and references; Briant(1993) for an earlier discussion.
PART III. THE ROYAL ECONOMY

7. PS-ARISTOTLE'S *OIKONOMIKA*, BOOK II

Book II of the *Oikonomika* is presented as a manual for would-be financial administrators in two sections. In the first, the theoretical part (1.1-8), the four types of ‘economies’ are described: royal, satrapal, city and household, along with their constituent elements. “Economy’ is, of course, to be understood here in the sense of a sphere of financial administration, a kingdom, a province, a city and its *chora* or an individual *oikos*. In the second section, the practical part (2.1-41), a number of financial stratagems of the past are presented as examples both of ways in which funds were actually collected in times of need and of imaginative financial management. The first section ends with a bridging passage to the second (1.8) which explains why it was thought necessary to add the practical examples to the theoretical discussion.

It is now widely accepted that Book II was written in the last quarter of the 4th century and that it was probably a treatise of an Aristotelian scholar intended to provide instruction on the efficient management of financial matters at different levels. As such, and in line with the Peripatetic school’s practical approach to the study of the human and the natural world, it looked for real-life models. For what interests one here, the royal and satrapal economies, these models were apparently found in the financial organization of the Achaemenid empire and those of Alexander and his early successors, exposed to detailed study by Greek intellectuals for the first time. However, this view will be challenged in what follows.

The text of the first section of Book II is a difficult one to understand because of its ‘technical’ language and brevity. My own translation is provided and contrasted with others solely from the point of view of language, principally with the translations of the Loeb edition of the *Oikonomika*, which is commonly used, and that of van Groningen/Wartelle (1968), along with van Groningen’s commentary (1933). Then the problems of date and author are considered and what may have been, in my opinion, the

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1 Following Groningen(1933).

2 The text adopted here is that of Groningen/Wartelle(1968), with comments on alternative readings in Loeb.
real-life model for the royal and satrapal economies. In following chapters each aspect of these economies will be analyzed in detail with reference to the sources.

Text and translation (Book II,1)

Introduction

§1 Τὸν οἶκονομεῖν μέλλοντά τι κατὰ τρόπον τῶν τε τόπων, περὶ οὗς ἂν πραγματεύεται, μὴ ἀπείρως ἔχειν, καὶ τῇ φύσει εὐφυῆ εἶναι καὶ τῇ προαιρέσει φιλόπονόν τε καὶ δίκαιον· ὃ τι γὰρ ἂν ἀπὶ τούτων τῶν μερῶν, πολλὰ διαμαρτήσεται περὶ τὴν πραγματείαν ἢν μεταχειρίζεται. Οἰκονομίαί δὲ εἰσὶ τέτταρες, ὡς ἐν τύπῳ διελέσθαι (τὰς γὰρ ἄλλας εἰς τὸ τοῦτο ἐμπιπτούσας εὐρήσομεν). βασιλική, σατραπική, πολιτική, ἴδιωτική.

‘He who will be involved in some form of financial administration must not be unacquainted with the places with which he has to deal and (must be) intelligent by nature and industrious and just by inclination. For whatever he lacks of any of these qualities will cause many problems for the task he undertakes. There are four types of economy, as they are divided by type - for we will find that the others are included in these - royal, satrapal, city and household.

§2 Τούτων δὲ μεγίστη μὲν καὶ ἀπλουστάτη ἢ βασιλική, <..>, ποικιλωτάτη δὲ καὶ ράστη ἢ πολιτική, ἐλαχίστη δὲ καὶ ποικιλωτάτη ἢ ἴδιωτική. Ἐπικοινωνεῖν μὲν τὰ πολλὰ ἄλλας ἀναγκαῖον ἐστίν· ὅσα δὲ μάλιστα δὴ αὐτῶν ἐκάστη συμβαίνει, ταῦτα ἐπισκεπτέον ὡμίν ἐστίν.

‘Of these most important and simple is the royal (economy), . . ., most varied and easy the city (economy), least important and most varied the household (economy). In most cases it is necessary for these to interact. Whatever the situation is with each in turn, that is what we shall examine.’

Πρῶτον μὲν τοῖνυν τὴν βασιλικὴν ἰδόμεν. Ἐστι δὲ αὐτῇ δυναμένη μὲν τὸ καθόλου, ἐδὴ δὲ ἐκουσά τέτταρα· περὶ <τὸ> νόμισμα, περὶ τὰ ἐξαγώγημα, περὶ τὰ εἰσαγώγημα, περὶ τὰ ἀναλώματα.
'First we will look at the royal economy. This exercises power over the whole and has four aspects: relating to coinage, goods that can be sent out, goods that can be brought in and expenditure.'

The translation in Loeb refers to four departments of the royal administration. However, there is no idea in the text of a fixed organizational division but rather of four main decision areas for financial management that directly relate to the king (also van Groningen's 'quatre aspects'). For ἐξαγόμενα and εἰσαγόμενα Loeb uses 'exports' and 'imports', taken apparently in the modern sense of these terms, which would seem to imply that the king was directly involved in matters of foreign commerce. Van Groningen also translates here 'articles d'exportation et importation', but qualifies this later (see below). It will be argued that this is not what should be understood. The ending -ιμος normally conveys the sense of 'can be' or 'able to' and it will be best at this stage simply to consider that what is meant in the text is the movement of goods, of whatever nature, that could be brought out of or into something.

The royal economy

§3 Τούτων δὲ ἑκαστῶν. Περὶ μὲν τὸ νόμισμα λέγω ποίον καὶ πότε [τίμιον ἢ eὖων] ποιητέον.

'(Let us take) each of these separately. With regard to currency, I mean what to mint of large or small denomination and when.'

Here the Loeb translation seems to be a long way off the mark when rendering this passage as 'I assign to currency the seasonal regulation of prices'. Τίμιον and eὖων can literally be translated 'expensive' and 'good-value/cheap' respectively, which I have linked to denominations in a general sense. Van Groningen considers them a later gloss and translates 'pour les monnaies il s'agira de savoir de quel type il faut en faire et quand'. 'Of what type' can then indicate 'of what material' or 'of what value'. In the case of the

3 Buck/Petersen(1944:186). For example, 'ἠγάλματος' is frequently used for agricultural land that is 'cultivable', 'workable', but not necessarily being cultivated at the moment.
Persian king, he regards these as exactly the same, because the latter minted, in his view, only gold darics and silver sigloi. It should be pointed out here that van Groningen’s model of the ps-Aristotelian economies is the Achaemenid empire, with Alexander as its inheritor.

\[\text{περὶ δὲ τὰ ἑξαγώγιμα καὶ εἰσαγώγιμα πότε καὶ τίνα παρὰ τῶν σατραπῶν ἐν τῇ ταγῇ ἐκλαβοῦντι αὐτῷ λυσιτελῆσει διατίθεσθαι.}\]

‘With regard to goods that can be sent out or brought in, which of them, having been received from the satraps in their provinces, were to be profitably disposed of on his (the king’s) behalf and when’

This passage is translated in Loeb: ‘to imports and exports, the profitable disposition, at any given time, of the dues received from provincial governors’. Van Groningen is, to my mind, nearer the mark when he translates this passage: ‘Pour les articles d’exportation et importation, après les avoir reçus de la part des satrapes dans les contributions, il y aura lieu d’examiner à quel moment et sous quelle forme il sera advantageous d’en disposer’. In his 1933 commentary (pp.34-35) he concludes that the king disposed of large quantities of goods from the tage - which is for van Groningen the tribute (phoros) - all of which he could not use for his own needs. The surplus was either collected at Susa, for example, to be sold, thus constituting the eisagogima, or transported by the king’s agents, e.g. the satraps, to a district to be disposed of there, thus constituting the exagogima.

The first problem with this interpretation is the word ‘tage’. This is not found elsewhere in connection with tribute, which is typically phoros or dasmos. In Hesychius (sv. ταγή· βασιλικὴ δωρεὰ· καὶ ἡ σύνταξις πρὸς τῷ θεῷ ἀναγκαῖον) the sense is quite the opposite, of a royal gift, or of the collection of the necessities of life. These cannot be related in any way to the use of the word in our text. The plural is more helpful. Ταγοί in Hesychius (προστάται, ἄρχοντες, ἔγγειμόνες), Pollux (1.129) and Harpokration (reges Thessalorum) are all commanders and rulers, while Harpokration sv. ταγαῖς· ἄρχαις, ἔγγειμονίας points to their commands or areas of rule. In LSJ the translation ‘command, province’ is adopted for this passage of the Oikonomika.
So one is left with two possibilities, that *tage* relates to tribute or to a satrapy. In van Groningen’s interpretation the satraps sent the king a stipulated tribute from which a surplus might be left over after the king’s needs had been satisfied. This surplus was then sold off by the king or returned to the provinces to be disposed of there. In my interpretation one is not dealing here just with tribute sent to the king but with the more general interaction between the royal and satrapal economies, i.e. everything that moved between the two. One should visualize a part of the ‘royal’ economy within every province and the goods in question were simply able to move into it (*eisagogima*) or out of it (*exagogima*) from the other economies in the same province. That such an interaction did take place had been specifically noted in the text earlier. The provincial administration collected commodity and silver tribute and taxation (which will be considered in Chapter 8 as part of the satrapal economy). Some of this served to cover its own expenses. Any surplus could potentially be directed to the royal economy (*eisagogima*), e.g. royal treasuries and storehouses. The provincial administrators also managed royally-owned land and natural resources, such as mines and forests, along with workshops and other properties in the cities. There were times when the produce of these, as well as the commodity surpluses already collected, needed to be disposed of on the king’s behalf (*exagogima*) and the local officials could see to it that this was done in a way profitable for the king.  

This matter will be discussed at length in Chapter 9, but here is an example of what I mean that supports the use of the specific language in the text. The city of Sardeis had suffered serious damage after its retaking by Antiochos III in 213 and the king wrote to give permission for timber to be cut from the royal forests of Taranza and taken to Sardeis for its reconstruction: .. e[椟]θε[ως] dε καὶ ἄλθην εἰς τὸν συνοικισμὸν τῆς πόλεως κόψαι καὶ ἔξαγαγέσθαι ἐκ τῶν ἐν Ταρανζὼς ἴλων .. (Document 9). The verb used is

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4 Scholars have given quite different interpretations to this passage. For example, Rostovtzeff (1941:443) relates it to the commercial policy of the king, i.e. how much of the merchandise received from the satraps he should sell and export and how much the kingdom needed in the way of imports. Corsaro (1980:1166) sees *tare* as the order of the king which determined the level of the satraps’ contributions. Andreades (1933:91) takes *tare* as tribute, the king fixing what was to be delivered to him in precious metal and kind. Murray (1966:151-153) argues, correctly in my view, that in the royal economy the levying of tribute is not considered, as it is left to the satrapal economy. So *tare* cannot be the word for tribute and τὰ ἔξαγαγόμα καὶ εἰσαγαγόμα are the goods and bullion received from the satrapies, with whose reception, storage and disposal the king is concerned. Briant (1996:467): the movement of goods in and out of royal storehouses.
exactly as in the *Oikonomika*, and the sense of the transaction is from the royal to the city economy.

περὶ δὲ τὰ ἀναλώματα τίνα περιαρετέον καὶ πότε, καὶ πότεν δοτέον νόμισμα εἰς τὰς δαπάνας, ἢ ἀντὶ νομίσματος ὄνια.

‘With regard to expenditure, what is to be cut and when, and whether to meet expenses with coinage or with goods in place of money’

The text in Loeb ends with ‘ἡ ἃ τῷ νομίσματι ὄνια’, which is a rather strange construction. Nevertheless it is rendered in the same general sense: ‘and to expenditure, the reduction of outgoings as occasion may serve, and the question of meeting expenses by currency or by commodities’, but van Groningen is again more accurate: ‘Quant aux dépenses, il faudra voir celles qu’on doit supprimer et à quelle date, et s’il faut régler en espèces ou en marchandises au lieu de monnaie’. The word ‘periaireteon’ is strictly translated as ‘done away with’ in LSJ but this probably also implies reduction of a total expenditure when a part is discontinued. The goods given to meet expenses in place of coinage would normally be a commodity such as grain, e.g. as part of a soldier’s pay, but this is too restrictive. One should envisage the king providing other than commodities in some cases, e.g. a land grant to an official in lieu of a salary or a tax remission to a community with the proviso that it should undertake to support a temple or a royal cult, which may have incurred actual expenses on the part of the king earlier.

The satrapal economy

§4 Δεύτερον δὲ τὴν σατραπικήν. "Εστί δὲ ταύτης εἴδη ἔξ τῶν προσόδων, [ἀπὸ γῆς, ἀπὸ τῶν ἐν τῇ χώρᾳ ἱδίων γινομένων, ἀπὸ ἐμπόρων, ἀπὸ τελῶν, ἀπὸ βοσκημάτων, ἀπὸ τῶν ἄλλων].

‘Secondly, the satrapal economy. This has six types of revenue, from land, from the (king’s) private possessions in the country, from market centres, from dues, from herds and flocks and from other sources.’
In Loeb the second type of revenue arises ‘from the special products of the country’ and the translator may be implying that these include products of industry, but one should rather see revenue involving these included in that from market centres or dues.

Van Groningen considers the listing here of the six types of revenues as an annotation of a scholiast that was later included in the text. The ‘ἀπὸ τῶν ἄλλων’ must have been noted after the original text’s sixth satrapal revenue, ‘ἀπὸ τῶν ἀνθρώπων’ had become corrupted (see below).

Αὐτῶν δὲ τούτων πρώτη μὲν καὶ κρατίστη ἢ ἀπὸ τῆς γῆς, αὐτὴ δὲ ἐστὶν ἢν οἱ μὲν ἐκφόριοι οἱ δὲ δεκάτην προσαγορεύουσιν.

‘Of these the first and most important (revenue) is that from land, which is what some call ekphorion and some dekate.’

In the Loeb translation ‘produce-tax’ and ‘tithe’ are completely general and do not clarify the difference, if any, between the two terms. An ekphorion is described in LSJ as ‘a payment assessed on produce, especially a rent paid in kind’. Van Groningen translates as ‘impôt foncier’, i.e. ‘land-tax’ or ‘ground rent’, which is probably more correct. The term is rarely found in the sources, but phoros is usually applied to tribute, which is normally a pre-determined fixed amount. On linguistic grounds a dekate is literally a ‘tithe or tenth part’, though it may sometimes be used in a general sense as any fraction in connection with taxation. With land, a proportion of the harvest should be understood.5

Since land is mentioned in general, it is reasonable to assume that all kinds of land are covered in this passage, including that belonging to the king, the cities, the temples and the subject dynasts and peoples (ethne).6

There is a problem with the phrase ‘which some call ekphorion and some dekate’. Strictly speaking this would imply that there was only one kind of revenue on land, with different

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5 Also Rostovtzeff(1910:245,n.2).

6 There is by no means agreement on how this passage should be interpreted. Some scholars consider that it refers only to royal land, private land being dealt with in the second type of satrapal revenue, e.g. Rostovtzeff(1910:241), Corsaro(1980:1165; 1985:86). Cavaignac(1923:114): the ἐκφόριον relates to royal land, the δεκάτη to private land.
names in different places. But this is probably not how one should read the text. If ps-Aristotle uses ‘dekate’ again for the revenue from herds and flocks, this time with ‘epikarpia’, he is possibly trying to distinguish between the two forms this revenue from land may take, the one based on a fixed assessment (ekphorion), the other on a proportion of the agricultural harvest (dekate).

Δευτέρα δὲ ἡ ἀπὸ τῶν ἵδιων γινομένη, οὐ μὲν χρυσὸν, οὗ δὲ ἀργύριον, οὗ δὲ χαλκός, οὗ δὲ ὀπόσα δύναται γίνεσθαι.

‘The second (revenue) is that from (the king’s) private possessions, in some place gold, in another silver, in another copper, in another whatever is available.’

Here the examples given by ps-Aristotle make clear that one is dealing mainly with natural resources, such as mines, and not Loeb’s ‘special products’. At the same time ‘ta idia’ points to private ownership. As far as the satrapal economy was concerned, this can only have meant the king’s property, since any other private property probably existed only under the city economy (Chapter 6.2). Since land had already been dealt with in the first satrapal revenue, and was not mentioned again here, everything else that the king owned is likely to have been included, e.g. mines, quarries, forests, salt pans and perhaps even commercial and industrial properties within cities.

Τρίτη δὲ καὶ ἡ ἀπὸ τῶν ἐμπορίων.

‘The third (revenue) is that from market centres.’

’Εμπόρια is rendered in LSJ both as ‘trading stations, market centres’ and as ‘merchandise’, but the Loeb translation only considers the former and includes taxes on sales generally in the fourth revenue. Van Groningen translates more restrictively as

7 Rostovtzeff(1910:241) noted that ἐκφορίον was only used in Egypt for the land tax, which was known elsewhere as δεκάτη, to explain this.
8 Rostovtzeff(1910:241-242), however, interpreted this as private land paying taxes in precious metals, although he considered the possibility of natural resources belonging to the king, which he later accepted (1941:444).
'ports de commerce', i.e. harbours which are trading centres, which is probably correct. An _emporion_, however, was not necessarily on the sea, although in the classical Greek world this would almost always have been the case. In Hellenistic Asia any large inland city might be an _emporion_, particularly those situated on major river systems, e.g. Seleukeia-Tigris or Antioch. What is to be understood here, probably, is trading activity on some scale, probably involving the transport of goods in bulk by water and not the usual market of a town or village. ⁹

Τετάρτη δὲ καὶ ἡ ἀπὸ τῶν κατὰ γῆν τε καὶ ἄγοραιον τελῶν γινομένη.

'The fourth (revenue) is that produced from tolls by land and sales taxes.'

In Loeb ἀπὸ ἄγοραιον is translated as 'from sales', while van Groningen's 'marchés' may be taken as 'markets' or 'market transactions'. In LSJ the translation 'market day' is also a possible one.

There is clearly a problem with the mention of 'land' here, as revenue from land had already been considered in the first source of satrapal revenue. The distinction is that ἀπὸ γῆς was used there, suggesting that taxation on produce was meant, whereas here κατὰ γῆν may imply dues on land ownership and legal transactions affecting land. However, the preposition κατὰ associated with land may also be understood in the sense of 'by' land. This would link nicely with the sales tax that immediately follows. First a product was transported by land and subject to tolls along the way. Then it was sold in a market where a sales tax was collected. If this is the correct interpretation, it would make for a clear distinction between traffic by water in the third source of revenue and by land in the fourth.

One inscription may be revealing in this context. At Herakleia-Latmos (Document 10), Antiochos III was called upon to grant the city and its port exemption from a number of taxes, including τὰ τέλη καὶ ἑγγαία καὶ τὰ ἐσαγώνια καὶ ἐξαγώγια. Clearly there are two groups of taxes involved, each commencing with τὰ. The first group matches ps-

⁹ Again, the interpretation is difficult. For example, Rostovtzeff(1941:444) considers customs dues, harbour dues and revenue from fairs.
Aristotle’s fourth revenue very well, i.e. tolls by land and sales taxes, while the second relates to customs duties, and so to the third revenue.

However, it would leave open the question of which revenue of the satrapal economy was meant to include dues on land transactions. Logically this could be the first.

Πέμπτη δὲ ἡ ἀπὸ τῶν βοσκημάτων, ἐπικαρπία τε καὶ δεκάτη καλομένη.

‘The fifth (revenue) is that from herds and flocks, called epikarpia or dekate.’

In Loeb βοσκημάτων is rendered as ‘from cattle’, but this is too restrictive. Van Groningen’s ‘troupeaux’ is more general. An alternative manuscript reading of νομισμάτων (‘of coinage’), that he simply points to without adopting (version Γ), should probably be rejected, as coinage was clearly part of the royal and not the satrapal economy.

In Loeb ἐπικαρπία is translated as ‘first-fruits’. In LSJ the specific meaning given to this passage is ‘tithe paid for the pasturage of animals’. Both seem unlikely. As with the tax on agriculture, what we probably have here is a tax on animal husbandry, mirroring that on agriculture, which might be either a fixed amount (epikarpia) or a proportional amount of a herd or flock (dekate). A pasturage due is generally described as an ennomion, which might be included in either type of revenue.

Ἐκτη δὲ ἡ ἀπὸ τῶν ἀνθρώπων, ἐπικεφάλαιον τε καὶ χειρωνάξιον προσαγορευμένη.

‘The sixth (revenue) is that from people, called both head-tax and artisan-tax.’

In Loeb ἀπὸ τῶν ἄλλων (‘from others’) is the reading, which might naturally be expected to end such a list of revenue sources, implying the existence of a variety of other sources which it was not considered important enough, or general enough from the point of view of such a treatise, to enumerate. However, there is a problem, because the head-tax and artisan-tax then define this ‘other’ further. Rather than something vague, a kind of
'etcetera', this becomes a quite specific tax, on people. Van Groningen has rightly pointed this out and corrected to 'ἡ ἀπό τῶν ἀνθρώπων'. This makes more sense. An instruction manual is meant to be specific. Land and animals having already been dealt with in terms of a fixed or proportional tax, what was left were people.

In Loeb ‘χειρονάξιον’ is translated as ‘tax on industry’ and it may be implied that it was applied to the products of industry. I should prefer to see it as a particular form of head tax on a certain category of the population, the artisans, whereas ‘epikephalaion’ may have covered everyone.

**Summary of revenues**

Despite the difficulty of interpreting precisely what each source of satrapal revenue in ps-Aristotle was intended to comprise, it is clear that there were three basic groups: 1) land and its products, 2) goods and their transportation and sale and 3) animate objects, people and animals.¹⁰

**Order of importance**

A question that might be asked is whether the order of the six satrapal revenues is significant. If the author had simply wished to list revenues without any particular criteria, he had no need of ‘πρώτη’, ‘δεύτερα’, ‘τρίτη’, etc. So his selection has probably been made in terms of importance.¹¹ A point in favour of this is that the very first revenue, that from land is termed ‘κρατιστή’, translated in LSJ as ‘best, most excellent’. That agriculture was by far the most significant element of the underlying economy of the Near East has already been discussed in Chapter 5. That it was also the first source of royal revenue, the author of the Oikonomika makes clear. There is a natural link between the two, which makes ‘first’ here equivalent to ‘first in importance’.

If the order given by ps-Aristotle is meaningful, as I am suggesting¹², this is how the different elements of the underlying economy would rank as sources of revenue: land and

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¹⁰ Rostovtzeff(1910:241).
¹¹ Rostovtzeff(1910:241).
agriculture, natural resource extraction from the king's properties, trading activity at market centres served mainly by water, tolls and trading activity by land, animal husbandry and people. It seems unlikely that this would be the order recommended to his students by the author of the *Oikonomika* unless he had a very specific state in mind, as it is quite unlikely that each and every one, if there were several, would have had the same priorities. Which this state may have been and when will be considered later.

**The continuation**

In §5 and §6 the city and household economies are described and this first section of Book II effectively closes with:

§7 'Επεί τοῖνν τὰς διαιρέσεις εἰρήκαμεν, μετὰ τούτο πάλιν νοητέον ἡμῖν ἡ σατραπεία, περὶ ἣν ἂν πραγματευόμεθα, ἡ πόλις, πότερον ἢ πάντα ἄρτι διελόμεθα ἡ τὰ μέγιστα τούτων δυνατὴ φέρειν ἐστί· κεί δ' ἐστί, τούτων χρηστέον.

'So, having discussed the divisions (of financial administration), we must next consider whether the satrapy, with which we may be dealing, or the city, is able to support all (the revenues) we have just detailed or most of them and, if so, to make use of them.'

Μετὰ δὲ τούτο ποῖαι τῶν προσόδων ἡ τὸ παράπαν οὐκ εἰσί, δυνατάς δ' εἰσί· γενέσθαι, ἢ μικράν νῦν οὕσαι μείζους οἶαι τῆς κατασκευασθῆναι, ἢ τῶν ἀναλομάτων τῶν νῦν ἀναλομμένων, τίνα τε καὶ πόσα περισσευόντα τὰ ὅλα μηθὲν βλάψει.

'And after this (we must consider) which of the revenues, which are either not present at all and can be made to exist, or which are now small and it would be possible to make larger, or of the expenses that are now incurred, which should be cut and by how much without damaging the whole (administration).'

13 In Rostovtzeff (1910:243) the main income came from royal land, private land and, possibly, natural resources.
What is suggested is that the financial administrator of either a province or a city needed to study the different types of revenue from his particular area of jurisdiction carefully and increase those that were present. He needed also to determine if other sources of revenue could be tapped. There seems to be the sense here of a duty to maximize revenue generation (which is what I have considered in Chapter 3 a cardinal point in the financial policy of the Seleukid kings). With regard to the other side of the balance sheet, expenses were to be cut where possible, but not if this would be damaging overall. One could think, for example, of a reduction in military expenses to a level which might prove harmful for the security of a province.

7.2 Intended audience

Book II appears to have been intended as a manual for would-be financial administrators. In the introduction the programme of the treatise is set out clearly, that there were certain fundamentals which could be learnt, but which required natural intelligence, industriousness and a sense of justice in order to be applied. The fundamentals would be taught, as becomes apparent in the development, by describing the different types of financial administration possible and the matters each dealt with. As for intelligence, industriousness and justice, these would not be taught, but examples of their application would serve instead.

For the would-be financial administrators studying the manual, it is likely that suitable employment was envisaged. Therefore the Oikonomika probably describes the conditions and opportunities of its time.

7.3 Date of the work

It is accepted by most scholars, following the analysis by van Groningen(1933), that Book II of the Oikonomika dates to the last quarter of the 4th century BC. However, it is

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\[14\] e.g. Bikerman(1938:120): immediate predecessors of the Seleukids; Corsaro(1980:1164-1173 and 1985:84): between 323 and 305, or at any rate in the transition from the empire of Alexander to the kingdoms of the Successors; Rostovtzeff(1941:441): last years of the 4th or first years of the 3rd century, with the Antigonid empire as a model probably, though very similar to the Seleukid empire. But other scholars place the work later, e.g. Musti(1987:135): possibly reference to the Seleukid empire; Andreades(1929:3): in Syria under the Successors (though whether Antigonos or Seleukos is not clear); Hornblower(1994:62): probably Seleukid conditions with Persian features.
worth examining the basis for this, with the help of the history of the work given by van Groningen himself\(^\text{15}\).

Commencing with Niehbuhr in the 19\(^{\text{th}}\) century, scholars uniformly ascribed the work to the 3\(^{\text{rd}}\) century BC, differing only in whether it had been written towards the beginning, middle or end. Wilcken was the first to point out that the collection of financial stratagems contained in the second section had been presented essentially in chronological order, but that none dated to after Alexander’s death. For him this implied that the collection had been made at about that time or slightly later. However, there was a problem in connecting the stratagems to the first, theoretical, section. The key lay in the linking phrase of §8:

\[\begin{align*}
\text{§8} & \quad \text{Τὰ μὲν οὖν περὶ τὰς οἰκονομίας τε καὶ τὰ μέρη τὰ τούτων εὐρήκαμεν. Ὅσα δὲ τίνες τῶν πρῶτον πεπράγασιν εἰς πόρον χρημάτων, εἰ (τε) τεχνικῶς τι διώκησαν, ἂ ὑπελαμβάνομεν ἀξιόλογα αὐτῶν εἶναι, συναρχόχαμεν. οὐδὲ γὰρ τούτην τὴν ἱστορίαν ἀξιέναι εἶναι. ἐστὶ γὰρ ὅτε τούτων ἐφαρμόσει τις οἷα ἂν αὐτὸς πραγματεύῃ.}
\end{align*}\]

'So we have investigated the (different forms of) financial administration and their parts. And we have gathered together (examples of) whatever some of those in times past did to collect funds or of matters which they managed skillfully, which we considered to be worthwhile. For we do not believe that describing these would be useless. It may be possible for someone to apply some of these at some time in matters with which he deals.'

Here Wilcken agreed with his predecessors that πινές τῶν πρῶτον, whose stratagems were now going to be described by the author of Book II, referred to people who had been living some time in the past. Therefore, the first section of Book II must have been written later by a different person to the one who made the stratagem collection. If the latter worked at the time of Alexander’s death or just after, the former must have written ca.250. The suggestion was that a student of the Lykeion had made a collection of stories to serve as practical examples in what was to be a treatise of Aristotle, which either never materialized or existed only in the form of teaching notes or was lost. This collection was

\[^{15}\text{Groningen(1933:37-48).}\]
discovered many years later and added to a short theoretical treatment of the subject by some other Aristotelian, perhaps with the help of the original teaching notes.

This idea of two separate sections was further developed by later scholars. Andreades pointed out that there was no connection between the two. The first section had a scientific basis and showed the mark of a well-informed author, the second was simply intended to divert. More importantly, §7 promised a further development of certain topics, which never materialized or was lost. To replace it the collection of stratagems was added with the bridging §8. However, Andreades reversed the chronological order of the sections. In his view the first had been prepared right at the end of the 4th century, exactly at the time when there were no tyrants about, since no 'tyranny' economy is mentioned, and the second added at the end of the 3rd century. This does not seem to be a valid argument, as we are told in §1 that other economies were included in the main four and so were not considered by the writer.

Van Groningen reversed scholarly opinion. He tried to show that Book II of the Oikonomika was not an epitome, that both sections formed a unity, that they dated to the 4th century and that there was only one author. This has now been accepted by the majority of scholars, but it will be useful to reexamine van Groningen's arguments.

A 4th century date is based on the argument that the king whom the author had in mind must have been the Achaemenid king or one who inherited from him. No reason is given for this. Apparently the fact that a Persian king ruled over an empire divided into satrapies was reason enough. However, against this there is a serious objection. Coinage was certainly not the prerogative only of the royal economy in the Achaemenid empire. The 4th century, right down to the last years of Achaemenid rule, saw the minting of numerous satrapal, provincial and city silver coinages all along the coasts of Asia Minor, Phoenicia and Palestine. In these regions hoard evidence indicates that the royal issues, the darics and sigloi, circulated in a distinct minority. Yet coinage is not mentioned in the satrapal economy. Therefore the Achaemenid empire cannot have been the specific model for the Oikonomika, Book II.

Van Groningen's alternative model was the kingdom of Alexander, as inheritor of the Achaemenids. He pointed out that ca.325 the reader of the treatise would have known of only one kingdom, that of Alexander, which bore some resemblance to the Achaemenid
empire. Since, according to him, the empire of Alexander did not exist after 306/5 (with their self-promotion as kings by the principal Successors), and indeed after the death of Alexander IV in 310, the work could not be representative of the situation then, i.e. Antigonus Monophthalmos' short-lived kingdom (to 301) was not the model for the Oikonomika.

My earlier point about coinage is now no longer valid, since Alexander did in fact put an end to satrapal issues, with one or two minor exceptions. However, there is another problem. The latest stratagems in the second part of the Oikonomika date to not earlier than 325/4. Thus, if the author were visualizing Alexander’s empire and writing a manual for would-be administrators for it, this would have been prepared in just the two years until Alexander’s death. After this, what sort of a royal or satrapal administration could one speak of when the Successors vied for power, satrapies became in effect little kingdoms and Alexander’s heirs were kings in name only? If anything, the only candidate as a model at this time is the one whom van Groningen rejects, Antigonus.

Van Groningen’s point that the author must have been influenced by the world situation at his time is, of course, valid. But he then argues that, since the mercantile character of the Ptolemaic economy is not reflected in the treatise, the work cannot have been written at a time when this was in effect, presumably from the start of the 3rd century. However, would someone living in Asia Minor or Syria then have really been influenced by what went on in Egypt, or even understood it well enough? Would he not have looked at something closer to home, e.g. the Seleukid empire? A model for would-be administrators is unlikely to have been based on a unique situation, such as Egypt’s, which had been, in any case, just a single satrapy in the Achaemenid empire.

Van Groningen suggests that an author writing ca.275 would not have known of one kingdom but of several with nothing in common with the Persian empire. In the case of the Seleukids there is for him just the mention of satrapies. This is not true, as satrapies, as organizational units, come very much into play in both literary and epigraphic sources. In Chapter 13 I hope to show that the financial administration of the Seleukid empire inherited a great deal from that of the Achaemenids.

16 Stratagem 34: Antimenes in Babylon as the replacement of Harpalos; stratagem 33: Kleomenes in Egypt, with whom Alexander would have communicated after his return from India.
Turning now to the different sources of revenue noted in the *Oikonomika* for the satrapal economy, one can find only a few evidenced for the Achaemenid empire and hardly any for Alexander's. On the other hand, every single one is to be found in texts referring to the Seleukid empire. Perhaps this is simply due to a lack of source material and the Seleukids copied what they had found, rather than innovating themselves. But there is evidence to show (Chapter 13.10) that significant financial changes did take place early in the reign of Antiochos I and that the sources of revenues tapped then were more varied than in earlier times.

The unity of the two sections is proved, according to van Groningen, because both were written from a practical point of view. This is a rather surprising evaluation of the first section with its strict listing of the different types of economy and the constituent parts of each. The contrast with the 'case studies' afterwards is most marked. But there is an important argument in favour of two different authors. The first section starts off with the statement that the would-be financial administrator must possess natural intelligence, industriousness and a sense of justice. In many of the stratagems this last quality is totally lacking, hardly training for the kind of administrator that the author of the first section may have had in mind. Van Groningen concedes this point but argues that the pupils of the treatise would be administering barbarians and so there would be less consideration for these! He forgets, first of all, that Greco-Macedonians would have been amongst those governed and, secondly, that the administrators themselves were in some cases 'barbarians', representatives of indigenous populations. The modern view of the Hellenistic kingdoms of Asia is not the one that prevailed in van Groningen's times of a Greco-Macedonian ruling colonial élite rigidly separating itself from barely-civilized natives.

The objection raised by many scholars concerning the 'πρώτερον' linking the two sections of Book II is not a significant difficulty for van Groningen, who does not consider this an exact term. True enough, if the word is taken in isolation, but not so in the present

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17 Briant (1996:410-411) notes these and comments: 'Les continuités achéménido-hellénistiques amènent à supposer que d'autres taxes connues à l'époque séleucide pourraient remonter au temps des Grands Rois: mais la preuve documentaire manque'.

18 The different forms of revenue will be discussed more fully in Chapter 8 in the order presented by ps-Aristotle.

19 Andreades (1929:3): the second part of the book is not seriously trying to instruct, but to entertain.
context. The text states ‘ὅσα δὲ τινὲς τῶν πρῶτερον πεπράγασιν’. An aorist active participle is implied between πρῶτερον and πεπράγασιν as the object of τῶν with the sense of ‘living’, such as βιωσάμενοι. So the translation should read ‘those things which some who have lived in the past had done’. Such a description would not be considered to apply to a person currently alive. Thus one would expect the writer who produced such a statement to belong to at least the next generation after the last person referred to in a stratagem. Since this must be one of Philoxenos (no.31), Kleomenes (nos.33, 39), Antimenes (nos.34, 38) or Ophelias the Olynthian (no.35) with stratagems from ca.325-323, and if one generation is taken as 25 years, the first section of Book II cannot date to before 300. We do know that Kleomenes was put to death by Ptolemy in 322/1 (Berve no.431). Of the other three, a Philoxenos is mentioned in 321 as having received the satrapy of Kilikia in the Triparadeisos settlement (Arr.Succ.1.34) and is probably the same as the earlier satrap of Karia in the stratagem (Berve no.794), but we have no knowledge of his fate after this, nor of that of Antimenes (Berve no.89) or Ophelias (Berve no.599). At the time we hear of them, however, they occupied important positions in the administration, probably in the prime of their lives. It is not unreasonable to suppose that one or more may have lived much longer, and that ‘πρῶτερον’ should be understood as ‘long since dead’. In that case the date of the first section of Book II can be brought forward still further, to ca.275.

I shall accept van Groningen’s point about the author living at a time when he could observe a kingdom that exhibited all the traits he was writing about, and particularly a fully-developed satrapal organization comparable to that of the Achaemenid empire with, in addition, widespread use of coinage and a comprehensively varied system of collecting revenue. The kingdom of Lysimachos might appear too small to fit the bill, that of Seleukos prior to Korypedion (281) too remote to serve as an example. It was only when all of Achaemenid Asia, or at least most of it, came together under one master, Seleukos, that the conditions were again right to allow one to speak of a royal and a satrapal economy.

There is another point. The distinction of revenue stemming from water-borne trade from that carried by land can only have had meaning for a Greek writer viewing the land-locked East at a time when the new cities founded there had had time to develop into important trading centres. By the reign of Antiochos I this was certainly the case, e.g.
Seleukeia-Tigris and Antioch-Orontes had become nodal points of commerce, the ports of Seleukeia-Pieria and Laodikeia-Mare gave access to the Mediterranean, Seleukeia-Eulaios (=Susa) had been connected to the Persian Gulf, Ai-Khanoum and Antioch-Tarmita controlled traffic on the Oxos etc. Furthermore there is evidence that important changes were made in financial administration in the early years of Antiochos I, which will be discussed in Chapter 13.10. Thus the 270’s seem to be the likeliest period, in my view, in which the first section of Book II was written. The second section had been prepared ca.325. Whether it was added to the first section from the very beginning or later is not clear.

Van Groningen’s strongest argument for dating the whole of Book II to the 4th quarter of the 4th century is its attribution to Aristotle, so, according to him, it must have been prepared in or near his time. This is true of the just under 90% of the Book, the part that deals with the stratagems. It has been accepted by me that these were prepared ca.325 and it is not impossible that Aristotle himself was aware of the collection. It is also likely that, faced with a new scholarly problem, the best method of administering Alexander’s empire, Aristotle and his school would have been devoting thought to this and probably preparing notes at the time. So it would not be unusual for a later scholar of the Aristotelian school to observe that the conditions of his own time had again reverted to those in Alexander’s, with a similar empire in existence, and so use whatever he could find on the subject, update it for the current situation, add the stratagems already collected and produce what we now have as Book II. Since the bulk of the work was already linked to Aristotle, and most of the ideas of the first part also, it is not strange that Aristotle’s name continued to be associated with it.

7.4 Conclusions on the Oikonomika, Book II

My conclusion, in brief, is that the first section of Book II of ps-Aristotle’s Oikonomika, the theoretical treatment of the four types of economy, is likely to date after 300 and probably in the 270’s, when it seems to be describing the administration of the Seleukid empire under Antiochos I. The order of satrapal revenues is indicative of their relative importance then. The second section, the financial stratagems, had probably been
collected ca.325 and were added on to the first section either when this was written or possibly even later.

In the chapters that follow, each aspect of the royal and satrapal economies in the *Oikonomika* will be dealt with from the point of view of the Seleukid empire. I will hope to show there is an excellent fit between theory and practice.
8. REVENUE

First the normal sources of income of the Seleukid kings are identified and, wherever possible, the manner in which these were tapped, the description of the satrapal economy in ps-Aristotle’s *Oikonomika* (Chapter 7), with its six types of revenue, serving as a useful guide. Then various cases of *ad hoc* revenue generation are discussed. An assessment of the level of total revenue at different times is left to Chapter 12.

8.1 Revenue from land

Αὐτῶν δὲ τούτων πρώτη μὲν καὶ κρατίστη ἡ ἀπὸ τῆς γῆς, αὐτὴ δὲ ἐστὶν ἢν οἱ μὲν ἐκφόριοι οἱ δὲ δεκάτην προσαγορεύοντον.

‘Of these the first and most important (revenue) is that from land (which is what some call *ekphorion* and some *dekate*).

In the overwhelmingly agricultural economies of the ancient Near East, taxation of land and its produce was a major source of revenue for ruling powers.¹

Two well-known inscriptions of the 3rd century are the starting point in trying to work out the manner in which revenue was generated by the Seleukid administration from royal land and land-grants. This is followed by a study of inscriptions relating to the taxation of city and temple land.

The Mnesimachos inscription (Document 5)

Mnesimachos listed the land grants he had received from Antigonus (Monophthalmos) and the annual *phoros* assessed on each. Specifically, the villages of Tobalmoura, Periasasostra and Iloukome paid 50, 57 and 3 3/12 gold staters respectively, while the *kleroi* in Kinaroa and Nagrioa paid 3 and 3 4/12 gold staters, the total *phoros* amounting to 116 7/12 gold staters per year. Out of all this property two persons, Pytheos and Adrastos, had received an *exairema*, a portion set apart, which consisted of land at Tobalmoura and Periasostra (*ἐκ πασῶν ὡν τῶν κωμῶν καὶ ἐκ τῶν κλήρων .. ἐξαίρεσις*).

This may have been the two kleroi mentioned, but I shall argue against this.

The loan Mnesimachos obtained from the temple of Artemis, with the land serving as security, amounted to 1,325 gold staters. Presumably its size was determined by the value of the land. Could this have been just an estimate made by the temple? Unlikely, as there was no real-estate market that could be referred to, this being a royal land grant to Mnesimachos in usufruct. Note that further on in the inscription the temple safeguarded itself in case the king decided to take back his land. So there must have been some official valuation on which the temple could base itself and such could possibly be the one for taxation purposes. The clue, of course, is in the amounts of annual tax noted for each land parcel, which are very precise numbers, suggesting that the land had indeed been carefully assessed before the tax liability was set.

But why mention the exairema of Pytheos and Adrastos, unless this land was not part of the arrangement between Mnesimachos and the temple, at least insofar as its revenue was concerned, which is what would have primarily interested the temple authorities. If one assumes, for the moment, that the exairema consisted of the two independent kleroi, the total tax assessment of the three villages alone would have been 110 3/12 gold staters and the value of this land of 1,325 gold staters almost exactly 12 times as much. In fact the tax on 1,325 staters should have amounted to 110 5/12 staters. Such a close fit is encouraging, suggesting that a 1/12th rate of taxation is correct, but not good enough.2

Exactness is required, as a valuation of property for the purposes of a 1/12th tax would simply not allow for wasted fractions. There are three other reasons why the isolated kleroi are not likely to have been the exairema of Pytheos and Adrastos. Firstly the text does not say so, as it could easily have done, but the wording is clear that their land was included within the village areas of Tobalmoura and Periasasostra. Secondly, Pytheos and Adrastos are not distinguished as separate land-holders, but apparently held the two properties jointly, as only one exairema is mentioned. Thirdly, the two pieces of land seem to have been of totally different size, the one in Tobalmoura with a country house, dwellings of slaves and laoi and cultivable land of an area requiring 15 artabai of seed,

2 Alternatively, Descat(1985:100-102), who suggested the equivalence of the exairema with the two kleroi and determined the 1/12th tax rate, regarded the very slight difference as resulting from a daric-stater conversion when the original Achaemenid assessment was converted into Greek currency. Cavaignac(1923:122-125): 1,325 staters as the value of the land and 8-9% as the rate of tribute.
the other in Periasasostra with housing plots and cultivable land of areas requiring only 3 artabai of seed each. Clearly the part of the exairema at Tobalmoura is about three times larger than the one at Periasasostra and would have been valued differently for tax purposes, yet the tax paid by the two independent kleroi is about the same. The conclusion then is that the exairema is not the two kleroi mentioned in the text.

The position then is this. For his total property, Mnesimachos was assessed for 116 7/12 gold staters. Excluding the exairema of Pytheos and Adrastos in the two main villages, the assessed value was 1,325 staters and the tax would have been 110 5/12 staters. So the tax assessment of the exairema was probably 6 2/12 staters, almost exactly equal to that of the two independent kleroi of 6 4/12 staters. In other words Pytheos and Adrastos, two individuals, effectively received the area of two kleroi within the village territories.

The ekphorion

Here then is evidence of a ps-Aristotelian ekphorion, a fixed amount of tax assessed on land, essentially a ground rent. One can also see that a detailed assessment of land value must have been made and that an annual tax rate of 1/12th was applied on this, at least in this region of Lydia.

Now it would be extremely interesting to know on what basis the assessment was made. A clue comes from Herodotos(6.42), who described the method of tax assessment of the Ionian cities in 493/2 by Artaphernes, who measured their land by parasangs and then set the tax (.. καὶ τὰς χώρας σφέων μετρήσας κατὰ παρασάγγας, τοὺς καλέσας οἱ Πέρσαι τὰ τριήκοντα στάδια, κατὰ δὴ τούτους μετρήσας φόρους ἔταξε ἑκάστουι ..). It has been suggested that the parasang of area here would be the perimeter enclosed by a parasang of length, which is roughly 5 km, and so about 160 hectares, on which an assessment of one gold mina was made. But the argument, though useful and thought-provoking, is too speculative.3

3 Descat(1985:106-107). A parasang of area, however, is more likely to be a square with a side of length one parasang, on the analogy of the Greek plethron, or about 25 rather than 1.6 sq.km. Elsewhere, Herodotos (2.6) characterises the appropriate units of land measurement in Egypt as an orguia, a stadion, a parasang and a schoinos as appropriate respectively to increasing sizes of land ownership. A city’s territory was more likely to be estimated in larger parasangs than smaller. Furthermore, though land measurement only is noted in Artaphernes’ measures, obviously the necessary first step in any
A different approach might work better. Let us assume that Mnesimachos' two main villages were much like those one might find in the Aegean world today. These are nearly always of a nucleated pattern, separated from their neighbours by about 4-5 km depending on the terrain, so that a farmer need not spend more than an hour in travel time, or a little bit more, to service his most distant fields. Thus, a village's land usually occupied an area of some 1,300 - 1,900 hectares. The question, of course, is how much of this could be cultivated, with 20-40% probably typical. Using the mid-range figures and assuming cereal cultivation with a biennial fallow system, the area sown each year would amount to about 250 hectares. Barley was the main cereal grown in the ancient Near East because of the limited rainfall of the region (Chapter 5.1). At a rate of around 1,200 litres/hectare, a Mnesimachos-type village might be expected to produce about 300,000 litres of barley a year. I have assumed for this exercise that only barley was grown on the land as a kind of equivalent of all foodstuffs.

Returning once more to Herodotos(6.42), one can envisage how Artaphernes' measures may have been applied in practice. Officials of his administration are likely to have visually inspected the land belonging to the Ionian cities and estimated or actually measured different homogeneous areas, assessing the quality of each for agriculture mainly, but also for animal husbandry and other economic activities. Done at the macro level of a city's territory rather than for each citizen's land plots, this would have been a manageable task and one can envisage that a city (or village) would have been characterized as being capable, under normal conditions, of producing so much grain (essentially barley in the ancient Near East, but some wheat in western Asia Minor) and so

assessment, there is nothing to preclude that additional factors were not taken into account. Indeed, different types of land are unlikely to have been uniformly rated, as their crop-bearing capacity, and so tax-paying ability, could vary considerably.

4 Descat (1985:107): 1,500-2,000 hectares for Turkish villages in the region, with 30% cultivable, so 225-300 hectares each year under a biennial fallow system; he estimates Mnesimachos' estate at 3,500 hectares. Doxiadis/Papaioannou(1974:49): an average village area of 2,100 hectares in antiquity. Kramer (1982:157): from a survey of 96 villages in western Iran, an average population of 488 each. At a survival rate of 450 litres of barley-equivalent per person per year (Chapter 12), this would require 220 hectares to be cultivated each year plus more for any surplus.


6 Kreissig (1978:42): land taxed on population, area, productivity, location and other factors. Hatzopoulos(1988:51): in 3rd century Macedonia vine-land generated twice the revenue of olive-land and four times that of grain-land. Andreades(1933:92): on the basis of land area alone, Egypt would have paid Persian tribute of 270, Lydia 75 and Ionia 65 drs/sq.km. This points to productivity as the key factor, essentially the difference between irrigated agriculture and dry farming.
much wine and supporting so many animals. The objective of the Achaemenid authorities was presumably to impose a fair total tribute on the community, a city in one case, a village in another, and leave the community itself to distribute the burden amongst its members.

But the next step was the crucial one, the substitution by silver of whatever part of a community’s agricultural and other production was taken as tribute by the Achaemenid administration. This probably coincided with the tributary reorganisation attributed to Darius in ca.519/8 (Hdt.3.89). Since Darius’ fiscal reform applied to the whole empire, Ionia included, it is likely that Artaphernes was simply making an up-to-date reassessment of the tribute-bearing capacities of the different cities in the wake of the Ionian Revolt, so as to distribute the total tribute burden of his satrapy more equitably. Thus, at the time of the original reform, some evaluation of the productive capacity of different territories must have been made, albeit *grosso modo*, and estimates of production expressed as values in silver.

Commodity exchange for silver was, of course, being carried out in some places in the Achaemenid empire at the time on a significant scale, e.g. Babylonia or the cities of the Mediterranean fringe, but in most regions barter would have been the norm. For Darius a certain quantity of barley or wine or a given number of sheep or goats as tribute was the same wherever they came from, so it might make sense to apply a uniform rate of exchange to convert a commodity assessment into a silver value. There is evidence for the rates that he may have used in the Persepolis Fortification and Treasury Tablets, and that these were imposed by edict, albeit in the restricted area of Persis. For 504/3 the rates in effect seems to have been 1 Babylonian shekel (of around 8.33 gr) = 1 *irtiba* of barley (very nearly 30 litres) = 1 *irtiba* of fruit = 1 *marrish* of wine (very nearly 10 litres) = one third of a sheep. There is evidence that the rates for wine and sheep remained stable well into the reign of Xerxes but for barley the situation then is not clear-cut. For the only year for which we possess data, the rate seems to have varied during the year in relation to the time of the harvest.7

If one assumes that the barley-to-silver exchange rate in Persis (1 Babylonian shekel = 1 *irtiba* of barley, or 30 litres) was applied empire-wide in the assessment of a silver tribute,

or at least in Lydia, our Mnesimachos-type village producing 300,000 litres of barley-equivalent annually would have been assessed for roughly 10,000 shekels. In terms of weight, a Babylonian shekel was almost exactly equivalent to a gold stater. With a 1:13 gold:silver ratio in effect at the time\(^8\), the valuation of the village would have been about 750 gold staters and, at a tax rate of \(1/12\)^th, the annual tax due about 60 staters. As can be seen from the inscription, Tobalmoura paid 50 and Periasosastra 57 staters, suggesting that the line of reasoning followed above may not be too far removed from the truth.

What I am suggesting then is that the Achaemenid administration assessed the land in terms of values of the quantities of major commodities that they estimated could be produced in a normal harvest. The number of animals, principally sheep and goats, in a given region was probably also taken into account and the system may have been uniform empire-wide. Annual tribute was then calculated at \(1/12\)^th of the assessed value. From the Mnesimachos inscription it would appear that this system may have continued into the Hellenistic period.

The **dekate**

It is just possible that ps-Aristotle may have been implying in the wording he uses ('\(\alphaιτη\ \deltaε\ \εστιν\ \ η\ \ οι\ \ μεν\ \ εκφοριαν\ \ οι\ \ δε\ \ δεκα\tauη\ \ προσαγορε\ουσιν\)') that the ground rent on land and the tithe on agriculture were one and the same thing (but see Chapter 7). But there are clearly two different mechanisms at work in the Mnesimachos inscription. After detailing his landholdings, Mnesimachos listed all his assets, out of which Pytheas and Adrastos had received a part:

'.. έκ πασών οδύ τών καμών καί έκ τών κλήρων καί τών οικοπέδων προσκυρούντων καί τών λαών πανοικίων σύν τοίς υπάρχουσιν καί τών ἀγγείων τών οίνηρων καί τοῦ φόρου τοῦ ἀργυρικοῦ καί τοῦ λητουργικοῦ καί τῶν ἄλλων τῶν γενομένων έκ τῶν καμών ..'

'So, from all the villages and from the allotments and the housing plots associated with them and the laoi with their households and their possessions, the wine jars and the money-tax and the labour-tax and the other things which are generated from the villages ..'

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\(^8\) Descat (1985:104).
First come what one might call the producing assets: land, people and their possessions (e.g. agricultural implements). Then come the revenues derived from their work: wine in jars, an argyrikos phoros paid in coin, a leitourgikos phoros or corvée duty that could be imposed on the villagers and, finally, ‘the other things which are generated from the villages’.

One idea is that the argyrikos phoros mentioned was the tribute to be paid to the king, as detailed earlier, and that the leitourgikos phoros was, likewise, public work duty, perhaps on the road network of the empire. But both these items are listed in what Mnesimachos clearly considered his assets, since he went on to identify that part of the total property which Pytheas and Adrastos had received as an exairema.

Furthermore, if these were imposts due to the king, what advantage would there have been for Mnesimachos in the land grant? The idea of a royal land grant was that it should convey some benefit to the grantee for services that had been or were being rendered to the king. In other words, a grant served frequently, both in the Achaemenid and Hellenistic periods, as a way of paying a salary to an official. Rather than go to the trouble of managing a royal property, extracting a surplus from it, converting this into silver and then making a salary payment, the king often found it more convenient to pass on both the revenue of the property (usufruct) and its expenses to the official concerned. The possibility that Mnesimachos did derive additional revenue from his villages and kleroi, and then did not bother to mention it, will not hold in view of the detail he went into on other apparently less important matters, such as giving the names of slaves. And surely the creditor for whom he was writing, the temple of Artemis, would have been more than interested.

So the position seems to be this. The land-grant of Mnesimachos was assessed for tribute to be paid to the king, probably by the grant holder himself, and various imposts to be levied on the villages and kleroi for the benefit of the landowner.⁹ Compulsory work-duty was also to be provided by the villagers, perhaps on parcels of cultivable land set aside for

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Mnesimachos' own needs, such as the two *kleroi* (which cannot have been given to Pytheas and Adrastos, as we saw), though royal service cannot be excluded.\(^\text{10}\)

Whereas the amounts of tribute were listed precisely, the imposts due to Mnesimachos were left rather vague. It is as if Mnesimachos' readers, principally the officials of the temple of Artemis, were expected to know these. There is thus a strong possibility that they had been fixed for the region as a certain proportion of the harvest (*dekate*) for agricultural produce (or more for different commodities) and so many days in the month for corvée duty. Some kind of regulation must have applied, otherwise there would undoubtedly have been a tendency for the grantee to try to extract as much as possible from his (precarious) land-grant in his own short-term interests at the expense of the villagers' and the king's (as beneficial owner of the land) long-term interests.

For the moment one is left with the following revenue situation, that Mnesimachos' land was burdened by both a fixed tribute due to the royal treasury and a proportional share of the produce due to him as landowner, so both *ekphorion* and *dekate*. One must suppose that the king was entitled to both these revenues before he had conceded the land. Once he had, the level of the *ekphorion* may have been set at 1/12th of the value of a typical harvest. For the *dekate*, one other inscription could possibly yield a clue.

**The Laodike inscription (Document 3)**

In the land sale to his ex-wife, Laodike, the assets being transferred by Antiochos II, villages, land, *laoi* and their possessions, were once again listed. Then follows the statement that the revenue of the fifty ninth year was also being granted (‘σὺν ταῖς [τοῦ ἐλιατοῦ καὶ πεντηκοστοῦ ἐτῶς προσόδοις’). Further along, Laodike was apparently granted tax exemption (‘ἐφ’ δι’ οἴδην ἀποτελεῖ εἰς τὸ βασιλικὸν’). It is not immediately clear whether this applied to the sale price, i.e. a sales tax, or to the revenue from the property. It is likely to have been both.

In this inscription there is no mention of *phoros*, as in Mnesimachos', but its presence is implied in the exemption from tax. Here one is speaking of revenue that was due earlier to the king as landlord and was now to be collected by Laodike.

\(^{10}\) Also Kreissig(1978:99).
The king was definitely parting with his land, as, unlike Mnesimachos, Laodike had obtained the right to attach it to a subject city of her choice (Chapter 6.2). However, this does not seem to have been a true sale, but rather a divorce settlement camouflaged as a sales transaction.\(^{11}\) The 'price' was 30 talents of silver and, if one accepts the evidence of the Mnesimachos inscription, this is likely to have been the valuation of the land, set equal to the value of its average annual agricultural and other production.\(^{12}\) The king’s intentions may have been that the 'price' be paid from the revenue of the land itself, as is implied by a) Laodike’s specified right to the revenue of the 59\(^{th}\) year and b) the timing of the three payment instalments in the 60\(^{th}\) year in the months of Audnaios (December), Xandikos (March) and up to three months later, which, not so curiously, immediately follow the wine, olive and grain harvests respectively of that year. If two years’ earnings were to suffice for Laodike, this means that her payments of 15 talents a year would come from exactly 50% of the estate’s estimated average annual revenue, i.e. this was the rental rate on this royal land paid by the laoi who worked it.

Back to Mnesimachos

If ca.274 Antiochos II were collecting 50% of produce as rent on the land he was about to sell to Laodike, there is no guarantee that in the earlier period in which Mnesimachos received his land-grant from Antigonos the situation was the same, but let us assume for the moment that it was and see where this might lead us.

If the assessed value of Mnesimachos’ land was 1,325 gold staters, which represented the average value of a year’s harvest, and he received 50% of this from his villagers or 662 ½ staters, while he himself paid 110 5/12 staters in tribute to the king, Mnesimachos’ revenue would have amounted to about 550 gold staters or 11,000 drachms annually or 30 drachms a day. The grant may have been given to Mnesimachos in lieu of salary for some office that he held. This one does not know for certain, but such land grants were normal both in the Achaemenid empire and the Hellenistic kingdoms. By way of comparison, the Ptolemaic general in charge of the forces that faced Antiochos III in Phoenicia and Palestine, Skopas, received 1000 drachms a day and each of his staff

\(^{11}\) Welles(1934:97) gives references.

\(^{12}\) Rostovtzeff (1910:263-264) and Hahn(1978:16) for the 30 talents as the revenue of the estate.
officers 100 (Polybios 13.2.3), three times as much as Mnesimachos may have done, though this may not have been his only income.

An interim conclusion

What one may conclude then is this. Royal land was subject to a rent from its tenants, for example the laoi of villages in western Asia Minor, which in some cases amounted to 50% of the harvest. When the king granted the land to some other party, he might choose to charge tribute on it, essentially a ground rent, perhaps set at 1/12th of the estimated average harvest. The grantee could then dispose of the remainder.

Obviously two cases, Mnesimachos’ and Laodike’s, will not permit one to generalise, so more evidence is sought for rates of taxation of land and its produce in the Seleukid empire.

Other evidence for high taxes on royal land and agricultural produce

Later in this Chapter the development of taxation in Judaea after the Seleukid conquest ca. 200 will be analysed. It will be seen that at some point both tribute and a tax of 1/3 the grain crop and ½ the fruit crop were being applied simultaneously. This rate of taxation has been considered punitive because of the Maccabean revolt, but it does not appear unreasonable in the light of what has been seen above, or of Ptolemaic practice.

A text from Babylonia dating to ca.308 apparently concerns a dispute between the Ebbabar temple at either Sippar or Larsa and the royal administration about the use of some land. The administration conceded the land to the temple at a rent of half the crop.

In Chapter 5.6 prices of commodities in Babylon in the Seleukid period were analysed. It was seen there that a sudden halving of the base price of dates took place ca.208 and remained in force for 70 or so years, subject only to fluctuations because of good or bad

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14 Abel(1949:186-187) points to the τρίτον and ἡμίοεμα on viticulture in the Ptolemaic kingdom. Préaux(1939:134,182,375) notes that the Ptolemies could take more than half of a royal tenant’s harvest in taxation or impose import duties of 50%.
harvests and the time of the year in relation to the harvest. No other explanation could be found for this other than an administrative decision, such as an exemption of this commodity from a 50% tax.

Policy for royal land

From the point of view of the king it was desirable to generate as much revenue as possible from the land without placing the producer in jeopardy (and so killing the goose that laid the golden egg). The amount of rent on royal land (or tribute and tax on other land) could be set at an appropriate level depending upon the productivity of the land. In irrigated Mesopotamia, for example, with its higher productivity, 50% of the grain crop might appear reasonable as the king’s share, and also perhaps on a choice property such as the land granted to Laodike. Elsewhere, the proportion collected by the king could well have been less, e.g. in dry-farming Judaea. But, one is left with the impression that, overall, royal land and its produce was heavily taxed and may have been the principal source of the king’s revenue.16

By way of comparison, in contemporary Mauryan India all land is also said to have belonged to the king and seems to have been equally heavily taxed, with a ground rent and a produce tax totalling not less than 50%.17

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16 For low taxes on land. Cavaignac (1923:114): taxation on land was more than 10%, but the 1/3 and ½ in Judaea were high, perhaps a remnant of Ptolemaic practice. Kreissig(1978:112): Judaean taxation had worsened after Magnesia. Freyne(1980:185-186): Judaean land taxes were exhorbitant.

For high taxes on land. Shipley(1993:275): the primary aim of the satrpal economy was the raising of tribute through exploitation of the non-Greek laoi. Briant(1973:116) for a very heavy φόρος on the village communities.

17 For Indian taxation. From Strabo(15.1.40) = Megasthenes(Fr.33.5): .. ἐστὶ δ' ἡ χώρα βασιλικὴ πάσα· μισθοῦ δ' αὐτὴν ἐπὶ τετάρταις ἐργάζεται τῶν καρπῶν (οἱ γεωργοὶ). (‘.. and the whole country is royal land. And (the farmers) cultivate it for a quarter of the produce as their wage’ or, more probably, ‘.. for a rent in addition to a quarter of the produce’).

From Diodoros(2.40.5) = Megasthenes(Fr.1.46): .. τῆς δὲ χώρας μισθοῦς τελοῦσι (οἱ γεωργοὶ) διὰ τὸ πάσαν τὴν Ἱδιωτὴν βασιλικὴν εἶναι, ἵδιοτὴ δὲ μηδενὶ γῆν ἔχειν κεκτήσασθαι: χωρὶς δὲ τῆς μισθώσεως τετάρτην εἰς τὸ βασιλικὸν τελοῦσι .. (‘.. and the rent of the land is paid (by the farmers) to the king because the whole of India is royal property, it not being permitted for any private individual to own land. Apart from the rent, they pay a quarter (of the produce) to the royal treasury’).

Taking both texts together, the rent was 25%, or possibly even 50%, and the agricultural tithe a further 25%. Stein (1922:95-96) compares the evidence of Megasthenes and Kautilya’s ArtaSastra, in which the Mauryan king was expected to obtain ¼ or 1/3 of the harvest under dry farming conditions, so probably even more from irrigated land.
Finally, there was one other source of revenue from royal land, by outright sale, e.g. the 330 plus 50 talents earned by Antiochos I from Pitane (OGIS 335, lines 132-134). This may reflect the policy suggested in Chapter 6 of a cost-benefit approach to the question of royal land, rather than simple generosity. To work the land in this case may have been considered less profitable by the king and there was still the question of tribute to be received from Pitane, perhaps at the 1/12th rate.

**Kleroi**

Two *kleroi* were included in Mnesimachos’ land-grant, each bearing a different tribute, suggesting once more that great care had been taken in assessing the value of even the smallest land-parcel based on its agricultural potential and then applying a factor of 1/12th. No separate tax on agricultural produce is mentioned, but it was probably considered part of the *argyrikos phoros* that Mnesimachos collected.

Elsewhere, however, there is evidence of tax on the production of *kleroi*. At Magnesia-Sipylos Seleukid *kleroi* were to be free of the tithe (*adekateutoi*)18, while a tax rate of 1/20th on wine and 1/10th on grain and other crops was applied to Attalid cleruchs.19 This appears very lenient compared to the strict treatment of native land, but then the purpose of a *kleros* was to give its holder a reasonable income as compensation for services rendered or being rendered freely.

**City land**

Since the empire was ‘spear-won’, all its land theoretically belonged to the king. The boundaries of the *chora* of existing cities, Greek and non-Greek, had been reconfirmed in the main after Alexander’s conquest and his successors made no serious attempt to change the *status quo*. The new foundations that had been established made extensive use of royal land. In all these cases what was implied was a land grant by the king to the cities, in return for which the king might demand tribute and taxation on the produce of the land. In principle this did not differ from a grant to an individual, such as

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18 OGIS 229, line 101  
19 Welles(1934:no.51).
Mnesimachos or Laodike. In each particular case the king would decide at what level to set tribute and land taxes, if at all. Bearing in mind that a city could generate important revenue for him in other ways, e.g. from taxation of agricultural produce that entered the city - from royal land for example - or trade and industry in general, he could afford to be lenient in dealing with city land.

It is perhaps for this reason that one frequently finds cities granted *aphorologesia* or *ateleia* or *aneisphoria* or the right not to be subject to the *syntaxis*.\(^{20}\) The terminology is unfortunately not used consistently and so in many cases one cannot tell what exactly was being exempted. Normally *phoros* refers to tribute, whether of a city or a native village, and was considered the sign of subjugation (Polybios 8.23.5)\(^ {21}\), but it sometimes included taxes on agriculture and other activities. Often the plural, *phoroi*, is used, which may imply just this wider range of imposts. *Tele* are mostly applied to indirect taxes, whether due to the royal treasury or a city, but not always. *Eisphorai* (or *epitagai* or *epigraphai*) are typically special contributions of citizens to city revenue, but could sometimes be demanded by the royal authorities, e.g. *I. Labraunda*, no.42. The term *σύνταξις*, literally contribution, often replaces *phoros* for a city, really a kind of euphemism for tribute to create the impression that there was no subjugation, but an alliance between king and city instead. When Alexander 'liberated' the Ionian cities, he did away with the *phoros*, but imposed an equal *syntaxis* for the war against the Persians.\(^ {22}\) In this sense, the special 'contribution' imposed by Antiochos I on the cities of Asia Minor to help finance the war against the Galatians, the *galatikon*, may have been estimated in the same way as tribute, proportionally to the size and wealth of a city and its land.\(^ {23}\)

That subject cities were sometimes subject to a tax on agriculture may be inferred from an inscription from Mylasa\(^ {24}\):

\[\ldots \text{kai yewpʰoxʰwntai oi miouthamaevoi tʰn γῆn katháper kai o lópoi tás idías yewpʰyias ἑιρογάρμωνai, kai tás te eisphorás dioróthounai pássas [kai tā] prosptípontai ek τοῦ βασιλικοῦ ἕ [polítikou katháper kai o tás idías yewpʰyias yewpʰoctes.}^{1}\]

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\(^{20}\) Hahn(1978:13-16) for city taxes and terminology.

\(^{21}\) Bikerman(1938:108).

\(^{22}\) The Alexander inscription from Priene (*OGIS* 1) distinguishes between *φόσ* on villages and *σύνταξις* on the city.

\(^{23}\) Welles(1934:no.15); Bikerman(1938:110).
‘.. and those that lease land will cultivate it as do the rest who cultivate their own land, and will pay all the contributions, both the taxes due to the royal treasury and the city, exactly like those who cultivate their own land.’

An inscription from Aigai in Aiolis clearly shows royal taxation on agricultural land: a dekate on what is probably grain production and a 1/8th tax on fruit (ξύλινος καρπός), though there is no mention of whether or not a phoros was also applied.25 Since fruit was generally taxed more than grain, the dekate here may literally be a tenth of the crop.

In concessions of Antiochos III to Teos26, the syntaxeis are distinct from the tribute and must imply all the other forms of taxation levied on Teos, including perhaps a tax on agriculture:

‘.. παραλθῶν εἰς τὴν ἐκκλησίαν αὐτὸς ἀνήκε τῇ[ν] πόλιν καὶ τὴν χώραν ἡμῶν ἱερὰν καὶ ἴσηλον καὶ ἀφορολόγητον [καὶ] τῶν ἄλλων ἄνω ἐφέρομεν συντάξεων βασιλεῖ Ἀττάλωι οὐ πεθάνω ἀπολυθήσεθαι ἡμᾶς δι’ αὐτοῦ ..’.

‘.. coming to the Assembly in person, he declared our city and chora sacred and inviolate and free of tribute and promised that he would free us of the other imposts that we had been burdened with by king Attalos ..’

The king apparently kept his promise and granted some benefits immediately and others later, upon which the grateful citizens of Teos honoured the king:

‘.. ἐπειδὴ οὐ μόνον εἰρήνην ἡμῖν ὁ βασιλεύς παρέσχεν, ἄλλα καὶ [τῶν] βαρέων καὶ σκληρῶν ἐκ(κ)ούφησιν εἰς τὸ μετὰ ταῦτα τελῶν παραλύσασι] τῶν συντάξεων καὶ λυπιτελεῖς τὰς ἐν τῇ χώρᾳ μετ’ ἀσφαλείας πιεσθέντος ἐργασίας καὶ τὰς καρπείας ..’

‘.. because not only did the king offer us peace, but also brought relief for the future from the heavy and harsh burden of taxes and made profitable and secure the work and the harvests (of the city) ..’

No doubt a harvest would be more profitable if a tax on it was removed.

A petition of Herakleia-Latmos to Antiochos III (Document 10) makes a specific request for exemption from taxes on agriculture (.. ἀξιώσαντες δὲ καὶ ἀτέλειαν συγχωρήσαι τῶν ἐκ

24 Le Bas/Waddington (1972, no.404)
26 Herrmann(1965:29ff); also Ma(1997: nos.17/18).
The Herakleians had already received other concessions previously, which they asked should be retained: (.. καὶ παρακαλέσοντας τὰ τε ὕπο τῶν βασιλέων συνεκχωρημένα [συνδιατηρηθῆναι] ἦν ..).

Since aphorologesia is not mentioned in the new ‘shopping-list’ of the Herakleians, it is not unreasonable to suppose that it had been granted in the first batch of royal concessions, as in the case of Teos above, which reinforces the argument for the Teans requesting tax exemption on agriculture also at their second attempt.

An inscription, possibly from Seleukeia-Tralles of the same period27, mentions the concession of a dekate by Antiochos III in response to a petition of the city: (‘.. ἦμιν τὴν ἀποτελομένην εἰς τὸ] βασιλικὸν δεκάτην τὸν [- ca. 29 --] ..‘). By analogy with Aigai, Teos and Heraklea, this may well be a tithe on agriculture. Indeed, what would fit well in the lacuna is ‘καρπῶν τῆς γῆς καὶ ξυλίνων καρπῶν’ (‘grain and fruit harvests’).

The time and place of all these inscriptions is about the same, the period of reconquest of western Asia Minor by Antiochos III, and their similarity is striking. It might not be unreasonable to suppose that they reflect a royal policy of graded concessions to enlist and maintain city support. Tribute, psychologically onerous, was done away with first, while the removal of taxation on agriculture followed later.

Temple land

A temple and its land might be assessed as part of a city or separately. In fiscal terms, an independent temple was treated no differently from a city and subject to tribute and taxation in the same way on its land, with the possibility of exemptions.28

A δεκάτη was charged by the Seleukid administration on the land of the sanctuary of Apollo at Tralles.29 A lump-sum annual tax of 15,000 shekels, or 5 talents, had been applied to the Temple of Jerusalem, which Demetrios I relinquished (I Macc.10.42, Jos.Ant.13.55). This is probably the tax Lysias had earlier intended to put up for tender, as for all other native sanctuaries (II Macc.11.3: ‘καθὼς τὰ λοιπὰ τῶν ἑθνῶν τεμένη’).

27 Welles(1934:no.41).
The kings may not have interfered much with the land of Babylonian temples, but they expected part of the yields\textsuperscript{30}, and indeed 50\% in at least one case (see above). We may have parallels from Jerusalem from the efforts of Heliodorus, Seleucus IV's minister, to expropriate part of the temple treasure that was purportedly being withheld from the king (II Macc.3.6), or from the concession of his share of 5,000 shekels of temple revenue made by Demetrius I (I Macc.10.42).

Scope of taxation on agriculture

No doubt the major agricultural commodities (grain, olives, wine, fruit, dates, sesame) yielded the bulk of taxation revenue from land, but the administration seems to have had a fiscal interest in every product of agriculture. In early 2\textsuperscript{nd} century Telmessos there was a lightening of the taxation burden on fodder and straw ($\chi'\rho\tau\sigma\varsigma$ and $\ddot{\alpha}\chi\nu\rho\alpha$), though whether under a local dynast, Antiochos III or Eumenes II is unclear.\textsuperscript{31} In Babylon the Astronomical Diaries show a sudden halving of the price of mustard ca.208 at the same time as that for dates noted above, again suggesting the removal of a tax (Chapter 5.6).

Rates of tribute and taxation of cities and temples

In all the cases of cities and temples considered above, the level of tribute is not mentioned as if it were something well known. The cities of western Asia Minor had been assessed in the past by the Persians in the manner described by Herodotos(6.42). No doubt their assessment might have changed from time to time as land, population and economic activity increased or decreased, but for large periods it was likely to have remained constant in the books of the imperial administration.

If the land-grants of the kings are anything to go by, the level of tribute may not have been high, perhaps only 1/12\textsuperscript{th} of the silver value of an average harvest. That is perhaps why aphorologesia was such a relatively frequent and early concession. Direct taxation of agriculture also seems to have been quite low, perhaps not more than an 1/8\textsuperscript{th} of the harvest, with the dekate that is frequently mentioned in inscriptions perhaps being just

\textsuperscript{30} Spek(1995:194).

\textsuperscript{31} Wörrle(1979:83).
that, a tenth. But the king was not a philanthropist by nature. He balanced economic and political considerations and, indeed, my theme is that he strove to maximize his revenue within the limits imposed by politics. In the case of a subject city he expected to earn much more from indirect taxation on trade and industry and could afford to be generous on land taxes.

Summary of taxation revenue on land

To summarise then, all land in the Seleukid empire seems to have been subject to both tribute (or ground rent, as a sign of submission to the king) and a proportional tax on agriculture, in ps-Aristotelian terms an *ekphorion* and a *dekate*.\(^{32}\) In the case of royal land, however, these might be combined into one proportional rent to the king as landlord. When land was donated to a city, a temple or an individual, tribute and tax were separated and the king retained the right to set the level of each, often reducing or abolishing one or the other, or sometimes even both. There was probably no fixed policy governing the king's actions, only a specific calculation each time of the political and economic implications. In general, cities and temples seem to have received favourable treatment and their burden is likely to have been considerably less heavy than that imposed on rural populations.

8.2 Revenue from the king's own property

Δευτέρα δὲ ἢ ἀπὸ τῶν ἰδίων γινομένη, ὦ μὲν χρυσίων, ὦ δὲ ἀργυρίων, ὦ δὲ χαλκὸς, ὦ δὲ ὁπόσα δύναται γίνεσθαι.

'The second (revenue) is that from (the king's) private possessions, in some place gold, in another silver, in another copper, in another whatever is available.'

Apart from land (which had already been dealt with by ps-Aristotle), the Seleukid king probably owned many if not all of the important natural resources of the empire: e.g.

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\(^{32}\) Pompey prided himself that he had replaced fixed tribute with a proportional tithe (Appian *BC* 5.4).
metals, timber, salt, irrigation water and a number of special products (also Chapter 5.3).  

Mines

Though no direct evidence exists for control of mining and quarrying by the kings, it must be considered highly probable. Not only does ps-Aristotle place precious metals production at the top of his list, but comparative evidence suggests that this was common practice for imperial powers, e.g. Rome and the mines of Spain, Philip II and the gold of Pangaion and the Maurya royal monopoly of mining.

Forests

Evidence for royal forests at Taranza and on Mt. Lebanon, from which timber was to be cut for the reconstruction of Sardeis and Jerusalem, has already been referred to (Chapter 5.3 and Documents 9 and 12). For Jerusalem there is explicit mention of the fact that the timber would be toll-free, but not that it would actually be provided gratis by the king. In the case of Sardeis, there is perhaps an indication that a gift was being made to the city because of the serious damage it had suffered, a similar situation to the grant of warships, timber and pitch to Rhodes after its earthquake (Pol.5.89.9). In all these cases, royal philanthropy was probably conditioned by practical economic sense. The sooner a subject city or a trading partner found its feet, the sooner royal revenues could return to their previous levels, hence free timber for now, but a return to ‘business as usual’ when the customer could afford it.

Comparative evidence from the Achaemenid empire, the Macedonia of Philip II and Mauryan India again suggests that concentration of good timber stands in royal hands was common practice.

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33 For comparison, Stein(1922:99): royal monopolies in Mauryan India for mines, quarries, salt-ponds, forests for wood and elephants, alcohol manufacturing and weaving.
34 Chapter 5.3 for a survey of likely sources of important metals in the empire.
35 Stein(1922:63): based on the Artašastra, in Mauryan India mines were in the hands of the state and rented out to private operators. Also Strabo (15.1.57, quoting Megasthenes) for a tax even applied to the gold dust brought down by the rivers. Sartre(1995:84) for royal mines and quarries in Asia Minor.
Salt

Because of its vital role in daily life, other empires have tried to control the production and distribution of salt and the Seleukid was probably no exception.\textsuperscript{37}

Evidence for the handling of salt by the Seleukid administration in Judaea comes from Antiochos III's concessions to Jerusalem after the taking of the city ca.200 (Document 12), where two actions are listed with regard to salt. The first was to supply 75 medimnoi to the Temple for the sacrifices and the second to exempt the Jewish gerousia, priests and scribes of the Temple and temple-singers, i.e. the upper classes of Judaea, from a tax peri tov allos ('regarding the salt pans').

The first concession suggests that the king may have controlled a salt supply in the region, possibly from the Dead Sea (Chapter 5.3). The second relates to a tax in connection with salt pans that was imposed as a head tax.

Later Demetrios I also promised relief from 'the price of the salt-pans' or 'the price of the salt' (Josephus Ant.13.49: τὴν τιμὴν τῶν ἀλῶν, Document 13; I Macc.10.29: τὴς τιμῆς τοῦ ἀλᾶς which his son, Demetrios II, actually fulfilled regarding 'the lakes of salt' (I Macc. 11.35: τὰς τοῦ ἀλᾶς λήμνας, Document 14).

The precise nature of this salt tax has been much debated.\textsuperscript{38} But before this problem can be tackled, the evidence for a salt tax in another region, Mesopotamia, needs to be examined.

Seal impressions on bullae from Uruk relating to salt pans typically have the legend ἀλικτήσις | year | name of city\textsuperscript{39}, as does only one, from 286/5, from the Michigan excavations of Seleukeia-Tigris. Then there is a gap and from 214/3 ἐπτελῶν ('taxed') or ἀτελῶν ('tax-free') was consistently added. Of the bullae found at Seleukeia in the 'Great House', a private building, those in archive B have only atelon stamps, the majority from 188/7 to 153/2 in an almost unbroken series. Archive A, largely destroyed, has only

\textsuperscript{37} Stein(1922:99) for the Maurya, Potts(1984:236-241) for the Ottomans in Iraq. For the British in India, salt was a very important source of revenue.

\textsuperscript{38} Rostovtzeff(1941:470): a compulsory contribution to the management of the salt pans that entitled each person to receive a quantity of salt, which he paid for separately. Bikerman(1938:112-113): the Jews were expected to deliver salt to the royal authorities, which they had to buy back at a price. Perhaps two taxes were involved, one on persons the other on production. But later (1988:126) he revised this to a salt tax or perhaps an obligation to purchase a certain quantity at a fixed price.

\textsuperscript{39} Rostovtzeff(1932:81).
*epitelon* stamps from 208/7 to 191/0 and the suggestion is that it contained a complete series of *epitelon* preceding those in archive B.\(^{40}\)

The 30,000 or more bullae found in the Italian excavations of the ‘archives’ building at Seleukeia-Tigris also consistently show ἐπιτελῶν or ἀπελῶν on the salt-tax stamps.\(^{41}\) The essential difference with the Michigan excavations is that these bullae were found in what appears to have been a public, probably municipal, building.\(^{42}\)

The Michigan bullae show considerable variation in inner diameter, indicating different lengths of document. They also have up to 3-4 private seal impressions and the suggestion has been made that they did not enclose simple receipts for salt purchases, which would not have required the seals of contracting parties and witnesses. Thus, it has been argued that the bullae probably contained annual contracts between merchants and importers or producers of salt, in connection with which a tax was levied or not, and that, consequently, there was no royal monopoly, but only a tax on the sale of salt, with exemptions for certain parties.\(^{43}\) But I will propose a different solution:

1. There was an attempt by the royal administration to exercise a salt monopoly in those area where this was feasible, which goes back at least to 287/6 and so to the reign of Seleukos I, or rather Antiochos I’s presence as co-ruler in the East.

2. There was a requirement by every household to purchase a certain quantity of salt annually at a fixed price from the royal salt-pans or mines (hence the terms ‘ἀλικῆς’, ‘περὶ τῶν ἀλῶν’, ‘τὰς τοῦ ἀλὸς λίμνας’, ‘τὴν τιμὴν τῶν ἀλῶν’), on which an additional sales tax was applied.

3. At some point, probably under Antiochos III, certain persons and their households were exempted from paying the additional tax, but not the fixed price of the salt.

4. The householder of the ‘Great House’ at Seleukeia-Tigris became such a person at some stage. Each year, a document was prepared listing his dependants, who might vary from year to year, the quantity of salt compulsorily purchased and the tax due or

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\(^{40}\) McDowell(1935:180-184).

\(^{41}\) Mollo(1996) has produced a first analysis and considers that the *alike* stamp probably does relate to a salt tax, but will not speculate how.

\(^{42}\) Invernizzi(1994:353).

\(^{43}\) McDowell(1935:185-188).
not. This was witnessed as to its accuracy and sealed by the tax-officer responsible for salt.

5. Since the sale and taxation of salt were probably an important source of revenue, the administration no doubt wished to check that a household had complied with the law and one needed to produce past salt-purchase documents upon request, hence the need for safe-keeping in a private or public archive.

6. When Judaea was acquired, a Ptolemaic head-tax on salt already existed\textsuperscript{44}, that may have been similar. Antiochos relieved the Jewish elite of the additional tax, but not of the purchase price. Later, his successors probably extended this measure to the whole population.

There is a certain similarity here to the way another royal resource, timber, was handled by Antiochos III for the reconstruction of the Temple at Jerusalem (above). Relief was given on the tax on timber at Mt. Lebanon, but not on the purchase price.

**Water**

The suggestion has been made that the large-scale supply of water for irrigation was treated as a royal monopoly (Chapter 5.3). For the Seleukid period the evidence is lacking and one may only argue on the assumption of continuity with the Achaemenid.

In the Murašu archive (Chapter 1.4) a typical contract\textsuperscript{45} has water leased to farmers for $\frac{1}{3}$ of the harvest, when watering was done directly, or $\frac{1}{4}$ when bucket-irrigation was used, plus silver equivalent to about another 5% of the harvest. A study of the archive shows that the costs of agricultural production for good land may have been divided somewhat as follows as percentages of the harvest, without taking taxes into account: land only 5-10%, seed 5-10%, water 15-35%, equipment (plough and oxen) 30-35%, labour 15-35\textsuperscript{.46}

\textsuperscript{44} Bikerman(1938:112).

\textsuperscript{45} Stolper(1974:78). It will be recalled that the Murašu leased water rights from the administration and sub-leased them along with land, seed and equipment.

\textsuperscript{46} Stolper(1985:125-143).
For comparison, the Artašastra records water taxes in Maurya India of $1/5^{th}$, $1/4^{th}$ and $1/3^{rd}$ the crop when water was carried by hand, animals and mechanical means respectively.\textsuperscript{47}

Other natural resources

One does not know how other special products such as asphalt, balsam, purple dyes etc. (Chapter 5.3) were handled, but, as for timber and salt, a sales price plus a tax, from which there might be exemptions, is likely.

For example, a porphyrikon tax is attested for Ptolemaic Lykia, which may have related to a royal monopoly\textsuperscript{48} and could have been taken over by the Seleukids.

Pasture land

Royal land suitable for grazing might be leased to a city or village for pasture rights (ennomion), probably assessed on the extent of the land or the number of animals using it.\textsuperscript{49}

Urban properties

Whether ps-Aristotle would have considered this under land or the king’s own property, the king was also the owner of revenue-earning urban properties. Antiochos III chose to relieve Sardeis of the rent of ergasteria he owned in the city. Probably the king had built the stoa containing the ergasteria in the first place.\textsuperscript{50}

8.3 Revenue from market centres

Τρίτη δὲ καὶ ἑκτὸς τῶν ἐμπορίων.

‘The third (revenue) is that from market centres.’

\textsuperscript{47} Stein(1922:23).

\textsuperscript{48} P.Teb. 8; Bagnall(1976:108-109).

\textsuperscript{49} OGIS 55; Bagnall(1976:109) for this tax in Lykia under a local dynasty.

\textsuperscript{50} Gauthier(1989:81,101-107); Ma(1997:129).
In discussing this source of satrapal revenue in ps-Aristotle (Chapter 7), it was suggested that it referred mainly to bulk trade by water. In Seleukid Asia many important inland cities were located on major navigable rivers, e.g. Seleukeia-Tigris, Antioch, Susa, Ai-Khanoum etc.

Uruk

One market centre for which we possess a little information from the bullae found there and the stamps impressed on them is Uruk on the Euphrates, a thriving city in the Seleukid period (Chapter 1.5).51 A bulla with λιμένος Ὠρχων, ‘the harbour of Uruk’, may point to an emporion established in the city to attract commercial river traffic, particularly that moving up from the Gulf52, and perhaps to the application of dues on shipping for the upkeep of the port.53 A πλοίων Εὐφράτου stamp, appearing without other official stamps, could represent a tax paid by ships registered in Uruk that were authorized to carry out river trade.54

Most frequently found is a stamp with ἐπωνύμου, or ἐπωνύμου Ὠρχων λιμένος, which clearly indicates a sales tax, though on what goods is unclear. On some bullae, this stamp is associated with an ἀνδραποδικοῦ stamp, pointing specifically to the sale of slaves. It is interesting that no other commodity - for a slave was such - is mentioned in connection with a sales tax, suggesting that an additional tax may have been imposed on slave sales, unless of course this was not a tax but a registration fee.55 The presence of an organised slave market at any major market centre is likely.

Many bullae with an ἐπωνύμου stamp or an ἐπωνύμου and ἀνδραποδικοῦ have a χρεοφυλακικός stamp as well. The chreophylax (discussed in Chapter 13.7) is well attested in the Greek world as the official responsible for the registration of private contracts and it has been

51 Rostovtzeff(1932).
52 Rostovtzeff(1932:79-80 and bulla 51): λιμήν here signifies fiscal district since there was no harbour at Uruk; also Bikerman(1938:116). But this ignores the importance of river-borne trade in Mesopotamia.
53 McDowell(1935:174), who rejects 'tax district'.
54 Rostovtzeff(1932:89-90).
55 Rostovtzeff(1932:66): two taxes.
suggested that he was also involved in registrations where fiscal considerations were involved. A case has been made for taxation of slave sales and mandatory registration introduced under Antiochos I. But the problem is that not all these bullae bear the chreophylakikos stamp. An ingenious solution that would account for the missing chreophylakikos is that registration was only compulsorily carried out by one of the parties to the transaction, the one paying the registration fee. So in the bullae we possess are supposedly reflected some transactions in which the temple of Anu and Antum, the presumed owner of the Uruk bullae, was the other party. But this might lead to the conclusion that every sale involving an eponiou stamp on its own had to be registered as well. It is difficult to imagine for what purpose this needed to be done, when surely the main aim was to collect taxes at the quay-side, which could be handled on the spot by Seleukid officials, after which a record of the transaction itself would not be of any interest to the authorities.

Seleukeia-Tigris

Another emporion was clearly Seleukeia-Tigris, the nodal point of overland trade routes from the East and the Persian Gulf and water-borne commerce. Bullae from the Michigan excavations (Chapter 1.5) show the impression of a λιμένος stamp, again possibly relating to the payment of port dues. A χρεοφυλάκων stamp never appears with a tax stamp, but with other apparently official stamps, and once with a καταγραφή, suggesting an act of registration. No ἐπανίου stamp is used, unlike Uruk, which is surprising.

56 Rostovtzeff(1932:58-59); McDowell(1935:131). See also Chapter 13.7.

Also, regarding registration, Rostovtzeff(1932:66,72): mandatory for slaves, only to improve security for other documents; McDowell(1935:178): probable for slaves; Bikerman(1938:117-118): widespread for all private contracts. Bagnall(1976:18-19): in C.Ord.Ptol.21-22 from Ptolemaic Koile Syria slaves had to be reported, else they were liable to be confiscated.

58 McDowell(1935:7-9,134).
59 McDowell(1935:173-175); Bikerman(1938:117).
A number of stamps appear in connection with slaves. Apart from the normal ἀνδραποδικής, a second stamp (ἀνδραποδικής ἐπιφην or ἐπιφην) has led to the suggestion that, since ἐπιφην = 'to agree', ἐπιφημίζω = 'to pledge, to declare', this implies an official appraisal of value of the slave prior to payment of tax in order to avoid collusion of buyer and seller with a low declared price. A third stamp (ἀνδραποδικῆς εἰσαγωγής or -γικῶν) points to a tax on imported slaves, perhaps different from that on home-sold slaves. The fourth stamp (καταγραφής) indicates an act of registration, perhaps of slaves.

The role of the chreophylax will be discussed in Chapter 13.7.

Taking Uruk and Seleukeia-Tigris together, what seems likely is that dues were charged for the use of an emporion and a general sales tax was levied on transactions that took place there. Perhaps only one commodity, slaves, was subject to an additional tax, which may have differed between imported and home-sold slaves. The Seleukid authorities also sought to collect revenue on related transactions, such as official assessments and registration.

Ports of cities

A city might be distinguished from its port in connection with taxation. From the king’s point of view, the port, as an emporion, could bring in important revenue from indirect taxes. In the case of Iasos, when taken over by the Seleukids, exemption was separately granted for city and port taxes.

Port dues seem to have been a common source of revenue, as at Uruk and Seleukeia-Tigris. At Herakleia-Latmos (Document 10) these had been used by the city earlier for the purchase of oil for the gymnasium. This was allowed by Antiochos III to continue (καὶ τὸ ἐλαιοχρήστιον διαμένει τὸ ἀποτεπαγμένον τοῖς νήσοις, ὅτε ἐπεκχρύσετο τῇ ὑμητι τοῦ λιμένος ..).

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61 McDowell(1935:176), following Rostovtzeff(1932): the possibility that at Uruk ἐπονίῳ was used for home-grown slaves.
62 McDowell(1935:144).
63 Wörrie(1979:110).
Another important tax at ports is likely to have been customs duty, charged separately on both imports and exports, referred to often in Mediterranean trade as the 2% tax (πεντηκοστή) or εψιλομένων. At Herakleia-Latmos (Document 10) different terms were used, εἰσαγώγια and ἐξαγώγια, for the dues collected by the king on imports and exports through the harbour. Customs duty on trade with the Seleukid empire is also attested in the privileges granted by Seleukos III to Rhodes (Pol.5.89.8).

8.4 Revenue from travel and transport by land and taxes on sales

Τετάρτη δὲ καὶ ἡ ἀπὸ τῶν κατὰ γῆν τε καὶ ἀγοραῖων τελῶν γινομένη.

'The fourth (revenue) is that produced from tolls by land and sales taxes.'

Lesser in importance than revenue from market centres (in the order given by ps-Aristotle), this source of revenue seems to refer to tolls on overland trade and sales taxes.

In Herakleia-Latmos (Document 10) τὰ τέλη καὶ ἐγγαία of the city - startlingly close to ps-Aristotle's ἀγοραῖων τε καὶ κατὰ γῆν τελῶν - have been clearly distinguished from the εἰσαγώγια καὶ ἐξαγώγια of the harbour.

There was a good reason for putting the two imposts together since a toll at a city gate might immediately be followed by a sales tax in the marketplace, as at Herakleia-Latmos, where a tax-exemption had been requested from Antiochos III for both wheat entering the city and that sold there (… μνησθησομένους δὲ καὶ ὅπως σῖτος δοθῇ τῇ πόλις ναὶ δωρεάν καὶ ἀτέλειαν τοῦ τε εἰσαγομένου εἰς τὴν πόλιν καὶ τοῦ πωλουμένου …), the presumption being that some wheat might find its way directly to private households.

Tolls were probably applied at customs posts at provincial boundaries, city territory limits and city gates, as one can see from the exemption on tolls for timber brought to Jerusalem from the Lebanon, Judaea and other places (Document 12).

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64 Moretti(1977:332).
65 Moretti(1977:332); Bikerman(1938:115-116).
66 Also Descat(1997:259).
Antimenes, Alexander’s financial officer at Babylon after ca.325, imposed a toll on all goods brought by travellers to Babylon, which had fallen into abeyance under the Achaemenids (ps-Arist.Oἰκ.2.2.38).

The exemption from the tithe and taxes (ἀπὸ τῆς δεκάτης καὶ τῶν τέλων) promised by Demetrios I for the city of Jerusalem ‘up to its boundaries’ (Document 13) probably applied to merchandise entering the city as well as sales and other taxes within the city. A toll was not necessarily set at 1/10th of the value of the merchandise, nor need the sales tax rate have been fixed, but both may have depended on the particular item involved.

As to what the ‘other taxes’ may have been, it is reasonable to suppose that some of these were applied on various types of legal transactions, e.g. those dealing with houses, land or slaves, which might require official registration (see 8.3). But the royal treasury seems to have had a say in aspects of private dealings that one might have considered beyond its jurisdiction. Two interesting Greek Parthian-period contracts from Avroman, probably reflecting earlier Seleukid practice, show that in case of violation of the agreement, not only was the injured party to receive a penalty payment, but the royal treasury also (an epitimon). This is perhaps an indication of how pervasive was the taxation system.

One wonders also if a toll was imposed at customs posts on travellers and their animals in addition to their goods. The captive Jews to be liberated without ransom by Demetrios I were granted tax-exemption on both themselves and their animals (I Macc.10.34: .. καὶ πᾶσαν ψυχὴν Ἰουδαίων τὴν αἰράματον τῆς ἱερᾶς ἱερᾶς εἰς πᾶσαν βασιλείαν μου ἀφῆμι ἐλευθέρων δωρεάν, καὶ πάντες Ἀφιέτωσαν τοὺς φόρους καὶ κτηνίων αὐτῶν ..). These Jews had apparently been deported earlier. As captives, what taxes would they have borne, what animals might they have possessed? Head taxes and taxes on flocks cannot be excluded, but what is more likely is that the erstwhile deportees were to return to Judaea, with pack and draft animals to carry their families and possessions, and were effectively being given a toll-free journey. And since they were to be found in ‘the whole kingdom’, this suggests that tolls on travellers may have been applied empire-wide.

68 Bikerman(1938:116-117).
69 Stein(1922:263): the Artaśastra has variable tolls at city gates in Maurya India: 4 or 5% on grain, wood and grease, 6 or 10% on textiles, 16.7% on fruit and 20% on imported articles. Strabo(15.1.51) notes a 1/10th tax on sales in Indian cities.
70 Minns(1915:28,30).
71 Stein(1922:98): a travel tax is also noted in the Artaśastra in Maurya India.
Relatively important, probably, were tolls imposed on goods that crossed from royal land into city land, e.g. timber from Mt. Lebanon. At Herakleia-Latmos (Document 10) exemption was requested from tolls applied on grain leaving royal land, whether for private use or for resale (.. οἱ ἐξαγωντες ἐκ τῆς τοῦ βασιλέως εἰς τὴν πόλιν ἐπὶ τὰς ἱδιας χρείας καὶ εἰς πρόσων ἀτελεῖς ὀσια ..). Added to the price paid to the king for the grain, the tolls charged for entering the city and the taxes for sale in the marketplace, the unfortunate Herakleians had reason to plead with the king for a lightening of their burden. And their case may not have been untypical of a subject city of the empire.

Religious festivals (πανηγύρεις)

One particular case of markets where taxes were levied by the administration were the commercial fairs associated with religious festivals (panegyreis). Tax exemption (ateleia) was sometimes granted to a sanctuary for a panegyris for one or more days in the month or for the few days preceding and sometimes following the festival.72

The temple of Baitokaike in northern Syria was exceptionally favoured with ateleia on the 15th and 30th days of each month (Document 16).73 The sanctuary of Apollo Tarsenos, on the other hand, was granted tax-exemption on its feast day, perhaps the only one in the year (τὴν πανήγυριν ἐν τῷ γενέσθαι ἀτελεῖς ..).74 Herakleia-Latmos was also given exemption for its panegyris (Document 10). The independent temple of Pessinous on the borders of Phrygia and Galatia was regarded as a great emporion.

The grant of ateleia does not make clear what taxes were involved at a panegyris. Perhaps dues for participating in the fair were one impost, analogous to the port dues of an emporion, but sales taxes were probably also levied on transactions. Perhaps, also, tolls were exempted on goods traveling to a panegyris.

The grant of ateleia was not wholly motivated by social considerations. A commercial fair attracted traders and customers from a wider region, particularly in rural areas which did not have easy access to large markets. The fair, in essence, became a temporary

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72 Debord(1982) for the commercial importance of the sanctuaries of Asia Minor.

73 Bikerman(1938:117).

emporion. The sales, that might otherwise not have taken place, meant more production and transport elsewhere that generated tax revenue.\textsuperscript{75}

8.5 Revenue from animals

Πέμπτη δὲ ἡ ἀπὸ τῶν βοσκημάτων, ἑπικαρπία τε καὶ δεκάτη καλουμένη.

‘The fifth (revenue) is that from herds and flocks, called epikarpia or dekate.’

There is some evidence for both fixed-amount and proportional taxes on animals.\textsuperscript{76}

An inscription from Aigai in Aiolis, when it was probably Seleukid, refers to a royal treasury and a 1/50\textsuperscript{th} tax levied on sheep and goats, yearlings being excluded, plus a lamb and a kid, along with a 1/8\textsuperscript{th} tax on bee-hives, presumably on the honey collected. Furthermore a charge was made on deer and boar, of a leg from each animal hunted.\textsuperscript{77}

At Herakleia-Latmos (Document 10) Antiochos III exempted a pasturage tax (ἐννόμων) on animals and bee-hives.

A προβατικόν tax is referred to for an unknown city ca.200 using Macedonian month names.\textsuperscript{78}

The sanctuary of Apollo Tarsenos had been given an additional tax exemption on sheep by Eumenes II to add to others that Antiochos III had granted earlier (.. καὶ ὑπάρχειν τῶι θεῶι ἀτέλειαν καὶ προβατ[τοι]').\textsuperscript{79}

The liberation and tax-exemption offered to Jewish captives and their animals by Demetrios I (I Macc.10.31; Jos.\textit{Ant.}13.51) may indicate a tax on the possession of animals (but also a toll).

\textsuperscript{75} Kuhrt/Sherwin-White(1994b:452).

\textsuperscript{76} Bikerman(1938:118) can find no evidence of a tax on animals.

\textsuperscript{77} Malay(1983).

\textsuperscript{78} Robinson(1958:75).

\textsuperscript{79} Pieńko(1989:letter B,400) for the inscription and the idea that this may not have been a tax on flocks, but perhaps a sales tax on sheep or a special tax on sacrificed sheep. Kreissig(1977b:15) places this temple on royal land.
For comparison, in the Maurya empire shepherds and cowherds paid tax from their animals (Arr.Ind.11.11) and the Persepolis Fortification texts show Achaemenid tax-collectors on their rounds gathering sheep or goats from specific tax-payers.80

8.6 Revenue from head taxes

"Εκτη δὲ ἡ ἀπὸ τῶν ἀνθρώπων, ἐπικεφάλαιον τε καὶ χειρωνάξιον προσαγωγευμένη.

‘The sixth (revenue) is that from people, called both head-tax and artisan-tax.’

What might be considered a head-tax is the ‘crown’ tax (στέφανα or στεφανιτικός φόρος) attested in a number of sources. What probably started as a voluntary gift of a city, a golden wreath with which to crown a royal benefactor, changed with time into a fixed annual contribution in coin, with the gold wreath sometimes added on top, e.g. Erythrai to Antiochos II (OGIS 223, lines 4-5: .. καὶ τὸν στέφανον ἀνήνεκαν, ὡς ἐστεφανώσατε ἡμᾶς, ἡμῶν ἀνὴρ καὶ τὸ χρυσόν τὸ ἐἰς τὰ ζέιμα ..) or the Jews to Demetrios II (I Macc.13.37).81

That certain classes of the population could be exempt by royal decree is attested in Antiochos III’s letter to the Jews (Document 12). Two other head-taxes are referred to in this letter. The first is described as ‘ὑπὲρ τῆς κεφαλῆς τελοῦσα’. The plural suggests a number of taxes or, perhaps, different levels, depending on professional categories. In this sense, this is more like an artisan tax, a cheironaxion. The second is the salt tax, attested also in Mesopotamia and discussed earlier.

The liberation and tax-exemption offered to Jewish captives by Demetrios I (I Macc.10.31; Jos.Ant.13.51) may indicate a head tax (but also a toll).

The Larichos inscription of the time of Antiochos I refers to tax-exemptions by the city of Priene to Larichos82:

.. ἀτέλειαν τοῦ σώματος καὶ ὅν ἦν εἰσαγηται ἡ ἐξάργηται εἰς τὸν ἰδιον οἶκον ..

.. ἀτέλεια καὶ τοῦ γυνῆς κτημῶν καὶ τῶν σωμάτων ὅσα ἦν ὑπάρχη ἑν τῇ τις ἱδίος κτήμασι καὶ ἐν τῇ πάλει ..

80 For example texts PF2025 and 2070 in Hallock(1969).
81 Bikerman(1938:111-112).
82 I.Priene no.18, lines 5-7,24-26;Gauthier(1991:50).
tax-exemption on his person and that which he brings into or out of his own household
.. tax-exemption on the animals and slaves located both on his estates and in the city ..’.

Two interpretations are possible: exemption from a head-tax on Larichos and his slaves
and animals or exemption from military service and the requisitioning of animals. The
former is to be preferred since a tax-exemption on the movement of goods intervenes,
suggesting that the subject of the phrase is taxation.

Though the taxes here are city taxes, these could be wholly or partly taken over if the city
became subject to a Hellenistic king. Then there is a frequent distinction between taxes
due to the royal treasury and those over which the city had retained control (ὅν ἡ πόλις
κυρία ἐστι)\(^{85}\), which might sometimes involve the sharing of the same tax, presumably
collected by the city and then partly paid to the king.\(^{86}\) Therefore a royal head-tax
(\textit{epikephalaion}) on a city’s citizens and slaves is possible.

For a village a head-tax is certainly attested. One was to be paid by the Kardakes near
Telmessos in 181 just after Magnesia when the region had passed to the Attalids, so this
was possibly originally a Seleukid tax. Its level was set per adult at four Rhodian drachms
and one obol, presumably \textit{plinthophoroi} at this time, and so equal to three Attic
drachms.\(^{87}\) If such a tax had been imposed on our Mnesimachos-type village (8.1), its
annual 50-stater tax would have been borne by about 300 adults, a not unreasonable
number for a medium-sized village.\(^{88}\) This suggests that the \textit{epikephalaion} may have
been an alternative, easier, way of assessing tribute on a village in some cases, though
perhaps not a usual one, since this form of taxation might then have ranked higher in ps-
Aristotle’s estimate. Perhaps the strength of this particular village did not lie in agriculture
but in animal husbandry.\(^{89}\) It is interesting that the head-tax here is referred to as a
\textit{syntaxis}.

\(^{83}\) Atkinson(1968:50), Gauthier(1991:55,60) for exemption from military service

\(^{84}\) Wörkle(1979:107,110) for Telmessos and Iasos;

\(^{85}\) Ma(1997:128); Moretti(1977:327); Bikerman(1938:110).

\(^{86}\) Gauthier(1989:33-36), Ma(1997:128) for the 1/10\textsuperscript{th} tax of the city of Sardeis, which Antiochos III
granted relief on his half of.

\(^{87}\) SEG 19.867; Allen(1983:95); Ashton(1994).

\(^{88}\) Doxiades/Papaioannou(1974:48): 700 average village size for antiquity, so say 350 adults.

\(^{89}\) Descat(1997:258) also wondered whether Achaemenid tribute may also have been established on the
basis of the number of people.
Turning now to the artisan-tax, a *cheironaxion* was applied to non-citizen artisans of Telmessos, of which they would be relieved if they undertook to patrol the mountain borders of the city. The city taxes of Telmessos had been taken over by a local dynast or, possibly, the Seleukid king.90.

In the sources there is mention of a *cheirotechnion* in mainland Greece, which seems to have been the same.91 The difference in terminology may reinforce the idea that the author of the *Oikonomika* lived in Asia Minor or further east.

By way of comparison, in the Mauryan empire artisans, traders and wage-labourers paid tax and were subject to public labour duties, while armourers, shipwrights and those that manufactured implements for agriculture were exempted (*Arr.Ind*.12.1; Strabo 15.1.46; Diod.2.41.1).

8.7 Case study. Seleukid Judaea

For no other province of the Seleukid empire do we possess so much detailed information concerning taxation as for Judaea ca.200-140.

The questions, of course, will be whether the system of taxation in Judaea was the same as that in other provinces of the Seleukid empire and whether it also applied in the 3rd century.

The letter of Antiochos III to Ptolemaios (Document 12)

After his conquest of Judaea from the Ptolemies ca.200, Antiochos ordered, amongst other things, tax relief for Jerusalem, which had suffered during the war. Certain taxes are noted in his letter.

For the bringing of timber and other materials to Jerusalem from Judaea, other regions and Lebanon, that were necessary for the repair of the Temple, no *telos* was to be imposed. This would imply that a toll was normally levied at the city gates of Jerusalem,

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91 Daux(1934); Flacelière(1935).
at the borders of the province of Judaea and at the exits of the royal forests of Lebanon for certain goods.\textsuperscript{92}

Three head taxes seem to have been applied, as some sections of the population were to be exempted. These have been discussed earlier.\textsuperscript{93}

A three-year exemption from taxes (\textit{ateleia}) was granted to the inhabitants of Jerusalem and all those who returned to the city by a certain time. Does this include the head taxes already mentioned? Probably not, as then the concession to the Jewish ruling classes would have been of no value. So one must suppose that the taxes implied are those that were normally levied within the city for legal and economic transactions, e.g. sales taxes, registration fees etc. The distinction is being made between \textit{telos} here and \textit{phoros} in what follows, between taxation and tribute, which one will see being repeated in other documents concerning fiscal matters in Judaea.

The same inhabitants of Jerusalem were being granted a permanent one-third reduction in tribute (\textit{phoros}).\textsuperscript{94} There is a problem here, since it has generally been considered that tribute was applied as an annual sum to a collective entity, a Greek polis, a village in royal land, a temple, a dynast or an \textit{ethnos}, which in turn distributed the burden amongst its members as it saw fit. So why is Judaea not mentioned here, but only Jerusalem? It is quite clear in the text that the Jews were considered an \textit{ethnos}, but apparently only insofar as their own laws and customs were concerned (\textit{πολιτευόμενοι τῶν ἑθνῶν κατὰ τοὺς πατρίους νόμους}). For the Seleukid fiscal authorities, Judaea seems to have been treated very much like any other province of the empire and Jerusalem like any other subject city, with a tribute assessment and a range of appropriate taxes.\textsuperscript{95}

There is not a single tax concession in Antiochos' letter for the rest of the population of Judaea, unless a few of the members of the Jewish ruling classes, who benefited from the head taxes exemption, happened to reside in the countryside. Indeed it is very probable

\textsuperscript{92} Also Bikerman(1935:16).

\textsuperscript{93} Bikerman (1935:18): the 'ὅπως ἐκ τῶν Ἐθνῶν τοῦ ἐκαθολίκῳ τελοῦν' may refer to different head taxes according to local custom. Tscherikover(1959:155): for example, the half shekel paid annually by each Jew to the Temple annually for the daily rites. But this is unlikely, in my view, because Antiochos had clearly stated that he would not interfere in local custom.

\textsuperscript{94} But Hahn(1978:18) takes this, along with the previous concession, as tribute remitted for three years and then reduced by 1/3\textsuperscript{rd}.

\textsuperscript{95} Also Schäfer(1995:29) for Antiochos' measure applying only to Jerusalem, but Kreissig(1978:73) and Bikerman(1988:126) for tribute paid by the Jews as an \textit{ethnos}.  


that Judaea would continue to pay tribute, assessed on its towns and villages, as well as head taxes and transaction taxes. Perhaps most important of all, taxes on agricultural production and animal husbandry are not mentioned in Antiochos' letter, probably not because they did not exist, but simply because they did not affect the city of Jerusalem so much as the countryside (see also the letters of Demetrios I and II below). Since the only tolls suppressed were for building materials entering Jerusalem for the Temple, including those from Judaea, one must suppose that tolls on other goods, e.g. agricultural produce, would still be levied at the city gates.

In this light, Antiochos' gesture does not appear to have been quite so generous. In the position of strength in which he found himself ca.200, Antiochos had no need to make concessions. Nor did he probably have any desire to reduce his revenues more than was absolutely necessary. Indeed he would have preferred to increase them, if he could, which seems to have been the consistent policy of Seleukid kings all along. Antiochos' decisions regarding the Jews were based on short-term political and financial considerations. The main beneficiaries were to be the Jewish ruling classes and the Temple, whose political support was desirable and would be paid for by the concessions. In this respect, the rest of the population of Judaea was a negligible quantity. As for the Temple, it was central to the economy of the province. By repairing it, and in particular its commercial porticoes ($\tau\alpha\varsigma\pi\epsilon\sigma\tau\omicron\alpha\varsigma$), and providing temporary relief from a number of transaction taxes in the city, the economy of Judaea could be stimulated. After three years, when the tax exemption no longer applied, Jerusalem could be expected to produce a satisfactory return for the royal treasury. For the countryside, there was also likely to be an improvement in its revenue-generating capacity as the city's economy, with which it was closely linked, grew stronger.

The position then at the time of Antiochos III seems to have been that Judaea paid tribute, assessed separately on Jerusalem and the different towns and villages, plus tithes on agriculture, head taxes of various kinds, tolls and other transaction taxes and perhaps taxes on animals. There is no mention of how the tax was collected, whether by the royal authorities or by tax farmers.

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The reign of Seleukos IV

At the time of Seleukos IV the tribute and taxes of Judaea are said to have amounted in total to 300 talents a year (Sulpicius Severus *Chron.* 2.17.5). Either this is an estimate or, more probably, in the light of subsequent events, a lump sum promised by a tax-contractor.

The tax-farming concessions by Antiochos IV

The next reference to taxation is when tax-farming contracts were conceded by Antiochos IV to two High Priests. Onias had earlier acquired the right to collect the taxes of Judaea, presumably the 300 talents above, but was outbid by Jason, who offered 360 talents plus 80 more for ‘any other revenue’, but what this was is not clear from the text (II Macc. 4.8: ἐπαγγελόμενος τῷ βασιλεῖ δι’ ἐντεύξεως ἄργυριον τάλαντα ἔξηκοντα πρὸς τοῖς τριακοσίοις καὶ προσόδου τινὸς ἄλλης τάλαντα ὀγδοήκοντα). Possibly the larger amount comprised tribute and taxation on land, while taxes on people, animals and commercial and legal transactions made up the smaller amount. This would be in keeping with the idea that ps-Aristotle has listed sources of revenue by importance and the very high taxation noted on land generally, but also specifically in Judaea (see below)\(^97\). Menelaos promised 300 talents more (II Macc. 4.24: ὑπερβαλὼν τὸν Ἱάσωνα τάλαντα ἄργυριον τριακόσια), but does not seem to have been able to meet his quota (II Macc. 4.27). The fiscal capacity of Judaea may have reached its limits.

The letter of Demetrios I to the Jewish nation (Document 13, with slight differences in I Macc. 10.25-45)

Fiscal matters come up once more ca. 150, when Demetrios I promised the Jews that he would free them from most of the tribute (τοὺς φόρους) and taxes (τὰς συντάξεις) that they had paid his predecessors. His situation was quite unlike Antiochos III’s in that he found himself in a position of weakness, in need of Jewish support against Alexander Balas.

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\(^97\) Abel(1949:331): the 80 talents to collect customs duties and tolls.
The major difference with Antiochos is that there was to be no special treatment of Jerusalem. What was offered by the king applied to the whole of Judaea, including recently added districts from adjacent provinces. Demetrios had, so to speak, to lay his cards on the table and one can thus obtain a full view of the range of taxation in Judaea.

In Demetrios' letter immediate exemption was to be granted both from tribute (τοῦ φόρου) and the tithe on agriculture, which stood at 1/3 of the grain crop and 1/2 of the fruit crop (καὶ ἀντὶ τῶν τρίτων τοῦ καρποῦ καὶ τοῦ ἡμίσεως τοῦ ἔξοδου καρποῦ τὸ γενόμενον ἐμοὶ μέρος / καὶ ἀντὶ τοῦ τρίτου τῆς σπορᾶς καὶ ἀντὶ τοῦ ἡμίσεος τοῦ καρποῦ τοῦ ἔξοδου τοῦ ἐπιβάλλοντος μοι λαβεῖν in I.Macc.), or rather the equivalent value, if ἀντὶ is to be understood as 'in place of', 'to the value of'.

It is quite certain that there were two different tax burdens, as the tithe is linked to the tribute with 'πρὸς τοῦτοις' (= 'on top of this'). This helps reinforce the idea that a tithe on agriculture also existed under Antiochos, but was not relieved, and is what the Mnesimachos and other Greek inscriptions showed as possibly being standard fiscal practice in the Seleukid empire for revenue from land, i.e. tribute (ekphorion) plus a tithe (dekate) on agricultural produce.

Demetrios also promised relief from the salt tax (τὴν τιμὴν τῶν ἀλών / τῆς τιμῆς τοῦ ἀλῶς in I.Macc.) and the crown tax (τὴν τιμὴν τῶν στεφάνων) and, separately, from the general head tax 'on each person, whatever was due to be given to me' (ὑπὲρ κεφαλῆς ἐκέκαστης ὧν ἔδωκα μοι διδόσθαι). These are exactly the same head taxes from which Antiochos had exempted only the Jewish upper classes earlier and confirms that there were indeed three. In fact, the phrasing of the general head tax does suggest that different rates may have been applied to different sections of the population. The nature of the salt tax has already been discussed.

Continuing with Demetrios' promises, Jerusalem, up to her boundaries, was to be relieved of the dekate and the tele (ἀπὸ τῆς δεκάτης καὶ τῶν τελῶν). Freedom from tele, or sales and transaction taxes, within the city probably matches the exemption granted earlier by Antiochos for three years. But the use of dekate is puzzling. The terminology might

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99 Also Schäfer(1995:54); contra Mørkholm(1966:145-146) that Antiochos IV introduced fixed tribute and then replaced it with proportional land taxes and Freyne(1980:185-186), that land taxes replaced tribute after the Maccabean revolt.
suggest a tithe on agriculture for Jerusalem. But this would be absurd if the tithe had been abolished in Judaea as a whole. In any case, the terminology used previously for the agricultural tithe is quite different. It is more likely then that the *dekate* was specifically a toll, to be distinguished from the sales and other transaction taxes in the city.\(^{100}\) It was not mentioned in Antiochus’ letter simply because no general relief from tolls at the city gates of Jerusalem had being granted then. One presumes that for goods crossing the frontiers of Judaea, Demetrios would still continue to levy tolls.

There was also to be no requisitioning of animals (*μηδὲ ἀγγαρεύσεσθαι τὰ Ἰουδαίων υποζύγια*), while the Sabbaths and feast days, and also three days before each feast day, were to be free of taxes (*ἀτέλεια*). These last are likely to have been transaction taxes again, and more specifically sales taxes, which would be waived on the occasion of the equivalent of a *panegyris*, much as happened elsewhere in the empire (8.4). However, if the correct interpretation has been given to this document, sales taxes would not have been incurred within the city of Jerusalem anyway, so what seems to be implied here is the rest of Judaea.

There is, finally, the case of the liberated Jewish captives (I Mac.10.34) discussed earlier, who would be freed of tax along with their animals. Two possible interpretations were given earlier (8.4-6), either exemption from a head tax and a tax on animals or, more probably, from a toll on persons and animals, when these Jews returned to Judaea.

The letter of Demetrios II to Jonathan (Document 14)

In a position of weakness once more, a Seleukid king again sought support from the Jews. It is likely that Demetrios I’s earlier promise had not been fulfilled, as Jonathan seems to have preferred to side with Alexander Balas (I Macc. 10.47).

This time Jonathan’s demand was that Judaea and the attached three districts of Samaria be made tribute-free (*aphorologetos*) in return for 300 talents (I Macc.11.28). This should not be taken literally, as the king would still earn 300 talents a year using the Jewish High-priest as tax-farmer.\(^{101}\) Demetrios II agreed and, as part of the package, ordered that the tithe on agriculture (*ἀπὸ τῶν γενημάτων τῆς γῆς καὶ τῶν ἀκροδρύων*) be

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\(^{100}\) Goldstein(1976:408), following Bikerman(1938:115-117) for sales taxes and tolls.

\(^{101}\) Also Schäfer(1995:54).
abolished. He also granted tax relief from tolls and transaction taxes (δεκάται and τέλη), the salt tax (τὰς τοῦ ἀλὸς λίμνες) and the crown tax (τοὺς ἀνήκοντας ἰμῶν στεφάνους). Compared to the 360 plus 80 talents or more that the High-Priest Jason had paid the Seleukid treasury in the reign of Antiochos IV for Judaea alone, Jonathan must have been getting quite a bargain. But his was the stronger position.

8.8 Conclusions on regular revenue

The picture of taxation in the province of Judaea ca.200-140 shows taxes applied to most economic activities, that match very well with the six sources of revenue in the satrapal economy in ps-Aristotle’s Oikonomika. One can observe 1) tribute on corporate entities, such as the city of Jerusalem, and a tithe on agriculture that varied according to the product, 2) revenue generated from royal natural resources such as forests and salt pans, 3) tolls on goods crossing provincial boundaries or city gates or exiting from royal forests, tolls on persons and animals and sales and transaction taxes in the city and countryside and religious fairs, 4) taxes on animals and 5) a number of head taxes that were both general and selectively applied to certain sections of the population. Only some special taxes of an emporion are missing, such as port dues, but that is simply because Jerusalem and Judaea received no water-born trade.

The same picture has been observed in the study of the documents examined earlier in this Chapter, which came predominantly from Asia Minor. Again, every single form of revenue described by ps-Aristotle was identified. In one case at least, that of Herakleia-Latmos (Document 10) most could be found together.

Since ps-Aristotle was describing the picture that he could observe in Asia Minor or northern Syria in the early 3rd century and one cannot detect any significant differences in Judaea of the first half of the 2nd century, it is quite possible that this Seleukid system of taxation was general in both time and space. It seems also to have been a very comprehensive system, leaving no area untouched where the kings could derive revenue, in keeping with the policy of maximization of income which I have considered one of their objectives (Chapter 3).
8.9 Extraordinary revenue

In the theoretical section of the *Oikonomika* ps-Aristotle attempted to categorize the regular income of kings via their satrapal administrations. In his theoretical treatment he did not make provision for any *ad hoc* revenues. These were dealt with in the practical examples that followed.

Seleukid kings raised funds from time to time by resorting to extortion and plunder. Such cases have found their way into the mainly hostile sources for their reigns, e.g. Polybios for temple-plundering by Antiochos IV (31.9.1) or I and II Maccabees, and tend to create the impression that this activity was wide-spread. But given the fact that there were very few wars of conquest outside the borders established by Seleukos I, except for those persistent and mostly inconclusive Syrian Wars, the opportunities for plunder seem to have been fairly limited. In those cases where erstwhile Seleukid provinces or cities were reconquered, which occurred only rarely, it did not pay the king to inflict excessive damage as this would have ruined his future revenue-earning prospects from taxation. He more often than not settled for an indemnity (see below).

From time to time a defeated enemy or a rebel city or people were treated harshly and plundered and enslaved, but this was legitimate practice in the eyes of the Greek world: to the victor belonged the spoils of war, who could impose his will on the defeated. The cities and peoples of the Seleukid empire lived a relatively peaceful existence when compared to the turmoil of the old Greek world in the last three centuries BC.

**Indemnities**

An indemnity might be imposed on a defeated enemy. Antiochos III exacted 300 talents from the Armenians plus 1,000 horses and 1,000 mules (Pol.8.23.5). Euthydemos of Baktria made concessions to the king, including the provisioning of his troops and the supply of elephants, but also ‘on other matters’ (Pol.11.34.10). Sophagasenos of the Paropamisadai was similarly imposed upon for elephants, but also for treasure (Pol.11.39.11-12), which suggests that this may also have been Euthydemos’ ‘other matters’. Gerrha avoided a military confrontation by paying 500 talents of silver, 1,000 talents of frankincense and 200 talents of myrrh (Pol.13.9.5).
Antiochos VII demanded 1,000 talents from Simon, the Jewish high-priest, unless he delivered up the cities and lands (mainly Joppa and Gazara), along with their tribute, that he had taken outside the borders of Judaea (I Macc.15.30).

A city within the empire might be fined for supporting an opponent of the king, e.g. Seleukeia-Tigris, whose 1,000 talents were graciously reduced by Antiochos III to 150 (Pol.5.54.9), and possibly also Sardes after its recapture in 213. Selge in Pisidia paid 400 talents to Achaios to cease hostilities, with a further 300 to come (Pol.5.76.10).

An indemnity may be a pointer to annual revenue from a province or city. In Greek tradition a fine was often levied for late payment or violation of an agreement equal in value to the transaction itself. In the Mnesimachos inscription (Document 5), for example, twice the value of the loan was to be paid if Mnesimachos violated his agreement. At Aspendos Alexander doubled the tribute of 50 talents to 100 when the city did not pay (Arr. Anab.1.26.2, 27.4).

Plunder

Captives were an important element of plunder in warfare. During the Maccabean revolt the Seleukid official Nikanor calculated that he could raise 2,000 talents from the anticipated sale of the Jewish population (II Macc.8.10; Jos. Ant.12.299). Antiochos IV apparently enslaved 40,000 when he suppressed a Jewish revolt and took Jerusalem (II Macc.5.14), though such a figure is highly suspect.

The looting of temples of their valuables appears with somewhat greater frequency in the sources, but should not give one the impression that the Seleukid kings plundered for plunder’s sake, though it is true that short-term financial difficulties may have made temple treasuries attractive targets.103

An attempt was made by Heliodoros, the minister of Seleukos IV, apparently to rob the Temple of Jerusalem of the savings of widows and orphans valued at 200 talents of gold and 400 talents of silver, but was frustrated by divine intervention, according to the Jewish version (II Macc.3.7ff). There is some question, though, whether this was such a

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102 Gauthier(1989:13,19-21) suspected that an indemnity was mentioned in the illegible first line of the inscription (Document 9), to be settled in three years.

wanton act. Seleukos IV had been providing funds for the sacrifices in the Temple (II Macc.3.3: ..καὶ Σέλευκος τοῦ τῆς Ἀσίας βασιλέα χρησάνειν ἐκ τῶν ἴδιων προσώπων πάντα τὰ πρὸς τὰς λειτουργίας τῶν θυσιῶν ἐπιμᾶλλοντα δαπανήματα ..). It was signalled to the Seleukid authorities by their local supervisor (προστάτης τοῦ ἱεροῦ) that the contents of the Temple treasury of the Temple did not match the accounts for the sacrifices (II Macc.3.6: .. καὶ μὴ προσήκειν αὐτὰ πρὸς τῶν θυσιῶν λόγον ..). It is possible then that Seleukos believed that the funds he had been supplying for a specific purpose had been misused and wished them returned.

The temple of Aine at Ekbatana was despoiled by Antiochos III of gold and silver ornamentation valued at 4,000 talents (Pol.10.27.12-13). Here, it is true, no cause seems to have been given by the temple, other than the king's own pressing financial needs for his Anabasis.

Some years later Antiochos IV, on his return from Egypt, captured Jerusalem by assault, took many captives and plundered the Temple of possessions valued at 1,800 talents. However, the Jews had apparently revolted, misled by a false report about the king's death in Egypt (I Macc.1.21; II Macc.5.14; 5.21). In Greek eyes, subjects who rebelled were forfeit along with their possessions and this was normal treatment. An alternative explanation is the forced collection of arrears of the annual tribute of 660 talents promised by the High-Priest Menelaos in 172 or 171, but never delivered.¹⁰⁴

Antiochos III died attempting to plunder the temple of Zeus-Bel in Elymais (Diod.28.3,29.15; Strabo 16.1.18) and Antiochos IV may have suffered a similar fate after an attempt on the temple of Artemis-Nanaia, also in Elymais (Pol.31.9; Diod.31.18a). That is how hostile tradition has presented these events. One may, however, consider them in the context of military campaigns, whose objective was simply to bring back into the Seleukid fold provinces that had broken away in the aftermath of Magnesia (which is how the normally hostile I Maccabees(3.31) has presented this for Antiochos IV: καὶ ἐθουλεύσατο τοῦ πορευθῆναι εἰς τὴν Περσίδα καὶ λαβεῖν τοὺς φόρους τῶν χωρῶν), and resistance happened to be met at important local sanctuaries, which also served as treasuries.

¹⁰⁴ Morkholm(1966:142-143).
Other sources of revenue

The king might acquire revenue by the act of granting a charter to a Greek *polis*. There were advantages in being a citizen, fiscal and otherwise, which someone would be willing to pay for. Jason, the High Priest offered 150 talents for the privilege of enrolling citizens in Antioch-Jerusalem (II Macc.4.9), which no doubt he felt he could recoup quite easily. One wonders if this practice had also been applied in other city foundations.

Similarly Demetrios I was paid 1,000 talents by Orophernes for helping to place him on the Kappadokian throne (App.Syr.47).

The sale of royal land to Pitane has already been mentioned (8.1) and might be indicative of Seleukid practice in generating revenue when required.

Conclusion

The various cases of extraordinary revenue collection described above often do show high sums, but one questions what these might have represented compared to regular annual revenue. If, for example, the indemnity of Seleukeia-Tigris had been set at one year’s tribute and taxation from the city, one should consider the remaining 160 years when the city provided regular revenue of this order. If the temple of Jerusalem yielded 1,800 talents in plunder (and not tribute owed) after more than 30 years of Seleukid rule, this represented only a small fraction of what the province had generated in revenue in this time. Though extraordinary revenue did help with temporary cash-flow problems, particularly those created by the need to finance military campaigns, it probably constituted overall and in the long run a negligible proportion of the income of Seleukid kings.105

105 contra Green(1990:362) that booty constituted a major item in the revenue account.
9. THE HANDLING OF SURPLUSES

Περὶ δὲ τὰ ἐξαγωγήμαα καὶ εἰσαγωγήμαα πότε καὶ τίνα παρὰ τῶν σατραπῶν ἐν τῇ ταχῇ ἐκλαβοῦντι αὐτῶν λυσιτελήσει διατίθεσθαι.

‘With regard to goods that can be sent out or brought in, which of them, having been received from the satraps in their provinces, were to be profitably disposed of on his (the king’s) behalf and when’

In Chapter 7 on the Oikonomika it was suggested that the second and third aspects of the royal economy represented the interaction between this and the other types of economy in terms of goods and bullion that crossed their respective boundaries in either direction. Though the terms εἰσαγωγήμα and ἐξαγωγήμα can indeed denote imports and exports in the modern sense, of a Greek polis for instance, here the meaning is more specific. It concerns the management of the surplus collected by the king from tribute and taxation and the natural resources he controlled. It includes items transported even within a province to and from royal land, treasuries and storehouses.\(^1\)

Fortunately there is a source which can show how the management of surplus was handled in detail at some point in time and place in the Achaemenid empire. This may help illuminate several Hellenistic-period texts and Seleukid practice.

9.1 Evidence from the Persepolis texts

It will be recalled (Chapter 1.4) that the Fortification texts of the time of Darius I deal with the movement of commodities to and from storehouses in an administrative area centered on Persepolis, which probably coincided with the later Seleukid satrapy of Persis. The chief administrator at Persepolis and his deputy controlled the entire operation with an organization that will be discussed in Chapter 13.1. Slightly later in time, the

\(^1\) Briant(1994b:74) also refused to translate the ἐξαγωγήμα and εἰσαγωγήμα of ps-Aristotle as ‘exportations’ and ‘importations’, but rather as ‘sorties’ and ‘entrées’, which concern the surplus that had to be managed intelligently by the administration. His original idea (1986:42) was that this referred to grain transported from one satrapy to another to balance surpluses and shortages and build up stocks on the great strategic routes, but this developed (1996:467) into any exits and entries of products from and into royal storehouses and a categoric denial in Briant/Descat(1998:91) that this had anything to do with exports and imports. Also Murray(1966:151): the reception, storage and disposal of goods and bullion received from satrapies.
Treasury texts (also Chapter 1.4) record payments made in silver to officials and workers at Persepolis in lieu of part of their ration allowance.

The Persepolis texts provide us with a glimpse of the workings of a satrapal economy, but the royal economy intrudes from time to time. There is evidence that similar operations may have been conducted at Susa and in Arachosia, which raises the possibility that the system may have been general.²

**Surplus, exchange and price**

Here is an example of how the surplus between commodity taxation receipts and ration-issuing requirements was handled at a satrapal storehouse according to the Fortification texts. This has been discussed elsewhere at length.³

Part of an account for years 18 and 19 of Darius I (504/3) at the Hištiyanuš fortress reads as follows⁴:

‘.. And again, in that fortress, an account was made for Maraza the assistant fruit-handler, Umaka the haturmakša, Hindukka the etira, total 3 (persons).
They withdrew 27 22/30 (irtiba) of fruit.
Then they made a sut (for) an adult female ass of lowest quality, the payment (being) 16 20/30 (irtiba) of fruit.
Then the ass was entrusted to Bakaparna in the 20th year, on the 12th day (of) the first month.
(As) balance they were withdrawing 11 2/30 (irtiba).
Of that they did not expend (for) what they were to make sut.
Then (for?) each 55 šaumaraš (and) one-third šaumaraš were brought in, in (accordance with) the former law.’

At this storehouse there were stocks of grain, wine and fruit, which had been apparently collected from taxation of the surrounding district. Maraza was the storekeeper.

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³ Aperghis(1997a).
responsible for fruit, while the role of the other two officials in the text will be discussed in Chapter 13.1.

It was decided that a certain quantity of fruit was surplus to the storehouse’s requirements and this was ‘withdrawn’ in accordance with a general policy of bringing commodity stocks down to zero or very low values by the end of the year in preparation for taxation receipts from the following year’s harvest. This ‘withdrawal’ essentially belonged to the king and now entered the royal economy from the satrapal.

A certain part of the amount withdrawn was exchanged for an ass at a price that had actually been pre-set for this type of animal and quality. Some time later an official, Bakaparna, on a round of collection, picked up the ass, as he did various animals from other storehouses. Collectors also picked up surpluses of grain and other commodities and brought them to royal storehouses or estates.

But at Hištiyanuš some fruit still remained and this was sold for šaumaraš, again at a preset rate of five to an irtiba of fruit. On this particular occasion the transaction was not carried out at the current official rate for some reason, but at the previous one. The šaumaraš, it turns out, was very possibly silver, which was also collected from the storehouses and brought to Persepolis.

At Persepolis the Treasury texts show us that silver was used to make partial payments to officials and workers and it then presumably found its way back to the storehouses in exchange for supplies.

A trading-post (zamataš) is where this exchange may have taken place. In one text\(^5\) 78 irtiba of barley were withdrawn from a storehouse and

> ‘Antarma received and took it (to) the zamataš of Harriyauzaka at Manada; he removed (it) by road. It was deposited to his (account and) he will be making sut’.

One can envisage Antarma carting 2,340 litres of the king’s barley, which might otherwise have rotted in the storehouse, to the trading post where it could be profitably exchanged or sold on the king’s behalf.

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Sometimes one can see the process reversed, a transfer back from a royal to a satrapal storehouse:

'Tell Piratamka, Ziišawiš spoke as follows: Flour which from the (royal) stores went to him (at) Uzikurraš in the 22nd year, out of that flour 49½ BAR (of) flour (is) to be issued (as) rations to Skudrian (and) Ašketian workers, whose apportionments are set by Baraddumawiš ...'

Ziišawiš was the deputy-head of the Persepolis administration and Piratamka a storekeeper in charge of a travel station on the Royal Road between Persepolis and Susa. Flour rations were normally provided to travellers passing through, sufficient only for one day, whereas workers in the vicinity had to be content with raw barley. This was obviously an exceptional situation, perhaps a bonus of some sort, as one often finds in the Fortification texts. At the usual rate of 1 litre per worker per day, this amount of flour would feed 495 workers for one day. This and more flour had apparently been issued to the travel storehouse from some royal store where, presumably, surplus grain had been collected and milled.

Here is how a transfer between satrapal and royal storehouses was typically recorded on a transaction tablet:

'29 marrish of wine Appirmarsha acquired and took (it) from (the place) Rashinuzza (to) Bashrakada (for) the royal stores'.

There are also occasional references to the 'sheep of the king', the 'cattle of the king', the 'royal horses' etc., which allow us a glimpse of the royal economy.

Other Achaemenid evidence

But, on a more general level, one should ask oneself the question of how it was that the Persian satraps obtained the silver with which to send the tribute of their respective provinces to the king (Hdt.3.90-94), if not to some extent through the sale of their

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surplus stocks. An example comes from an Athenian decree (IG II² 207, a-d) honouring the Persian satrap Orontes for having sold grain to the Athenians for silver.\textsuperscript{10}

In 5\textsuperscript{th} century Babylonia the Murašu texts (Chapter 1.4) show quite clearly that taxes were owed to the Persian treasury in silver on land which had been granted by the king to hatrus, which were groups of soldiers, artisans etc, who may have found it difficult to raise the necessary silver. The Murašu firm undertook to lease the land from the hatrus and pay their silver taxes. They then sub-leased the land, along with water-rights, equipment and seed, in return for a rent in barley or dates. One is not told how they converted these commodity receipts into silver, but is not unreasonable to suppose that this was through bulk sales in city markets, perhaps partly after conversion into other products, e.g. barley beer or date wine. As far as the royal administration was concerned, an intermediary had been found to convert what was originally commodity taxation into silver.\textsuperscript{11}

The examples discussed above show a system in operation exactly like that described by ps-Aristotle regarding ‘goods that can be sent out or brought in’. Not only was there movement of commodities between the royal and satrapal economies in both directions, but the surpluses of satrapal storehouse were exchanged for something else or sold for silver in a way that was apparently advantageous for the king.

\textbf{9.2 Evidence from Hellenistic texts}

\textbf{Antigonos and the synoikism of Teos and Lebedos (Document 1)}

In a letter addressed by Antigonos Monophthalmos to Teos in western Asia Minor regarding a synoikism with Lebedos, Antigonos appeared upset that the Lebedians, seconded by the Teans, had requested that they be allowed to import grain because of an anticipated shortage. He pointed out that the taxed land was located nearby and any supplies could easily be obtained from it (\textit{.. πληθών οὖσας τῆς φορολογομέλινης χώρας ὡστε έάν χρεία γίνηται σίτου, εἰκερῶς οἱμεθα εἶναι μεταπέμπεσθαι ἐκ [ταύτης ὁπόσοι] ὃν τις βούληται}).

\textsuperscript{10} Briant(1994b:72-73) discusses the decree in detail and concludes that the sale of grain surpluses was ‘une pratique courante et normale des satrapes’.

\textsuperscript{11} Stolper(1974;1985) for the Murašu.
Antigonos’ letter mentions the *phorologoumene chora*, the taxed land. Looked at from the perspective of ps-Aristotle, the ‘taxed land’ belonged to the satrapal economy, which is where taxation and rents were collected (Chapter 8.1). It was the surplus over and above the needs of the satrapy, both in silver and in kind, which could be disposed of on the king’s behalf. So what Antigonos was implying is that on his orders the Teans and Lebedians could receive grain from this surplus.

One can see that Antigonos was protesting his good intentions too much and the reality was probably different. Teos and Lebedos were probably considered by him tied customers for his salable grain and being taken advantage of. They justifiably wanted a less expensive supplier but had to be diplomatic about suggesting this to their nominal ally, but actual overlord, Antigonos. If they could have bought grain at a low cost from him, why look elsewhere? ‘As everyone knows’ in Antigonos’ letter suggests that the sale of commodities from royal lands must have been common practice and he himself declared that it was his policy for all subject cities to restrict grain imports. Thus one should not doubt that Antigonos kept his one eye very firmly on the market and took advantage of his near-monopolistic position. In the end, however, he acceded to the request of the Teans, presumably attaching more value to long-term political advantage than to short-term financial gain.

Eumenes and the mercenary agreement.

In this text (OGIS 266) a contract with mercenary soldiers is laid out in detail. Though from Attalid Asia Minor, this is probably relevant to Seleukid practice as well. There are some special circumstances relating to a mutiny that had just taken place, but these are not relevant to the present discussion. Mercenaries were normally given a daily wage (ἀρέσκιον, μισθός) and a food ration or allowance (αἶτος, μέτρημα) (Chapter 10). In the agreement (line 1) this is how the Attalid king was to handle the food allowance:

‘.. αἶτον τιμήν ἀποτίνειν τοῦ μεδίμνου δραχμᾶς τέσσαρας, οἶνον τοῦ μετρητοῦ δραχμᾶς τέσσαρας ..’

‘... to set a price for wheat of four drachmas per medimnos and for wine of four drachmas per metretes ..’
It has been suggested\(^\text{12}\) that what the text means is that the king paid these sums, presumably on a monthly basis, so that the soldiers might themselves purchase their grain and wine supplies. However, there is a problem here. If the king were indeed specifying payments that he had contracted to make, what of the normal wages of the mercenaries, which should logically have appeared at this point in the agreement and do not? In my interpretation the king established a fixed price for his soldiers so that they could make purchases at royal storehouses. A *medimnos*, equal to 48 *choinikes*, was the normal soldier’s ration in antiquity for 48 days. One can envisage soldiers’ messes, their ‘household economies’, making regular bulk purchases from the royal economy. It is interesting that the wheat price at which Eumenes had agreed to sell produce from the royal stores to his mercenaries seems to have been lower than the prevailing price in this period.\(^\text{13}\) The fact that such a price option was included in the mercenary agreement suggests that the price must indeed have been low. One can speculate that perhaps one of the reasons for their revolt may have been the fact that the mercenaries, as tied customers of the king, were being compelled to purchase supplies at rather high prices, thereby effectively returning to their paymaster much of what they had received from him in pay. Eumenes may have been using a near-monopolistic position to sell his produce no differently from Antigonos and so, in all likelihood, would have done a Seleukos or an Antiochos.

**Demetrios I and the Jews**

In the competition between Seleukid contenders for Jewish support ca.152, Demetrios I’s offer included the following (I Macc. 10.40):

‘... καὶ γὰρ δίδομι κατ’ ένιαυτόν δέκα πέντε χιλιάδες σίκλων ἄργυρίου ἀπὸ τῶν λόγων τοῦ βασιλέως ἀπὸ τῶν τόπων τῶν ἀνηκόντων ..’

‘... And I will give each year 15,000 shekels of silver from the king’s account from the places belonging to me.’

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\(^\text{12}\) Griffith(1935:282-288); Grote(1913:86-87).

\(^\text{13}\) Also Launey(1950:738-746), who discusses the meaning of *ἀπαιτεῖν* and draws attention to the higher prices at Delos in the first half of the 3rd century of 5.7 to 9.9 *drs/medimnos* for wheat and 10-11 *drs/metretes* for wine. Eumenes’ mercenaries were apparently getting a good bargain.
Obviously it is not possible to pay silver from land and what is referred to here is the value of a certain amount of agricultural produce, rent from royal land. A sale would have to be made in the satrapal or city economies and the proceeds entered into the royal treasury before payment to the Jews could be effected.

Laodike and Iasos (Document 6)

Laodike, the wife of Antiochos II, wrote to the city of Iasos concerning a gift of grain that she had made to the city, which she had instructed the dioiketes, Strouthion to deliver each year (γεγράφεια Στρουθίων τῶν διοικητῆς ἐν' ἐτη δέκα κατ' ἐνιαυτὸν πυρῶν χιλίων μεδίμνους Ἀττικοῦς εἰς τὴν πόλιν παρακομίζοντα παραδίδοναι τοῖς παρὰ τοῦ δήμου)

As will be argued in Chapter 13.5, the dioiketes was responsible for the financial administration of a satrapy or a region within one, including the management of the king’s own property, taking his orders directly from the king. Here it is the queen who issues the orders, which suggests that this grain was coming from a royal surplus. The text goes on to inform us that the city was expected to sell the grain so as to provide dowries for daughters of poor citizens. Naturally, Laodike might have provided the silver herself, but it may have seemed easier to shift the problem of the grain-sale onto the city.

One can see a similar picture in the Fortification texts, where estates belonging to members of the royal family are called ulhi, whereas those granted to officials of the administration are irmatam. Here is an example of an Achaemenid queen’s orders to issue commodities from her estate:14

‘Tell Šalamanna (the woman) Irtasduna spoke as follows: From my ulhi (estate) (at) Kuknaka 100 marrish (of) wine (is) to be issued to Kamšabana the accountant. Irtima (is) the hirakurra. In the 22nd year (this) sealed document (was delivered)’

Irtasduna was Artystone, the favourite wife of Darius I (Hdt.3.88), Irtima the hirakurra may have been the bailiff of her estate and Šalamanna, who crops up a number of times in the Fortification texts arranging for provisions to be supplied, is likely to have been a financial officer in the satrapal administration.

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Other texts

Wood from the royal forests of Taranza and Lebanon for the rebuilding of Sardeis (Document 9) and the Temple of Jerusalem (Document 12) are other examples of transfers from the royal to city economies. Free grain supplies and oil for the gymnasium of Herakleia-Latmos (Document 10) probably originally arrived at royal storehouses as the surplus of rent from royal land or taxation from cities. And so on.

9.3 Conclusions on the handling of surpluses

The Achaemenid kings received much of their income from commodity taxation, but, though they paid many of their expenses as commodity rations, a surplus was still left over, which needed to be disposed of for two reasons. The first is that commodity stocks would eventually spoil if left in storage for too long. The second is that other useful items were also required for the running of the empire, principally precious metals.

For the Seleukid kings it has been suggested (Chapter 3) that they strove to convert more of their taxation receipts and administrative expenses into silver. But though the volume of incoming and outgoing commodities in the satrapal economy may have been lower, the problem of a surplus and its disposal continued to exist.

In both empires the solution seems to have been the same: satrapal officials had the responsibility of disposing of the surplus by sale or royal grant. In the Seleukid empire, however, one has the impression that the king was more directly involved in the decision-making (see also Chapter 13).

One thing is clear, that the commodity surpluses of the king, whether Achaemenid or Seleukid, were not left idle.¹⁵

¹⁵ For Briant(1994b:76) a tributary economy had need of access to a market where it could dispose of its surpluses for silver. Exchange could be initiated by officials of the administration or private merchants acting as intermediaries.
10. EXPENDITURE

Περὶ δὲ τὰ ἀναλώματα τίνα περιαρετέον καὶ πότε, καὶ πότεν δοτέον νόμισμα εἰς τὰς
dαπάνας, ἦ ἀντὶ νομίσματος ἄλλα.

'With regard to expenditure, what is to be cut and when, and whether to meet expenses
with coinage or with goods in place of money.'

The main regular expenses of the empire concerned the maintenance of armed forces and
satrapal administration and the upkeep of king and court. Ad hoc expenditure aided
the kings' foreign and domestic policies and included the funding of city construction,
grants of tribute and tax relief and gifts to cities, temples and individuals. One should also
not forget losses suffered in war, in particular the Roman war indemnity.

Expenditure took place both in silver and kind. My theme has been that, increasingly, it
took the form of silver as this was what its major destination, the Seleukid armed forces,
required (see below). Total expenditure will be considered in Chapter 12.

10.1 Military expenses

No figures are given in the sources for the military costs of the Seleukids at any time.
Yet this, as will be seen below, represented the major expense item of the royal economy.¹
This was a 'spear-won' empire, retaining its hold on the land, as had done its predecessors
in the Near East, primarily through the threat and application of military force. An army
was maintained to extract tribute and fed off the process of this tribute. This was, in
essence, the practice of the Roman Empire too, for which there is a great deal more
numerical information. A professional army and navy were employed there, which seem to
have consumed perhaps two thirds or more of the state budget.²

To arrive at a total cost it is necessary to know basically three things: the size of the army
and navy, the average rate of pay of each soldier and sailor and the period during the year
when he was paid. Clearly there is oversimplification here. Army numbers could differ
significantly between 'peace-time' conditions and those of a major campaign or war

¹ Andreades(1933:99).
² For Duncan-Jones(1994:45) the figure is over 70% ca. AD 150 and AD 215.
lasting several years. Rates of pay would vary for different classes of soldier or sailor and might also depend upon the status of the troops, whether Greco-Macedonian settlers, Greek or native mercenaries, native levies or ‘allies’. These rates may also have changed during the 2 ½ centuries of Seleukid rule. Finally, length of service could involve year-round garrison duty or simply a short summer expedition for the fleet.

Despite all these uncertainties an attempt will be made to arrive at an approximate total cost of the Seleukid armed forces under two conditions, ‘peace-time’ and those of a major campaign. The period for which there is most information for army size spans the reigns of Antiochos III and his successors to the defeat of Antiochos VII by the Parthians in 129. After this, and the resulting loss of Mesopotamia, one can no longer speak of a Seleukid empire. As for the earlier period, it is possible only to extrapolate backwards with caution.

The army

The starting point is the detailed figures in the sources for two major battles, Raphia against Ptolemy IV in 217 (Pol.5.79) and Magnesia against the Romans in 190 (Livy 37.37.9, 37.40; App.Syr.31), and the pompe at Daphne in 166 (Pol.30.25). The table below shows the approximate make-up of the army in each case.3

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3 I essentially follow Bar-Kochva(1979), with some differences in counting troops in the different categories (Bar-Kochva:51-52 for mercenaries, native levies and allies), the difference with total army size being what he has termed ‘military settlers’ and I have called ‘regulars’.

The 1,000 Thracians at Raphia I consider mercenaries, whereas he regards them as military settlers from Persis. But why should Thracian military settlers be singled out and no other nationality?

At Magnesia the detailed figures in Livy(37.40) do not add up to his total of 60,000 infantry and 12,000 cavalry in 37.37.9, but only to 45,200 infantry and 11,700 cavalry. The missing figures can be supplied with some confidence. The number of ‘Tarentine’ mercenaries in the cavalry is not given, but was probably around 500 (also Bar-Kochva:169). The argyraepides in the Seleukid infantry normally totaled 10,000 (also Bar-Kochva:9) and the remaining 5,000 or so are troops are likely to have been those guarding the Seleukid camp and the ‘lights’ supporting the 50 elephants. Bar-Kochva(p.51) assumes that the camp was guarded by 3,000 Thracian military settlers. One notes that Alexander too seems to have used Thracians in this role at Gaugamela (Arr.Anab.3.12.5). Again, I reject the notion of military settlers and prefer mercenaries.

In the Daphne pompe 3,000 Thracians are noted and this time Bar-Kochva(p.52) does consider them mercenaries. As for the ‘lights’ supporting the 50 elephants, these would be about 2,000 trained regular troops. Finally, Bar-Kochva(p.51) assumes that the 2,500 Mysians were allies, rather than mercenaries, as I do, bearing in mind their appearance in the pompe at Daphne.
The above figures are for field armies only. Garrisons, navies and support personnel will be considered later.

The battle of Raphia was the culminating major action of the 4th Syrian War, which followed immediately upon the suppression by Antiochos of Molon’s revolt in the East. At the time, the king could not draw upon the full resources of the empire, as western Asia Minor was effectively lost to the usurper Achaios, southern Asia Minor was controlled by the Ptolemies and beyond Media and Persis Seleukid control was either weak or non-existent (Chapter 2). Thus, the 68,000 troops of Raphia represented only a part of Seleukid military potential.

At Magnesia an army of some 72,000 was deployed. But two years earlier Antiochos had crossed over into Greece with a force of 10,000 and 500 cavalry (Livy 35.43.6; 36.15.3), which faced the Romans at Thermopylae (App.Syr.17) and only 500 escaped the battle (Livy 36.19.11; App.Syr.20). In all probability, Antiochos’ losses were mainly in mercenaries, which he seems to have recouped quickly for Magnesia.

The purpose of the Daphne pompe has always remained unclear. Was it, as a hostile Polybios(30.25) has tried to persuade us, a response to the games celebrated by Aemilius Paullus, a declaration of the wealth and strength of the empire? Or was it simply a victory procession after the invasion of Egypt. Or was it, as I am inclined to believe, the

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5 Gruen(1977:76).
festive commencement of the expedition of Antiochos IV against the Parthians, the gathering of the main forces in preparation for the eastward march the following year?6 The Roman inspectors, who had anxiously arrived, could find nothing threatening to the interests of Rome (Pol.30.27) and one may suppose that they were not unhappy that Antiochos’ ambitions were directed away from the Mediterranean.

The absence of non-Greek levies and ‘allies’ at Daphne, if a military expedition was in preparation, is to be expected. It would be normal to have them join the army on its march east at a staging centre, such as Seleukeia-Tigris, nearer their area of recruitment. If the battle of Raphia is any guide, included in the Seleukid army then were 5,000 Medes, Kissians, Kadusians and Karmanians, as well as 2,000 ‘Agrianian’ and Persian bowmen and slingers (Pol.5.79).7 The indications are that Antiochos IV may still have retained some sort of suzerainty over Persis (Chapter 2) and so native levies from the east of the order of 7,000 or more seem quite possible, giving a total army size for this campaign of not less than 55,000.

At the same time, however, substantial Seleukid troops were engaged in Palestine in suppressing the Maccabean revolt. The fanciful figure given for the battle of Ammaus (165) of 40,000 infantry and 7,000 cavalry in I. Maccabees(3.39,41) can be discarded, but the 20,000 in II Maccabees(8.9) may well be a reasonable figure, if Edomite and Philistine ‘allies’ are included.8 Thus, a total force of around 75,000 in two Seleukid field armies at this time is a not unreasonable figure.

There is some support for such a number in the later campaign of Lysias against the Maccabees to quell what had by then become a dangerous situation for the Seleukids in Palestine, which culminated in the battle of Beith-Zacharia in 162. In Josephus’ account of the campaign (BJ 1.41-6), the 50,000 infantry and 5,000 cavalry for the Seleukid army may be a reasonably accurate number.9 This would have represented a substantial part of the forces that had traveled east with Antiochos IV a few years earlier, but certainly not

7 Bar-Kochva(1979:51) on the ‘Agrianians’ as possibly Persians armed in the style of the Agrianians of Alexander.
8 Bar-Kochva(1979:13).
all, if one considers that the situation there had been left unresolved by his sudden death, with the Parthian threat undiminished.

From the detailed figures in the sources for the specific periods of Raphia, Magnesia and Daphne, spanning about 50 years, one may arrive at the conclusion that the Seleukid kings could and did raise field armies then of 70-80,000 when required.

There are no equally reliable figures for other major campaigns in this period, but one can nevertheless reach some conclusions. It is possible that a larger Seleukid army was deployed in the victorious battle of Panion in 200 during the 5th Syrian war than in the earlier defeat at Raphia. In Daniel(11.13) ‘the king of the north shall again set forth a multitude, greater than the former’, which possibly refers to the 4th and 5th Syrian wars.

For the eastern Anabasis (212-205) one should not reject Justin(41.5.7) out of hand when he quotes 100,000 infantry and 20,000 cavalry, though these figures have obviously been rounded up. Polybios(10.28.1) also writes of a large force. One may consider the importance and difficulty of this campaign in recovering lost and distant territories, which so added to the prestige of the king that he was granted the title ‘Great’ by his contemporaries. One may also note the relative quiet at this time on the Mediterranean political and military front, which would have permitted a maximum effort in the East. Finally, the analysis of mint output at Seleukeia-Tigris in Chapter 11.5 suggests that huge amounts of coinage were minted there, far greater than any peace-time needs of the region, indicating very high military expenditure. So it is not unreasonable to consider that Antiochos was able to gather a rather large army for the Anabasis, probably not smaller than those of his other campaigns. A figure of 70,000 or more, approaching Justin’s, may not in the end be unreasonable.

For the period after Antiochos IV two other figures in the sources should be noted. The first is the 80,000 strong army raised by Antiochos VII in his last-ditch effort against the Parthians, which culminated in his defeat and death in 129 (Justin 38.10). Such a number should not really surprise one in view of what has already been seen of Seleukid military

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10 Bar-Kochva(1979:10).

11 contra Grainger(1996:339) that on extended campaigns only half these forces could be used, which constituted the standing army.
capability and the critical importance of Mesopotamia to the empire.\textsuperscript{12} Diodoros\textsuperscript{(34.15-17)} hints at a massive recruitment drive when he speaks of the loss suffered by every family in Antioch after the defeat. Justin's account has Antiochos receiving the submission of several native 'kings' on his march east, victoriously occupying Babylonia and having all the people of the region pass over to his side until nothing was left to the Parthians. What we may read between the lines is the recruitment of substantial Greek and non-Greek forces from erstwhile Seleukid territory in Mesopotamia and western Iran.\textsuperscript{13} To these may also be added the potentially large Jewish contingent led by Hyrcanus (Jos.\textit{Ant.}\textsuperscript{13.250}). There is no reason to doubt that the army that finally faced the Parthians may have been of the size given by Justin.

The second figure is the army of 40,000 raised by Alexander II Zabinas in his attempt on the Seleukid throne in the 120's (Diod.\textsuperscript{34/35.22}). Even when the Seleukid kingdom - as such it was then - had been restricted to mainly northern Syria and Kilikia, it was still possible to raise such forces.

The earlier period from Seleukos I to Antiochos III is the most difficult for any estimate. The only precise numbers we have are for Seleukos' army on the march to Ipsous, which consisted of 20,000 infantry and 12,000 cavalry, along with 480 elephants (Diod.\textsuperscript{20.113.4}). The relatively small numbers of infantry are not indicative of Seleukid military potential then. It is likely that Seleukos had put together only a picked force for the long march west at a time when the eastern satrapies of the empire had recently been conquered and a potential threat from Chandragupta the Maurya emperor still existed, despite the peace treaty between the two kings. On the other hand, the size of the cavalry in the army is revealing. It is completely out of proportion to infantry - the normal ratio in Hellenistic armies is more like 1:10, as at Raphia - and equal to the largest number we know of, that for the battle of Magnesia. No doubt this was due to the inclusion then of Baktria within Seleukos' empire, with its large resources of horsemen.\textsuperscript{14} One may

\textsuperscript{12} Also Bar-Kochva\textsuperscript{(1979:11)}. Furthermore, a study of numerical distortion in Roman writers by Duncan-Jones\textsuperscript{(1997)} shows that numbers beginning with high digits are considerably less frequent than those beginning with low digits, as they tend to be rounded upwards, e.g. 90 to 100. Consequently, a number starting with 9 or 8 is relatively 'unpopular', and for this reason has a greater chance of being accurate.

\textsuperscript{13} Also Sherwin-White/Kuhrt\textsuperscript{(1993:224)}.

\textsuperscript{14} 10,000 Baktrian horsemen under Euthydemos later faced Antiochos III's invasion of Baktria (Pol.\textit{10.49.1}).
suppose that Seleukos could, if he had so wished, mobilize a force as large as those raised by Antiochos III or IV subsequently. And this probably applied to his successors. Whether they did so or not in any of the numerous campaigns of the third century is unknown.

Returning to the 50-year period spanning the reigns of Antiochos III to IV, Seleukid field armies of 70-80,000 men engaged in campaigns which usually lasted for a few years have been regularly noted. The core of these armies seems to have been about 35,000 ‘regulars’, as I have termed them. According to most scholars, these were mainly military settlers with a duty to serve when called-up by the king, but I question this as there is no direct evidence in the sources. The number of mercenaries normally employed was at least 15,000, though it is possible that more were used in the Anabasis. The remaining troops were non-Greek levies and ‘allies’, though it is difficult to see how the latter, at least, differed greatly from mercenaries.

What may be considered surprising is that no non-Greek troops were apparently utilized in the Seleukid ‘regular’ infantry. Syria and Mesopotamia, for example, are not noted as having supplied specific contingents in any of the major Seleukid campaigns. The explanation that this was for reasons of security, because to arm troops from areas so close to the heartland of the empire was considered dangerous, is not convincing. The human resources existed, and the Achaemenids certainly had no qualms in using them, when one considers, for example, the huge contingents from the provinces that found their way into the Persian battle line at Gaugamela (Arr. Anab. 3.11.3-7). The truth must lie elsewhere, and probably in the designation given to certain troops who were ‘armed in the Macedonian fashion’. I suggest that this is where the missing Syrians and Mesopotamians, and probably Persians too, may lie. It will be recalled that Alexander had set the trend by creating first a mixed cavalry and then a mixed phalanx of


16 Bikerman (1938:78-88) regarded the army as consisting essentially of mercenaries and permanent recruits, with conscription only where necessary. For example, in the Maccabean war it was regular troops who fought, not colonists (p.85). Kleroi given to settlers did not entail an obligation of military service. Cohen (1991:41; 1995:63) stressed that there is no evidence that military obligations were tied to settlers’ lots; also Corsaro (1980:1216-1217).

17 Bar-Kochva (1979:52).

Macedonians and Persians shortly before his death, in which the Macedonians were given the senior positions (Arr. Anab. 7.22.3-4) and this is likely to have been continued by the Seleukids. As for the ‘regular’ cavalry, this is noted as a mixed force in the sources. At Magnesia, for example, the agema and the royal squadron are described by Livy (37.40.5-6,11) as comprising Medes and races from the same region, Syrians, Phrygians and Lydians.

One other point is worth noting, that the ‘regular’ infantry consisted essentially of phalanx-type troops, a force that required special training to function effectively, not one that could be put together hurriedly. I have already questioned the view that European military settlers were constrained to provide troops in return for their land-grants when required to do so. This view sees the settlers’ sons serving for a time in the argyraspides units or in the crack cavalry regiments of the Companions and agema and then being transferred to a reserve and called up when required for other cavalry and phalanx units. I have suggested that phalanx troops ‘armed in the Macedonian fashion’ may refer to substantial numbers of non-Greeks, particularly from Mesopotamia and Syria, while there are clear references to non-Europeans even in the elite cavalry.

In the 50-year period that has been considered above, 30,000 or so phalangists and 6,000 cavalrymen seem to have been almost continuously employed on campaign. If these were essentially Greco-Macedonians, there was hardly any respite for them. But would it have made sense for the Seleukid kings to have relied so exclusively on their European subjects when they had so many Asians to draw from? In the last resort, the Greco-Macedonians were the pillar supporting the dynasty. Dissatisfaction due to constant campaigning or losses in a single major defeat, such as Raphia or Magnesia, might destroy this support at one blow, and this the kings could surely see. Yet the dynasty survived, with military forces that could reach their former levels even after major defeats, which suggests that the Seleukids did indeed draw for their ‘regular’ forces from a virtually inexhaustible reservoir of subject populations. Perhaps only the 10,000-strong elite argyraspides corps and elements of the cavalry were exclusively or mainly composed of Greco-Macedonians.


20 Compare the British, who controlled India mainly with native troops and British officers.
The question should also be asked: what of the mercenaries in the army? Again, one must consider the almost continuous campaigning of the 50-year period that has been considered and the relatively steady number of mercenaries that keep cropping up in the sources for the great battles, at around 15,000. Given the distances involved, which would have made the recruitment and transport of mercenaries from beyond the borders of the empire a lengthy and costly process, it would be more sensible for the Seleukid kings to maintain a steady number of mercenary troops for their almost continuous military needs and utilise some of these on garrison duty in times of peace. A clue to this possible preference for a regular mercenary force is offered by Josephus (Ant. 13.129) in describing the action of Demetrios II who, upon concluding peace with the Jews, 'dismissed his army and reduced their pay (presumably below agreed levels) and continued to give their pay only to the mercenaries who had come up with him from Crete and from the other islands'.

What then is the conclusion one may reach? In my view, the Seleukid kings, or at least Antiochos III and IV, maintained a more or less permanent army of some 50,000 men, 35,000 'regulars' and 15,000 mercenaries, excluding garrisons. No doubt some of these troops served on garrison duty in the brief intervals of peace. For the needs of major campaigns, garrisons were drawn upon, more mercenaries recruited, levies raised from subject populations and 'allies' called upon. In these circumstance army size could double. I am not convinced that the troops I have called 'regulars' could be markedly augmented by a call-up of European settlers. Indeed I am not convinced that the Greco-Macedonian settlers had any obligation to respond to such a call-up. In my view the essential Seleukid army, 'regulars' and mercenaries, was, effectively, a permanent professional force.

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21 For some scholars the standing force would only have been the 10,000 argyraspides and some cavalry (Foulon 1996:60-61, Bar-Kochva 1979:59-62), but, since there was continuous fighting of the Seleukid phalanx, Griffith (1935:164) concludes that it was effectively a standing army.

The navy

As for the Seleukid navy, the source information is even scantier than for the army. Until Antiochos III, the Seleukids apparently made no serious attempt to challenge the Ptolemies or Antigonids in the eastern Mediterranean and, consequently, probably maintained only token naval forces there.\(^{23}\)

The situation changed with Antiochos III, whose drive into Asia Minor from spring 197 began with a combined operation of army and fleet against the Ptolemaic possessions along the coast of southern Asia Minor. One does not know the size of his initial fleet, part of which may have come from the recently conquered Phoenician cities\(^{24}\), but a few years later, in 192, forty decked and sixty open vessels, along with a few others that had been on patrol in the Aegean, escorted the expeditionary force that landed in Greece (Livy 35.43.3-4). Again, it is likely that the Greek coastal cities of Asia Minor, newly taken over or brought into alliance, may have supplied some of the warships and crews. An ‘open’ warship here is likely to have been a trireme, with a compliment of about 200, or perhaps a bireme, while most ‘decked’ warships at this time were quadriremes and quinquiremes, with 300 or more rowers and marines. Thus the total numbers in Antiochos’ fleet for his Greek expedition must have been of the order of 20-25,000. This was, naturally, a fleet put together for a specific campaign and the treaty of Apameia (188) later permitted only 10 ‘decked’ warships, no triremes, but some smaller vessels to the Seleukids (Pol.21.42.13), presumably with reference only to the Mediterranean. One is perhaps looking here at a force of not more than 5,000 men, but probably employed mostly during the sailing season.

In the Persian Gulf the situation was different. A war-fleet had probably safeguarded Seleukid interests from the time of Seleukos I. The fort at Ikaros (Failaka) dates to the early 3rd century and may have guarded a naval station, while a Seleukid presence at Tylos (Bahrain) is possible.\(^{25}\) Antioch-Persis seems to have been an important foundation on the Gulf, perhaps at Bushire, while Pliny (NH 6.159) gives us the names of three otherwise

\(^{23}\) *contra* Bikerman’s powerful navy (1938:98).


unknown Seleukid settlements in this area, Arethousa, Larissa and Chalkis, which may well have been naval stations similar to the possible one at Failaka.

Seleukid naval activity in the Gulf seems to have increased markedly with the arrival of Antiochos III on the scene following his return from the Anabasis in 205, when he exacted tribute from Gerrha (Pol.13.9.4-5) and sailed as far as Bahrain. One notes the creation of a satrapy of the Erythraian Sea with its own mint at about this time, testifying to real interest in the Gulf trade, which persisted down to the mid-2nd century. There is also the report of a naval battle conducted by Numenios, admiral of a king Antiochos, perhaps Antiochos IV, off cape Ras-Musandam on the same day that a land battle took place at the cape (Pliny NH 6.152). That this episode was considered worthy of mention suggests a not insignificant Seleukid expeditionary force.

There is no way of knowing the size of the Seleukid fleet in the Gulf or the types of vessel it may have contained. If 20 or so triremes were deployed, one might suppose that the total force could have amounted to about 5,000 men.

Though numbers for the Seleukid navy are highly conjectural, a figure of not more than 10,000 under ‘peace-time’ conditions seems likely, which was virtually all of the time, in marked contrast to the use of the army. Only after Antiochos III’s conquest of the ports of Phoenicia and Palestine is the Seleukid navy likely to have been of much consequence. During Antiochos III’s campaign to Greece the total naval forces of the empire may have briefly reached the level of 30,000 sailors and marines.

Garrisons

References to Seleukid garrisons (φούραι) or garrison commanders (φρούραρχοι) appear from time to time in Greek sources, frequently connected with the citadels from which subject cities were dominated, or also guard posts (σταθμοί, φυλακαί). Clearly the purpose of garrisons was to guard against possible uprisings, provide security for the local population so that it could go about its daily activities and ensure that tribute was collected by the financial officials of the administration. Perhaps every city was

27 Bikerman(1938:53-55) for references.
garrisoned\textsuperscript{28}, even a theoretically ‘safe’ one like Babylon in the 3\textsuperscript{rd} century.\textsuperscript{29} The Seleukid \textit{epistates} noted in many cities is likely to have been supported by troops.\textsuperscript{30}

The citadels and forts in which garrisons were based might also serve as local administrative centres, treasuries (\textit{γαζωφυλάκια}) and depots of supplies and material for the administration and army. It was frequently the case for the troops themselves to be billeted on the civilian population, which must have imposed a heavy burden, hence the almost persistent request of the Greek cities to be freed from \textit{epistathmeia}.\textsuperscript{31}

Clearly the \textit{phroura} of an important subject city on the Aegean might amount to several hundred men, whereas a \textit{phylake} or \textit{stathmos} could be manned by only a few dozen soldiers. One can perhaps form an idea of the considerable extent of the garrison network from a study of the Achaemenid empire, faced with exactly the same problem of control.\textsuperscript{32}

The figure of 30,000 Jews requested by Demetrios I for garrison duty (I Macc.10.36-37) may not be taken seriously, but an offer was probably made, and repeated by Demetrios II (I Macc.13.40). The 2,000 Jewish soldiers from Babylonia that Antiochos III ordered sent to Phrygia and Lydia were intended to reinforce the garrisons there (Jos.\textit{Ant}.12.149: \textit{τὰ φρούρια καὶ τῶν ἀναγκαιοτάτων τόπων}). Another indication is the very considerable use noted in the sources of mercenaries by Alexander, mainly for garrison duty, which has given rise to estimates of from 36,000 to over 100,000.\textsuperscript{33}

Troops manning garrisons might not only be western mercenaries, but also soldiers brought from other parts of the empire, a regular practice of the Achaemenids also.\textsuperscript{34}

Apart from the 2,000 Jews mentioned above, Persian cavalry under Omanes is noted at Palaimagnesia near Smyrna (\textit{OGIS} 229).

\textsuperscript{28} Bagnall(1976:220): almost universal for Hellenistic kings.

\textsuperscript{29} Sherwin-White(1982:55,70).

\textsuperscript{30} Ma(1997:93).

\textsuperscript{31} And not only cities, but villages also (cf. Ptolemaios’ request in Document 4). Also Hennig(1995:267ff).

\textsuperscript{32} Tuplin(1987a:235-241) lists known Persian garrisons appearing in the sources. The distribution is quite uneven because of different source quality from different areas. Better-documented western and southern Asia Minor had 56 garrison sites, Palestine 19 and Persis also 19. This gives the impression of a quite dense network.

\textsuperscript{33} Milns(1987:250-251) quotes Griffiths:36,000, Thomas:54,000 and Wirth:over 100,000.

\textsuperscript{34} e.g. a Jewish garrison at Elephantine.
All one can say about numbers is that, given the huge area and population to be controlled, there must have been many garrisons and troops required. I will settle on a figure that is about the minimum estimate for Alexander’s mercenaries, not less than 30,000 for the hard core serving garrison duty, increased in ‘peace-time’ conditions by mercenaries not on active service.

**Total armed forces**

Under ‘peace-time’ conditions then, the Seleukid armed forces may have comprised about 80,000 soldiers, i.e. 35,000 regulars, 15,000 mercenaries and 30,000 garrison troops, with an infantry/cavalry ratio of approximately 1:10, and about 10,000 sailors and marines. For an important expedition, such as the Anabasis, recruitment of more mercenaries, ‘allies’ and subject levies could raise this number by at least another 30,000 to a total of 120,000, or even more when a large fleet was involved, as against the Romans.

**Rates of pay**

Hellenistic armies were, on the whole, more professional than their predecessors of the Classical period. The Seleukid kings, in particular, relied, as discussed earlier, on a more or less standing army of some size, a network of garrisons in the satrapies and a regularly-employed mercenary force, which might serve garrison duty in (rare) peace-time conditions. All these troops required regular pay.\(^35\)

There were various ways of paying one’s soldiers. The standard method was to provide a wage (μισθός, ὀψώνιον) and a ration allowance, or money in lieu (σίτος, στατημετρία, στιτῶνον, σταρχία), though sometimes these terms confusingly seem to cover both forms of payment. There was also the possibility of purchases from royal storehouses at low prices and fiscal immunities for the soldiers and their goods.\(^36\) One method used for

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\(^{36}\) Launey(1950:738-746), Griffith(1935:282-288) and the contract of the Pergamene king with mercenary soldiers (OGIS 266) discussed in 9.2.
troops posted to garrisons for lengthy periods was the provision of land-grants (κληροὶ).\textsuperscript{37}

There is no direct evidence for soldiers' pay in the Seleukid kingdom, only for the Mediterranean world at this time, but one may suppose that soldiers could be attracted for service in the East at going rates, which at the time of Antiochus III seem to have been around 6 obols/day for the average infantry soldier plus a ration allowance or money in lieu. A cavalryman could expect to earn at least twice as much.\textsuperscript{38}

For recruits serving in the Seleukid army, the evidence suggests that they were paid also and that their pay rates did not differ from those of mercenaries. Demetrius I offered to enroll 30,000 Jews in his army at the same pay as for his other troops (I Macc.10.36). When Demetrius II disbanded his soldiers after his Jewish campaign, retaining only the mercenaries, he provoked dissatisfaction because his predecessors had paid troops even in peace-time so as to be ready for a call-up (Jos.\textit{Ant.}13.130).

An ostrakon from 3rd century Babylon may provide some concrete information on the pay of garrison troops. A unit under Ballaros and another under Artemon each apparently received pay of 249.\textsuperscript{39} This was probably monthly pay in drachms. The question now is how many men belonged to each unit. The normal depth of the Macedonian phalanx, and the smallest unit (lochos), was 16 men (Pol.18.30.1; Arr.\textit{Anab.}7.23.3-4)\textsuperscript{40}, but these soldiers on garrison duty were unlikely to have belonged to the phalanx. In all probability they would have been mercenaries, lighter-armed infantry, where the depth of a file and the lochos was half that of the phalanx, i.e. 8 men (Arrian \textit{Tactics} 14). Their pay then

\textsuperscript{37} Kleroi for the garrison of Palaimagnesia (\textit{OGIS} 229), the Jewish soldiers sent to garrison Phrygia and Lydia (Jos.\textit{Ant.}12.149-152), the Parthian-period garrison of Susa (\textit{SEG} 7.13; Cumont 1931:241). Also Bar-Kochva(1979:21), Cohen(1978:7-9).

\textsuperscript{38} Launey(1950:750-758) lists the epigraphic evidence and concludes that the pay for a mercenary in the 3rd century was about 8 obols/day plus 3 or 3 1/3 obols for rations, if paid in silver, but probably lower in the 2nd century. Pritchett(1971:22) makes use of much the same information, but interprets διανομή and στρατιωτικα in two cases as composite pay, arriving at 6-8 obols/day. In one case he is not justified in doing so (Thermos IG\textsuperscript{2} IX,1,3 of 263/2) as the composite rate for a psilos of 4 2/3 obol/day would seem to be far too low, if one includes a 2-3 obols/day ration allowance. Griffith(1935:300-306) likewise opts for 6-8 obols/day, which he regards as composite pay, and considers that mercenaries probably received the same as citizen soldiers. Also Moretti(1977:323): 1-2 dr/day for a mercenary, Cavaignac(1951:142): 20-25dr/month for a foot soldier, Bar-Kochva(1977:173): 1 dr/day wage for mercenaries in Judaea. Callataj(1997:404-405) estimates 8 obols/day for the pay of an hoplite in the 3rd century and considers this remained roughly the same into the early 1st century.

\textsuperscript{39} Sherwin-White(1982:55-61).

\textsuperscript{40} Bar-Kochva(1979:66-67).
works out at almost exactly 6 obols/day each. A unit leader probably earned twice as much as the ordinary soldier.\textsuperscript{41}

There is no evidence for sailors' pay in the Seleukid empire or, for that matter, in the Hellenistic period. On the analogy of the Classical period, it is likely that it was somewhat lower than the average pay of a soldier.

Period of pay

Two inscriptions, depending on how they are interpreted, suggest that wages of mercenary troops may have been paid for only 9 or 10 months of the year, or perhaps for the full year, but with service demanded for less.\textsuperscript{42} This might equally apply to soldiers in the regular army, on the assumption that they could not be actively involved in winter, though perhaps not if they were on campaign at the time.

With regard to most sailors and marines, it is likely that pay would have been awarded only when these were on active duty during the summer sailing months.

Method of pay

The military resources of the Seleukid kings could be augmented at the time of a major campaign by tapping the reserve constituted by Greco-Macedonian and other settlers, by recruiting more mercenaries on the open market, by calling upon 'allies' for troops and by raising levies from amongst the subject populations.

For a mercenary it is very likely that an advance payment was necessary in order to attract him to royal service for a particular campaign. A professional soldier had no guarantee that he would be finally paid if his paymaster were defeated. If he were fortunate, he could expect a pay-off when his services were no longer required in addition to any booty that he might have acquired. Given, however, the fact that much of the time the Seleukid kings were at war or had need of soldiers for garrison duty, a mercenary might continue to be employed indefinitely. In such a case he would expect regular pay and the \textit{ostrakon}

\textsuperscript{41} Allen(1983:209) for a Cretan inscription of the time of Attalos I and Alexander's \textit{diplofrēsis} or double-pay man.

\textsuperscript{42} LCos 10: 9 months, OGIS 266: 10 months. Griffith(1935:283-284) for less than a year's payment, Launey(1950:741, 755-756) and Grote(1913:86) for less than a year's service.
from Babylon (above) suggests that it was provided on a monthly basis. This would apply also to the regular army.

Evidence for advance payments to mercenaries may come from an interesting hoard of 58 gold Ptolemaic trichrysa buried in northern Syria west of Antioch at the time of the 2nd Syrian war. On about 10 of the coins are small incisions, forming distinguishable Greek letters, placed there after striking. It has been suggested that these marks identified the owners of the coins, mercenary soldiers. An hypothesis that would fit the picture of the hoard is that an initial advance of Ptolemaic forces from Seleukeia-Peria towards Antioch brought a company of mercenaries to this point, where, in the face of some danger, their funds were buried and never recovered after the Ptolemaic retreat. The high-value gold coins being carried by the soldiers do point to their having been received as advance payments for this campaign.

An even stronger piece of evidence for such advance payments to mercenaries is constituted by the coinage issues of Mithridates VI Eupator. The entire series is dated by regnal year and month and die studies enable one to estimate the volume minted at any time. One notes two clear peaks in production. The first occurs in 89 and 88, at the very start of the First Mithridatic war, which was forced upon the Pontic king by the Romans, and his preparations for war, particularly the recruitment of mercenaries, must therefore have been hurried. The second peak was in 75 and 74, before the start of the Third Mithridatic War, which Mithridates himself provoked. The impression one has is of the putting together of a huge war-chest of coinage, ready to be opened at the right moment for the recruitment of troops and their regular pay.

**Total cost of the armed forces**

So far an estimate has been made of the size of the ‘peace-time’ and ‘war-time’ Seleukid armed forces, of around 90,000 and 120,000 respectively, but only fighting men.

At 1 dr/day for infantry and sailors and twice that for cavalry, the annual cost of the wages of the ‘peace-time’ Seleukid armed forces at the time of Antiochos III would have amounted to about 5-6,000 talents per year in silver. At 2 obols/day for rations, the

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43 Davesne/Yenisoganci(1992:33).
44 Callatay(1997:52).
additional cost would have been about 1,500 talents, but no doubt as much of this as could be was supplied in kind from the royal storehouses. To these figures should be added the cost of support personnel (commisariat, baggage handlers, grooms, servants etc) and the overheads (clothing, equipment, pack-animals, housing, maintenance of the war-elephants and cavalry horses, commissioning of war-ships etc.). Again, some of these expenses would have been settled in kind. A total annual cost of 8,000 or more talents should not surprise one. If a major campaign, such as the Anabasis or the conquest of Asia Minor was taking place, military expenses might exceed 10,000 talents a year.

For comparison, estimates of the annual cost of Alexander’s army reach as high as 15,000 talents in the last phase of his campaign, the Romans set the 15,000 talent indemnity after Magnesia at what they maintained had been the cost of the war to them (Pol.21.17.4) and the army of Augustus has been estimated to have cost about 445 million sesterces annually or nearly 19,000 talents.

10.2 Cost of the provincial administration

The Ptolemaic general in charge of the forces that faced Antiochos III in Phoenicia and Palestine, Skopas, received 10 minas a day and each of his staff officers 1 mina (Pol.13.2.3). Generals could and did change sides and become governors of provinces (e.g. Ptolemaios in Document 4) and, perhaps, this is an indication of pay scales of senior officers in the Seleukid empire as well.

However, for many officials a large part of their earnings, and perhaps even all, may have been indirect, from the land granted to them by the king while they were in office or afterwards. One does not know what services Mnesimachos had rendered, but following the argument in Chapter 8.1, his own revenue from his land-grant may have amounted to about 30 drs/day. Aristodikides land-grant (Document 2) ultimately contained 5,500

45 Milns(1987:254) estimated 2,200-4,800 talents/yr for the mixed phalanx and 6,000 talents/yr for 100,000 mercenaries at 1 dr/day. He also considered an additional 30-50% for food and overheads. This would give a total of more than 10,000-15,000 talents a year. Cavaignac(1951:142): a 100,000 army cost 6,000 talents a year.

46 Cavaignac(1923:118) estimates the cost of a fleet of 80-90 ships at the time at 2,000 talents/yr.


plethra of mostly cultivable land, or about 500 hectares, roughly equal in fact to the estimated cultivable area of one of Mnesimachos’ two main villages and so perhaps yielding half his revenue. By way of comparison, a governor of the minor Achaemenid province of Judaea earned 40 shekels or 80 drachms daily from the ‘satrap’s table’ (Nehemiah 5.15-17).

These are isolated rates of pay which really give only an indication of what some administrative personnel of a satrapy may have cost. So, to arrive at a total cost of the provincial administration one is reduced to ‘educated speculation’.

The financial and, indirectly, civil administration of a satrapy is discussed in Chapter 13. Let us assume that the chief officers of a satrapy, the strategos and the dioiketes, received half of Skopas’ pay on average, i.e. 5 minas a day, and their respective subordinates, the hyparch and the oikonomos, only 1 mina a day, exactly like Skopas’ officers. Each of the 20 or so satrapies of the empire at its peak may have been divided on average into 3-4 hyparchies/oikonomiai. Garrison commanders are not taken into account as their pay has been considered in military expenditure, but there were other senior officials in a satrapy, one or more eklogistai, possibly an epi ton ieron and epistatai in some cities (also Chapter 13).

So, two chief officers and about 10 at the next level made up the ‘senior management’ of a satrapy and may have cost, on average, 20 minas a day or 120 talents a year. At least one large satrapy (Koile Syria) possessed intermediate administrative subdivisions, the meridarchies, with a meridarch and a dioiketes in command of each, which would have increased their cost. For 20 satrapies in the empire at its peak, the total annual cost of senior personnel works out at about 2,500 talents. But a substantial part of this may have effectively have been given in land-grants. At lower levels of the administration, individual personnel costs would have been appreciably lower, probably near the one drachm per day of the average soldier. Taking other expenses of the satrapies into account that could not be met by requisitions or corvée labour, the total cost of the

49 Plutarch (Agis 7) probably exaggerated somewhat when he considered the Seleukid satrap wealthier than all the Spartan kings put together. His assumed average pay of 5 minas a day would have amounted to 30 talents a year, the revenue of a good-sized city of Asia Minor, e.g. Themistokles’ 50 talents from Magnesia (Thuk. 1.138.5).

50 The 72 provinces attributed by Appian (Syr.62) to Seleukos I were in all likelihood hyparchies.
provincial administration in silver may have been of the order of 3-4,000 talents annually at the empire’s peak ca.281, purely based on ‘educated speculation’.

10.3 Cost of the king and his court

Here too one is reduced to ‘educated speculation’, since a figure must be derived, however approximate.

The Persian king, we are told (Athenaios 4.145a), spent 20 or 30 talents or more a day for his maintenance. There is some confirmation of this in the huge quantities of commodities listed by Polyainos(4.3.32) for the king’s dinner.\textsuperscript{51} In both cases, it was clearly not only the king and his courtiers who wined and dined, but also that part of the army which was permanently attached to the court and traveled with it. On the assumption that half the cost was borne by the army, the expenditure of the king and his court would have amounted to about 5,000 talents annually.

One cannot apply this directly to the world of the Seleukid king, of course, even if the figures were accurate. Nevertheless, to consider that the Seleukid kings spent 2-3,000 talents a year on themselves and their court does not appear unreasonable. As part of the ideology of kingship, the monarch was expected to give the impression of great wealth.\textsuperscript{52} Even at a time of some financial strain after Magnesia (Chapter 12), Antiochos IV could be regarded as surpassing all previous kings in his public displays (Livy 41.20).

10.4 Extraordinary expenditure

Benefactions

The Seleukid kings used some of their wealth in acts of benefaction (εἰργασία) with which they sought to create goodwill (ἐυνοια), which for them mainly meant the gaining of

\textsuperscript{51} Lewis(1987).
\textsuperscript{52} Sherwin-White/Kuhrt(1993:129-132) for the royal ideology, Bikerman(1938:Ch.2) for the Seleukid court.
political support. This aspect of their rule has been discussed by others⁵³ and it is the intention here only to assess its economic implications.

Sanctuaries were prime targets of benefactions, partly because of the religious sensitivities of the kings and partly because they influenced large sections of the population. Sanctuaries received outright grants of land⁵⁴ or revenue from land⁵⁵ or tax-exemptions⁵⁶ or financial and material assistance with construction and maintenance⁵⁷ or goods and subsidies for the performance of the cult⁵⁸.

There is no evidence of *regular* contributions by the royal administration to the running costs of the Babylonian temples as in Ptolemaic Egypt.⁵⁹ We do, however, have evidence of royal involvement in building and maintenance on an *ad hoc* basis, e.g. Alexander's work on the Esagila temple continued by Seleukos I and finished by Antiochos I, the dedications of the Anu-uballit’s Nicarchos and Kephalon concerning their temple building activity at Uruk, which was probably funded by the royal treasury. The kings also provided funds and sacrificial animals as offerings to the gods, or their officials did on their behalf.⁶⁰

The scale of some royal gifts is impressive. The temple of Apollo at Didyma, a pan-Hellenic sanctuary, whose influence spread far in the Greek world, was presented by Seleukos I with gold vessels weighing 3,248 drs and silver vessels weighing 9,380 drs, a total value in precious metal alone of almost 7 talents plus large quantities of frankincense, myrrh and other items.⁶¹ The Temple of Jerusalem was granted by

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⁵⁴ e.g. Baitoikaie (Document 16)

⁵⁵ e.g. Meriç/Nollé(1985:21) for the temple of Apollo Toumoundos.

⁵⁶ e.g. the commercial fairs held at religious festivals (Chapter 8).


⁵⁸ e.g. the provision of flour, wheat and salt for the daily sacrifices of the Temple of Jerusalem (Document 12).


⁶⁰ e.g. Grayson(1975:no.13b); Sherwin-White(1983b) for offerings by Seleukos II to the Esagil temple at Babylon.

⁶¹ Welles(1934:no.5).
Antiochos III an (annual?) subsidy for the rites of animals, wine, oil and frankincense worth 20,000 shekels of silver, or nearly 7 talents, plus large quantities of flour, wheat and salt (Document 12). Demetrios I promised 150,000 drachms for the sacrifices, or 25 talents, and that he would relinquish the 10,000 drachms that he collected annually from the temple as tax (Jos.Ant.13.55).

Greek cities were also important targets of benefactions, though it is sometimes difficult to distinguish between a motive that was political, such as the acquisition of prestige or influence, or economic, though often there was something of both. One of the largest gifts, worth several hundred talents, was that by Seleukos III to Rhodes after its devastating earthquake: ten fully-equipped quinqueremes, 200,000 medimnoi of grain, 10,000 cubits of timber and 1,000 talents-weight of hair and resin, plus ateleia for trade with the empire (Pol.5.58.9). Obviously, to place a trading partner on his feet, and one that performed the very useful function of combating piracy in the Eastern Mediterranean, made good economic sense. The Rhodians, it seems, were Seleukid favourites. Antiochos IV lavished attention on them (Livy 41.20) and Demetrios I presented them with 200,000 medimnoi of wheat and a 100,000 of barley (worth 3-400 talents) (Diod.31.36).

Other Greek cities, both inside and outside the empire came in for a wide range of benefactions, e.g. the building of a commercial stoa at Miletos, the repair of an aqueduct and the supply of oil for the gymnasium at Herakleia-Latmos (Document 10), grain to be sold for dowries for daughters of poor citizens at Iasos (Document 6), the repair of the walls of Jerusalem (I Macc.10.45) and so on. Sometimes a city had been damaged by war and needed assistance, at other times it was mainly a question of keeping it on one’s side in the politics of the time. One aspect of benefaction to cities was the granting of political subsidies to allies. There was no place where a Seleukid king’s presence might not be felt in this way. A good example is the very wide range of benefactions of Antiochos IV, praised by Livy(41.20), probably repeating the judgement of a normally hostile Polybios(26.1).

The overall impression is that the Seleukid kings must have regularly spent several hundred talents annually on benefactions. But much of what they offered was in kind,
from the royal properties or storehouses. At times it might make more sense to dispose of one’s surplus stocks by gift, earning an intangible return in good-will, if the possibility of selling them was not on the cards.

City- and colony-building

Each time a new city or colony was founded, a considerable expense was incurred. In my view, however, most of what a city or colony needed, land, building materials and grain to feed itself initially, could be supplied in kind, which may have been surplus to the kings’ requirements anyway. For example, the 2,000 Jewish settlers that Antiochos III transported to Phrygia and Lydia were to be given land and grain, until they could produce enough themselves, and tax-exemption for ten years (Jos.Ant.12.149). There is no mention of silver here. But this is not to say that there were no silver expenses involved in the building of the new Seleukid foundations, only that they may have been quite manageable and, in any case, of short duration.

Tax-exemptions

Clearly, when revenue was lost as a result of a land-grant or a tax-exemption offered to a city or temple, a cost was effectively incurred indirectly. It has been suggested (Chapter 6 and above) that land-grants may have been one way of cutting down on silver payments to officials and, whenever there was attachment to cities, this may actually have resulted in more silver revenue for the kings through increased economic activity and taxation.

With regard to tax-exemptions, it is hardly ever that a Seleukid king made a subject city totally tax-free. Perhaps Jerusalem (and Judaea) approached this condition when faced with weak kings (Demetrios I and II) vying for support. In most Asia Minor cities about which there is information, only one or a few of a wide range of taxes were usually exempted, and typically the *phoros*, to begin with, that may not have been such a heavy burden after all, compared to some of the other taxes(Chapter 8).
Indemnities

An extraordinary expense of considerable magnitude was the 15,000 talent Roman indemnity, which, after the initial payments of 500 and 2,500 talents, became a regular disbursement of 1,000 talents annually for twelve years and did cause problems for the Seleukid treasury (Chapter 12).

10.5 Conclusions on expenditure

The evidence suggests that the greater part of the expenditure of Seleukid kings was earmarked for their armed forces, certainly not less than half in 'peace-time' conditions and probably considerably more when a major campaign was under way. Most of the remainder supported the provincial administration and the king and his court. A non-negligible amount was used in benefactions in the interests of foreign and domestic policy. Virtually nothing seems to have been spent on what one might call today productivity improvements in the underlying economy.
11. COINAGE

Περὶ μὲν τὸ νόμασμα λέγω ποῖον καὶ πότε [τίμιον ἢ ἐξωνον] ποιητέον.

'With regard to currency, what to mint of large or small denomination and when'.

That is how ps-Aristotle reduced the king's coinage problem to its essentials. But one might also add 'and where and why'. Or, in other words, what was the Seleukid coinage policy and how was it administered?

It has been suggested as an hypothesis (Chapter 3) that the kings' primary objective was to ensure an adequate supply of coined money from tribute and taxation with which to meet military and administrative expenses.

The first task will be to examine what the Seleucids actually coined, the mints and their production. Here Newell's two works (WSM 1977, ESM 1978, with revisions by Mørkholm) are invaluable. Admittedly they reach only to the reign of Antiochus III, and new issues have been added and new attributions made since then, so that the picture has somewhat changed. A revised and much more extensive catalogue of Seleukid coinage is currently in preparation by Arthur Houghton and Katherine Lorber. Mørkholm (1963) has contributed a detailed analysis of the coinage of Antiochus IV, while a number of articles deal with the production of specific mints or issues and will be referred to where appropriate.

Next I shall consider the different categories of coinage and their uses. It will become apparent that the silver tetradrachm was far and away the most important denomination. The circulation within the empire of tetradrachms will be studied based on hoard and die evidence and a picture should hopefully emerge of Seleukid coinage policy and its application.

11.1 Mints

When Alexander died in 323, only the mints of Babylon and, perhaps, Susa existed in the whole of Mesopotamia and the Upper Satrapies. The nearest mints were located in

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I am deeply indebted to them for supplying me with a draft of Volume I of this catalogue, which deals with the issues of the early kings down to Antiochos III. The major difference from Newell is the much clearer identification of each series, with all the primary and secondary control marks it uses.
Phoenicia and Kilikia.² It is clear why this was so. The ports in these regions served to ferry reinforcements of mercenary troops to Alexander and discharged soldiers back to Greece, while Babylon was where his veterans were mainly being paid off after the return from India and where the bulk of the bullion captured in the Achaemenid treasuries was kept. At the same time, Babylonia was used to a monetary economy involving weighed precious metal, since this is how taxes to the Achaemenid administration had been partly paid³. The mint at Babylon issued some coins on the local standard to ensure continuity, but, essentially, it served a military need.

Seleukos I faced a different problem, as has been suggested (Chapter 3). The Achaemenid bullion had been essentially coined and the bulk of this coinage probably circulated in the west, which was the main theatre of conflict of the Successors. Apart from Babylonia, with its economy partly based on precious metals, the East did not seem to have progressed much towards a monetary economy. Commodity taxation had served the Achaemenid king well, as it would do to pay troops, but this was not what western mercenaries required. As has been argued, the need to acquire precious metal caused the early Seleukids to restructure the economies of their different provinces in such a way that taxes could be paid to and payments made by the administration in silver. And an adequate supply of coinage was ensured by the creation of a number of mints, each serving the needs of a specific region.⁴

A major mint was opened by Seleukos at the new capital, Seleukeia-Tigris, to serve Babylonia and that at Babylon seems to have been gradually phased out by the end of his reign. Mints appeared at other provincial centres as the new measures were gradually introduced: Ekbatana for Media, Karrhai for northern Mesopotamia and at one or more unknown locations in Kappadokia, northern Mesopotamia or northern Syria. In some eastern regions progress seems to have been slower. It took Antiochos (I)’s presence in the Upper Satrapies, as co-ruler from ca.291/0, for a mint to be established at Baktra and another at Ai-Khanoum, and possibly even a third.

In the West the situation appears to have been easier. The Greco-Macedonian inhabitants of the new city foundations of northern Syria were already accustomed to the use of

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³ As evidenced by the Murašu texts (Stolper 1974;1985).
⁴ For the mints of Seleukos I and Antiochos I, I have relied on the Houghton/Lorber catalogue.
coinage and mints were introduced at Antioch, Seleukeia-Peria and Laodikeia-Mare immediately (from 301). In Kilikia and western Asia Minor a number of mints already operated, Tarsos, Sardeis and Pergamon, which simply switched to production for their new master, from 294 and 281 respectively.

Under Antiochos I a number of ephemeral mints with very limited production were opened up in eastern regions, perhaps in Drangiane, western Arachosia and Aria. In the West, Magnesia-Maiandros and Smyrna probably coined for the king. Doura-Europos and Edessa supplied some bronze and there are some more unattributed mints from the general region.

Many more mints were opened up by Antiochos II in Asia Minor: Kyme, Phokaia and Myrina, Aigai and perhaps Temnos, Lampsakos possibly, Alexandreia-Troas, Ilion and Abydos, Lysimacheia and perhaps Kabyle in Thrace, Mylasa, Ephesos for some bronze and a few other unattributed mints. In the East an important mint was established at Artakoana for Aria. The transformation of any remnants of a commodity-based barter economy to a monetary one seems to have been proceeding quite rapidly in most areas, but it cannot have been a simple task in the Upper Satrapies, if one considers the delay in setting up major mints in Baktria, and even more so in Aria.

The picture then is of a proliferation of mints, each seemingly serving particular regions. Normally a mint would be located at a satrapal capital, but, where Seleukid city-building was being conducted on a significant scale, additional mints might be established, e.g. in northern Mesopotamia at Karrhai or at Aī Khanoum or, much later under Antioch IV, when the eastern trade had became important, at Antioch-on-the-Erythraian Sea. If, however, a satrapy did not possess a sufficiently important monetary economy, perhaps because of poor agricultural resources and lack of urban centres, it was apparently served from the mint of an adjacent satrapy. Thus, the mint at Ekbatana may have supplied Parthia and Hyrkania with the necessary coinage, that at Artakoana Drangiane, that at Baktra Margiane and Sogdiane, while the mint at Susa almost certainly covered Persis, until the local frataraka coinage was produced in this region, and possibly Karmania.

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7 Newell's identification of a mint at Persepolis has been shown to be incorrect by Houghton(1980).
But why so many mints? Could not the Seleukids have solved the problem of issuing coinage in the way the Romans and Ptolemies did, mostly from one central mint? To suggest that overland distances in the empire were too great for the economic transportation of coins is not the answer. In Kilikia alone, three mints operated simultaneously at the death of Antiochos III: Tarsos, Soli and Seleukeia-Kalykadnos,\(^8\) when one could probably have served the province quite adequately. This question will be answered later, after a discussion of what coinage was produced at the mints and what uses it had.

11.2 Coinage issues

Newell has listed what he considered to be different coinage issues. Frequently the difference between these is simply a control mark or control mark arrangement on the reverse of the coin, while the obverse may well belong to the same die (e.g. in ESM nos.48 and 49, 52 and 53, 57 and 62). That is not what one would really call now an 'issue' and Houghton/Lorber have made a better classification.

A summary picture of the number of Newell-type issues by region and king for the early Seleucids is given in Table 1, where coinage has been divided into four major categories: gold, large silver (mainly tetradrachms, but also any other coin larger than a drachm), small silver (drachms and fractions) and bronze. It is recognized that issues, as defined by Newell, are clearly not equal in size, nor can even an average volume of coinage be assigned to one. So, of what use might this picture be? It so happens that when one calculates the percentage distribution of Newell-type silver issues by region for each king and compares it to the distribution worked out by Golenko (1993,1995), based on coin hoards, publications and private collections known to him, the correlation between the two sets of data (columns 9 and 10 of the Table) is quite high, with a correlation coefficient of 89%. What this means is that Newell's picture is valid in so far as relative volumes of coinage are concerned, i.e. if one king had fewer Newell-type issues in a particular region compared to another, he is likely to have produced roughly proportionally less coinage there.

\(^8\) Mørkholm(1984:93).
Were one to use Newell at the individual mint level, the discrepancies with Golenko would be greater, though still quite good (correlation coefficient 84%). But, as one consolidates the information at higher levels, the result becomes still more accurate.9

At the highest level, the total numbers of Newell-type series in each coinage category for all the early Seleukid kings are likely to represent quite well the relative magnitudes of the coinage emissions in each category. If each number is multiplied by a weight factor reflecting the value of the coins in the category (where drachm = 1), one has the relative values of the coinages in each category. There is a further consideration, as discussed in Chapter 1.6, that gold dies are assumed to have produced only half the number of coins compared to silver dies. For this reason, the factors used are: gold staters 10 (not 20), tetradrachms 4, small silver ½ and bronze 1/20. With these factors, gold staters represented 18% of the total value of Seleukid coinage issued, silver tetradrachms 78%, small silver 3% and bronze only 1%. What is clear here is the overwhelming concentration by the Seleukid kings on high value coins, particularly tetradrachms.

Table 1. The pattern of Seleukid coinage issues

1) Numbers of Newell-type series by king and region

2) Comparison with Golenko’s distribution of silver by region for each king

<table>
<thead>
<tr>
<th>REGION</th>
<th>KING</th>
<th>Gold</th>
<th>4-drs</th>
<th>Small silver</th>
<th>Bronze</th>
<th>Yrs</th>
<th>% 4-drs Newell</th>
<th>% silver Golenko</th>
</tr>
</thead>
<tbody>
<tr>
<td>MESOPOTAMIA</td>
<td>Seleukos I</td>
<td>17</td>
<td>137</td>
<td>76</td>
<td>25</td>
<td>31</td>
<td>61</td>
<td>66.8</td>
</tr>
<tr>
<td></td>
<td>Antiochos I</td>
<td>4</td>
<td>38</td>
<td>8</td>
<td>42</td>
<td>20</td>
<td>35</td>
<td>59.2</td>
</tr>
<tr>
<td></td>
<td>Antiochos II</td>
<td>1</td>
<td>15</td>
<td>-</td>
<td>11</td>
<td>15</td>
<td>15</td>
<td>35.6</td>
</tr>
<tr>
<td></td>
<td>Seleukos II</td>
<td>-</td>
<td>22</td>
<td>3</td>
<td>32</td>
<td>20</td>
<td>27</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>Seleukos III</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>4</td>
<td>3</td>
<td>23</td>
<td>25.9</td>
</tr>
<tr>
<td></td>
<td>Antiochos III</td>
<td>2</td>
<td>76</td>
<td>3</td>
<td>42</td>
<td>36</td>
<td>41</td>
<td>35.2</td>
</tr>
<tr>
<td>UPPER SATRAPIES</td>
<td>Seleukos I</td>
<td>8</td>
<td>42</td>
<td>53</td>
<td>3</td>
<td>31</td>
<td>20</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>Antiochos I</td>
<td>9</td>
<td>24</td>
<td>19</td>
<td>15</td>
<td>20</td>
<td>24</td>
<td>17.0</td>
</tr>
<tr>
<td></td>
<td>Antiochos II</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>15</td>
<td>8</td>
<td>10.8</td>
</tr>
</tbody>
</table>

9 This is in the nature of lists of positive numbers with sub-totals and totals. A large percentage difference in a particular number is reflected in a smaller difference in the sub-total it affects and an even smaller one in the total.
<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Seleukos I</th>
<th>Seleukos II</th>
<th>Seleukos III</th>
<th>Antiochos I</th>
<th>Antiochos II</th>
<th>Antiochos III</th>
<th>Seleukos I</th>
<th>Seleukos II</th>
<th>Seleukos III</th>
<th>Antiochos I</th>
<th>Antiochos II</th>
<th>Antiochos III</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYRIA-KILIKIA</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>ASIA MINOR</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>KOILE SYRIA</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL EMPIRE</td>
<td>29</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>67</td>
<td>708</td>
<td>236</td>
<td>479</td>
<td>125</td>
<td></td>
<td>18</td>
<td>78</td>
<td>3</td>
<td>&lt;1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**11.3 Coin categories**

**Gold**

When the king set out to mint gold staters, or the rare double stater, double and a half stater or octadrachm, he was clearly not catering for the everyday currency needs of his subjects. With the gold : silver ratio at 1:10, a gold stater was worth 20 Attic drachmae or 10 silver shekels on the Babylonian standard. Given that a shekel could purchase 120 litres of barley on average in Babylon (Chapter 5.6), a gold stater could feed a man for nearly 27 months at the rate of 1 ½ litres per person per day. Clearly a coin like this did not circulate in the local market, though it could have been used by the royal treasury as
the medium of large payments for services and supplies to the administration and of receipt of taxes (cf. the Mnesimachus inscription, Document 5, with its tax assessments noted in gold staters).

Gold may also have played a role in long-distance trade. It is possible that gold staters were used primarily for the Indian trade\(^\text{10}\) and production ceased when the East was lost, i.e. by the end of the reign of Antiochus II. This is not unreasonable and can be supported by an examination of where gold issues were minted in the reigns of the first three Seleucids\(^\text{11}\): in the east at Baktra (12), Seleukeia-Tigris (10), Ecbatana (9) and Susa (6), in the west at Karrhai (6), Antioch (2), Tarsos (4), Kappadokia or northern Syria (2) and Smyrna (1). If gold had been intended primarily as a medium of payment of taxes or for services and supplies to the administration, one would have expected a much more uniform distribution of gold production across mints to serve their respective regions, but in these figures there is a marked preponderance of the eastern mints. What is even more interesting is that Baktra, the nearest mint to India, outdoes even Seleukeia-Tigris in gold, whereas its tetradrachm production is very much less (only 16 issues compared to 110 in ESM). So Indian trade was a probable destination of some of the gold.

Gold coinage production in the East appears to have declined considerably with the next two Seleukids: a little perhaps at Seleukeia, Ecbatana and Susa for Seleukos II and none for Seleukos III. The significant gold issues by Antiochus III at Nisibis, Seleukeia-Tigris and Susa may be associated with advance payments and final settlements of soldiers’ pay in connection with the Anabasis\(^\text{12}\), but also with the revival of eastern trade in this reign (Chapter 5.5).

In the West, gold seems to have become more of a prestige issue, to convey a message concerning the king, but it usually served a practical purpose as well, more often than not a military payment.\(^\text{13}\) The gold stater struck by Antiochus IV, for example, can probably

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\(^{10}\) Bikerman (1938:214).

\(^{11}\) Newell-type series.

\(^{12}\) Bikerman (1938:215): similarly for the gold struck at Antioch.

\(^{13}\) Of the ten gold issues of the 2nd century listed by Bikerman (1938:214-216), most have a clear military purpose and this is not excluded for some of the others. Mørkholm (1984:96) sees special occasions and propaganda as the prime reasons for gold issues, but emergencies also. One would have to argue that large military expenditure might be considered an emergency, if one did not have the requisite amount of silver at hand to cover it, as there would be no point in simply hoarding the gold.
be associated with the festival at Daphne and may have been intended to demonstrate the wealth and power of the Seleucid king\textsuperscript{14}, even after his set-back at the hands of the Romans in Egypt. At the same time, however, there was probably a sound financial reason behind this issue, an advance in pay to the army then preparing for the expedition to the East (Chapter 10.1). The several gold issues at Antioch bySeleukos II are too many for prestige purposes. Heavy military expenditure is again the most likely reason given the turbulent nature of this reign (Laodikeian war, conflict with Antiochos Hierax, expedition to retake Parthia etc.).

Silver tetradrachms

A silver Attic tetradrachm was worth a fifth of a gold stater and so could purchase 5 \( \frac{1}{2} \) months supply of barley for a man in Babylon. Thus it too was unlikely to have been common in the local marketplace. Yet, as was noted earlier, it probably represented about 4/5ths in terms of value of the coinage issued by the Seleukids. It is likely, therefore, that the tetradrachm served as the principal medium of exchange for economic transactions between the administration and its subjects.\textsuperscript{15}

One may envisage the path a tetradrachm followed after it left the mint. To begin with, it would have been used to make payments by the royal authorities to officials, soldiers and suppliers of goods and services to the Crown and also to provide subsidies to cities, temples, local dynasts etc.\textsuperscript{16} A soldier’s pay, for example, might amount to 7-8 tetradrachms a month, a senior official could earn considerably more (Chapter 10). The soldier or official would make certain purchases in the market, exchanging his tetradrachms for small silver and bronze. Moneychangers are likely to have been available to perform the conversion.\textsuperscript{17} At some point, the producer and intermediate seller were

\textsuperscript{14} M\textsuperscript{0}rkholm(1963:33).

\textsuperscript{15} Schöner-Geiss(1978:134): the tetradrachm constituted the bulk of Seleukid issues and was used for large transactions. Howgego(1995:34): state expenditure was far and away the most important reason for circulating new coinage.

\textsuperscript{16} Crawford(1970:46): ‘coinage was probably invented in order that a large number of state payments be made in a convenient form’. M\textsuperscript{0}rkholm(1991:24) has no doubt that ‘the prime motivating factor regulating the volume of coinage (of Hellenistic kings) was the rise and fall of public expenses’, though there were also considerations of propaganda and prestige, commerce and profit (from the mint).

\textsuperscript{17} Merker(1975:239-240): a fee for the exchange of copper coins (\textgreek{ιμηόντος γαλαλων}) is attested in an inscription from Palestine, probably of the late 2\textsuperscript{nd} century.
called upon to pay taxes and these would probably be collected in tetradrachms, or even gold staters, by the authorities. For example, the Mnesimachos inscription (Document 5) shows a village being assessed annually for 50 gold staters, the equivalent of 250 tetradrachms. One may imagine the villagers selling their produce in the nearby Greek cities either to a re-seller or directly in the marketplace and converting their small-change earnings into the right number of tetradrachms to meet the annual tax commitment of their village. Now these coins might be Seleukid or other Attic-standard ‘international’ issues, such as ‘Alexanders’ or ‘Lysimachi’, which circulated freely in the Seleukid empire (see below). For the administration it probably made no difference, although there may have been a small premium on Seleukid issues or counter-marking for a fee on some foreign issues to make them legal tender, though this was quite rare.18 Some of the tetradrachms were now collected in a district treasury of the provincial administration, where they could be utilized to meet local expenses, with any surplus probably being transferred sooner or later to a provincial centre.

The tetradrachm must also have been the coin used par excellence in intra-regional, inter-regional and long-distance trade because of the greater value of the bulk transactions involved. Within the empire it was accepted everywhere, as also in the Greek world to the west, with the exception of Ptolemaic Egypt, as is evidenced by coin hoards. The volume of intra-regional and inter-regional trade has been discussed earlier and not considered significant when compared to local trade (Chapter 5.5). Therefore, this aspect of trade probably utilized a rather small proportion of the tetradrachms in circulation. The long-distance Indian and Arabian trade, on the other hand, may have been more important in terms of value. It was at this time in the hands of Arab middlemen. That they too accepted Seleucid tetradrachms is shown by the copying of Seleucid coinage by Gerrha and other Arab principalities.19 But the question again is how important this long-distance trade

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18 Morkholm(1984:105,108-109): counter-marking is noted mainly in the period 175-170. Seyrig(1958:196): an expedient at the time to save on reminting expenses because of the severe drain on the treasury of the Roman indemnity, the ceasing of revenues from Asia Minor and the cost of campaigns in the East. In my view, counter-marking was a rather restricted phenomenon, probably due to temporary local difficulties rather than any general policy.

19 Mørkholm(1976).
trade really was compared to local production and exchange between cities and their rural surroundings, which provided the bulk of taxation revenue.\textsuperscript{20}

Small silver

When one considers small silver, drachms to hemiobols, one is probably looking at an everyday currency. But there is far too little of it, as seen by the number of issues in Newell: 236 compared to 708 tetradrachm issues (Table 1). Indeed, if one excludes the coinage of Seleukos I, the comparison is 101 to 483. To some extent this is due to the accidents of discovery as it is easier to find a large-denomination coin, especially in hoards, but there is clearly another factor at work. Taking the three major mints of Seleukos I in ESM, one notes that Seleukeia-Tigris produced 45 issues of small silver, Ekbatana 41 and Susa 17. By the reign of Antiochus I the numbers are down to 6, 6 and 0 respectively, and there is absolutely nothing under Antiochus II. Under Seleukos I only Seleukeia-Tigris, of these mints, coined bronze, a total of 24 issues. In the reigns of Antiochos I and II bronze appears for the first time at both Ekbatana (15 and 4 issues respectively) and Susa (2 and 1) while continuing at Seleukeia-Tigris (20 and 9). While coins of one ruler could be expected to circulate in subsequent reigns, albeit in reducing quantities because of wear and loss, what we see here is clearly a picture of the replacement of one category of coinage by another for everyday use, bronze in place of small silver.

In the west the great mint at Antioch started coining later in the reign of Seleukos I. Under him and his successors only 11 issues of small silver, and then only drachms, were struck there compared to 127 issues of bronze. The picture is the same at other important mints. Tetradrachm production is associated with very few small-silver issues from Antiochos I onwards but considerable quantities of bronze (419 issues in Table 1) and one should bear in mind that some subject cities also minted their own bronze coinage, which weighs the balance in favour of Seleukid bronze even more. It would seem then that

\textsuperscript{20} Golenko(1993:110) has stressed the primary role of international trade and local commerce in the development of Seleucid coinage, going so far as to suggest that the kings tried to secure a monopoly on the sale of Mesopotamian grain (1993:88) and that dues from transit trade constituted their main income (1995:96). In his opinion, this led the Seleucids to try to involve as large a part of the population in commercial relations as possible. What I will accept is that the administrative payments - tax collection cycle did involve perforce most of the population in local commerce and the use of coinage.
Antiochus I initiated a shift towards a bronze coinage for everyday use, which was followed by his successors.

However, that is not to say that small silver did not circulate. There were huge numbers of Alexander drachms around, which, as will be seen, dominated the small-silver market and the Seleukids were apparently content that this be so, as drachms were also a suitable denomination for the administrative payment-tax collection cycle. What they apparently restricted severely was fractional silver. It was as if they were experiencing at this stage some silver shortages and preferred to direct their more limited supplies to the tetradrachm, which served their coinage policy best.\(^2\) It will be recalled (Chapter 2) that, starting from the reign of Antiochos I, the Seleukids began to lose control of border areas in Asia Minor, Kappadokia and Armenia, and later Baktia and Karmania, with their silver production. This must have been to some extent offset by net inflows of silver from a favourable balance of trade\(^2\)

**Bronze**

Seleucid bronze appears to have been a fiduciary currency, i.e. its value was not dependent on its metal content, copper and tin, but set by the issuing authority. This is clear firstly because weights were not controlled to nearly the same extent as for silver. An analysis of the bronze coinage of Seleukos I from Seleukeia-Tigris in ESM shows weights ranging from 2.08-4.55 gr for one-unit pieces, 5.17-9.24 gr for two-unit pieces and 8.94-16.72 gr for four-unit pieces. What is even more revealing are bronze coins of Antiochos IV from the same mint marked with AX, BX and AX, probably specifying one, two and four chalkoi respectively, whose respective weight ranges are 2.82-5.10 gr, 6.20-8.88 gr and 11.27-20.25 gr.\(^2\) The very wide range of weights, on average more than 25% about a mean, cannot be due to wear. Thus, when the bronze coin circulated, its value was known by its approximate size and not by its weight. To make matters absolutely clear it might even be stamped with a letter giving its denomination, as seems


\(^2\) Chapter 5.5; also Mørkholm(1982:302).

to have occurred after a halving of weight under Antiochos IV and again later under Alexander Balas.\textsuperscript{24}

For the second reason as to why Seleukid bronze was a fiduciary coinage, one must look to the relationship between silver and bronze in terms of their intrinsic value, which probably stood at around 1:120 to 1:96 in the 3\textsuperscript{rd} century and may have gone down to 1:60 by the 2\textsuperscript{nd}. One may use the well-known equivalence from classical Athens of 1 drachm = 6 obols = 48 \textit{chalkoi}, which was followed by the Macedonian kings. Then if a one-unit bronze of Antiochus IV, which weighed roughly as much as a silver drachm, was equivalent to one \textit{chalkos} in the above relationship, its nominal value would have been $1/48^{\text{th}}$ of the equivalent silver, against an intrinsic of only $1/60^{\text{th}}$, and so a fiduciary mark-up of 25\%. But this was after Antiochos' halving of weight, which may have become necessary because of the rise in the value of bronze.\textsuperscript{25} And being a fiduciary coinage is probably one reason why so very little bronze seems to have been hoarded.

What needs to be looked at now is the relationship that bronze production bore to small silver (hemidrachms or less). Taking Seleukeia-Tigris as an example, one notes in ESM that the silver hemidrachms and obols of Seleukos I seem to be have been discontinued in favour of four-unit, two-unit, one-unit and half-unit bronzes under Antiochos I. This pattern of changeover is common to most eastern mints\textsuperscript{26}, suggesting that the bronze was


\textsuperscript{25} Newell (1978:273) supports a silver : bronze ratio in 3rd century Italy and Sicily that lay between 1:120 and 1:96. Price(1968:103) quotes prices at Athens from the end of the 5th century of 230 drachmae per talent of tin and 35 drachmae per talent of copper. Given that the greatest quantity of tin found in a Greek coin is just under 15\%, the silver : bronze ratio should not have been more than 1:93 and more probably in the region 1:120 to 1:100, thus agreeing with Newell. However, any increase in the cost of copper and tin was likely to overvalue bronze coins and remove them from circulation. This is perhaps the reason why Antiochos IV doubled the denomination of the existing coins and then noted the new value on them. If Le Rider(1994b:31) is correct, the nominal silver:bronze relationship would then have stood at 1:100, with that based on the cost of metals more like 1:127, implying that prior to the revaluation of bronze the actual value stood at just over 1:60, which would have been substantially above the nominal value. Bikerman(1938:217) has taken bronze at near its true value and considered that it must have borne a 1:50 relationship to silver in the 2\textsuperscript{nd} century.


\textsuperscript{26} From Table 1, in Mesopotamia and the Upper Satrapies respectively, 76 and 53 small silver issues of Seleukos I to only 8 and 19 for Antiochos I, while bronze issues increase from 25 and 3 to 42 and 15, despite the much shorter reign of Antiochos.
intended as a purely fiduciary replacement of the small silver. Where a mint continued to
produce small silver, as at Baktra, there may sometimes have been no bronze coinage at
all.

Now one can perhaps understand a passage in the Astronomical Diary of 274.27 After
reference has been made to the collection of ‘silver, cloth, goods and utensils(?)’ by the
satrap of Babylon to help the king (Antiochos I) pursue the war against the Ptolemies in
northern Syria, the Diary continues:

‘That year, purchases in Babylon and the (other) cities were made with copper coins of Ionia’.

The ‘copper coins’ referred to here are obviously the official Seleukid bronze currency.
The Achaemenids had not used copper in their coinage and this was to the Babylonians an
‘Ionian’, i.e. Greek, invention. If bronze had been a normal medium of exchange in the
market of Babylon at the time, there would have been absolutely no need to mention it.
However, what was happening was abnormal according to the Babylonian astronomers.
The small silver coinage had apparently been collected by the authorities to help finance
the war, probably in exchange for bronze, and the inhabitants were now compelled to use
the distasteful to them bronze coinage, distasteful because it was a purely fiduciary
currency introduced into an area which had possessed a long tradition of exchange based
on the value of precious metal (though bronze had been used in the distant past28). That
mention should be made of a bronze coinage in these terms in the Diary, suggests that the
measure of replacing small silver by bronze had just been introduced in Babylon. Note
that the Babylon mint had never minted bronze under Alexander or Seleukos I.29 This
may have been an emergency measure because of the war, but since a shift from small
silver to bronze is detectable at all eastern mints, it is likely that it was planned as part of a
restructuring of the currency (also Chapter 13.10).

Before leaving this question of bronze coinage, one may note that small silver
denominations continued to be produced, albeit on a very small scale, at the same mints
with bronze. For example, Antiochos III issued a hemidrachm and an obol at Ekbatana
alongside 48 bronze series ranging from six-unit to half-unit pieces. The question is why?

27 Sachs/Hunger(I, -273).
Clearly some small silver from previous issues of the Seleukids and Alexander continued in circulation, but it was apparently felt necessary to ‘top up’ what would have been a declining volume because of wear and loss. Some transactions, which may have been conducted mandatorily in silver, such as the payment of taxes, may have required the small pieces for exactness.

Finally, there is a difference of opinion as to whether bronze coinage only circulated locally or not.\(^30\) Perhaps one should clarify first what one means by ‘locally’. One notes that some eastern mints, Seleukeia-Tigris and Ekbatana, minted large quantities of bronze while others, such as Babylon, Susa, Baktra and Artakoana, produced nothing or very little.\(^31\) And yet, bronze coinage circulated in Babylon, as we know from the Astronomical Diary of 274, coins of Seleukeia-Tigris of all the early sovereigns have been found in Susa\(^32\) and there seems to be no reason why Ekbatana under Antiochos I needed 15 issues for its local economy as against Susa’s two. The picture that emerges is rather one of two major eastern mints for bronze, that at Seleukeia-Tigris supplying Mesopotamia and Susiane, and the other at Ekbatana supplying Media and most of the Upper Satrapies. In this area bronze coinage was still a relative novelty, probably not readily accepted, and the circulation requirements may not have been unduly heavy. Thus no eastern city under Seleukid rule minted its own local bronze coinage unlike the west, where several cities obtained this right early on. One also sees very little bronze output from minor royal mints there, which concentrated almost exclusively on silver, leaving bronze to the major mints of Antioch, Sardeis or Tarsos.

Minting profit

Even silver is in some respects a fiduciary currency, as the intrinsic value of the coin is always slightly less than its nominal value to cover a minting profit, but how much this was is unclear.\(^33\)


\(^{31}\) Newell(1978).

\(^{32}\) Le Rider(1965:446-7).

\(^{33}\) For the silver coinage of the early Seleucids, Golenko(1993:96-97) has suggested a minting profit of about 3.3%, but it is difficult to accept his argument.
An easier, although short-term, way of making a profit was to lower coin weight. Under Antiochus IV a reduction of tetradrachm weight is noted between the first and second Antioch series from mainly in the region of 16.90-17.19 grams to mainly in the region of 16.50-16.79 grams, a reduction of about 2%, which can only have been due to an administrative decision.\textsuperscript{34} This came at a time when competing coinages had also experienced weight reductions from the Attic standard of 17.2 grams most commonly achieved, e.g. Pergamum (16.90-16.99 ca.190), Macedonia (16.80-16.89 ca.178) and Athens (16.70 ca.166). It would have been foolish to continue to mint a heavier coinage than your competitors, which would be grabbed up in the market and eventually find its way out of circulation as bullion. On the other hand, too light a silver coinage would sooner or later find no acceptance with those providing supplies and services to the state.

It was, of course, not only a question of weight. One could also reduce the silver content. Until Antiochus IV purity of 94-95% silver was still maintained, but a debasement commenced slowly with Alexander Balas (91%) and reached quite low levels of silver by the 1st century (65%).\textsuperscript{35}

With regard to bronze there was considerable profit to be gained by a mint, as it was very much a token coinage, and a reason why cities avidly sought the right to mint.\textsuperscript{36}

\subsection*{11.4 Coinage circulation}

An analysis of coin hoards can provide indications of the pattern of circulation of coinage in the Seleukid empire at different times. In theory, a hoard should be a reasonably accurate cross-section of the money circulating in the area at the time the hoard was buried. And this may be true when there was war or some other violent disruption which caused a person to hurriedly hide the coins in his possession for reasons of safety. However, in some cases, hoards appear to represent savings which had been accumulated over a number of years through selective retention of certain types of coins, perhaps the heavier specimens or those richer in precious metal or least worn or simply those most

\textsuperscript{34} Mørkholm(1963:40).

\textsuperscript{35} Bikerman(1938:216).

\textsuperscript{36} Mørkholm(1982:302). Even cities producing Antiochos IV's 'municipal' issues may have had to pay for the privilege (Mørkholm 1967:82).
appealing to the hoarder. We have no way of knowing.\textsuperscript{37} In other cases the coins in a hoard mostly belong to a particular issue and do not seem to have had time to find their way into general circulation before they were buried, e.g. payments to mercenary soldiers, coinage issued by a city for a particular local need etc. In situations such as these, the evidence of the hoard can be quite misleading. Thus, it is only when the data from several hoards from the same region and period have been set beside one another, that these anomalies can be ironed out and a reasonably coherent picture emerge.

Care should also be taken to distinguish between gold, large silver (mainly tetradrachms, but also the occasional didrachms, shekels and larger issues) and small silver (mainly drachms, but also a few fractions), as significant differences in patterns of circulation may emerge because of the different uses of different denominations (see above). As for gold, the rather rare issues were frequently commemorative of some special event, but that is not to say that they did not have a utilitarian function as well.

A computer-aided analysis has been undertaken using the Inventory of Greek Coin Hoards and Coin Hoards, Volumes I - VIII, with the following considerations:

1. Only hoards found within what had at any time been Seleukid territory are considered.

2. Only hoards are taken into account in which Seleukid issues, live/posthumous 'Alexanders' or live/posthumous 'Lysimachi' are present, as these represented the 'official' currencies of the Seleukid empire. Occasionally a hoard contains only coins in the name of a city or, in one case (IGCH 1431), only Antigonid coins, but it is ignored as it was probably put together from issues minted for special purposes.

3. For silver, only those hoards with 20 or more coins are regarded as likely to be to any extent representative of currency circulation.

4. Most weight is given to the evidence of pot hoards, which are considered to be complete, less to hoards which the publishers could regard as complete, or to coins found in excavations, and even less to hoards which are clearly not complete and may have been subjected to selective withdrawal of particular coin types.

Large silver

\textsuperscript{37} Crawford(1970:40): a hoard normally, but not necessarily, reflects actual circulation.
Coin Hoards List 1 in the Supporting Data section presents the calculated percentage of large silver Seleukid coins (almost entirely tetradrachms) in all selected hoards, grouped by wider geographical area and sorted by earliest estimated burial date. The remaining coins in these hoards are mainly life-time and posthumous Alexander and Lysimachos tetradrachms. A rough pattern emerges, which can be summarized in Table 2 below. When the hoard evidence is missing or insufficient, a '?' before the percentage range indicates a best estimate based on earlier and later periods and adjacent geographical areas.

Table 2. Estimated % of circulation of large Seleukid silver

<table>
<thead>
<tr>
<th>Kings</th>
<th>Dates</th>
<th>Mesopotamia</th>
<th>Syria</th>
<th>Upper Satrapies</th>
<th>Asia Minor</th>
<th>KoileSyria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seleukos I</td>
<td>312-281</td>
<td>10-20</td>
<td>5-10</td>
<td>?10-20</td>
<td>0-5</td>
<td>0</td>
</tr>
<tr>
<td>Antiochos I &amp; II</td>
<td>281-246</td>
<td>20-30</td>
<td>5-10</td>
<td>20-40</td>
<td>0-5</td>
<td>0</td>
</tr>
<tr>
<td>Seleukos II &amp; III</td>
<td>246-223</td>
<td>30-40</td>
<td>10-20</td>
<td>?30-40</td>
<td>10-15</td>
<td>0</td>
</tr>
<tr>
<td>SeleukosIV &amp; Antiochos IV</td>
<td>187-164</td>
<td>50-60</td>
<td>10-20</td>
<td>?50-60</td>
<td>5-10</td>
<td>?10-30</td>
</tr>
<tr>
<td>Antiochos V to VII</td>
<td>164-129</td>
<td>60-70</td>
<td>40-50</td>
<td>?60-70</td>
<td>0-5</td>
<td>30-70</td>
</tr>
<tr>
<td>Antiochos VIII on</td>
<td>129-64</td>
<td>20-30</td>
<td>50-70</td>
<td>?20-30</td>
<td>0</td>
<td>70-90</td>
</tr>
</tbody>
</table>

From the Table above, the circulation pattern of large silver coins seems to have been roughly as follows in different areas:

1. **Mesopotamia.** The share of Seleukid issues steadily increased from probably only 10-20% in the reign of Seleukos I to perhaps 70% by the time Mesopotamia finally fell to the Parthians in 129. This growth of ‘market share’ can most easily be explained by a policy of gradual replacement of ‘Alexanders’ and ‘Lysimachi’, as coins dropped out of circulation through loss or wear.
The decay rate of a mass of coinage in circulation is normally taken at around 2% annually.\textsuperscript{38} For the total amount to remain the same because of the needs of a stable economy, new issues would have to replace what was lost. New Seleukid coinage could not apparently have achieved this. Had it done so, its percentage share would have risen much faster, reaching 40% after 25 years, 64% after 50 years and 87% after 100 years. A rate of replacement that would match the hoard evidence is about 0.6% annually, which would give percentage shares for Seleukid issues of 14% after 25 years, 26% after 50 years, 45% after 100 years and 59% after 150 years.

There are two possibilities then. The one is that the Seleukids did not need to replace all the coinage that dropped out of circulation because there was a net inflow of foreign Attic-standard coinage from abroad to make up the difference due to a positive balance of trade (Chapter 5.5). The second possibility is that the decay rate may have been less than 2%. The main component of this figure is the actual wear in coins, estimated at an average of 5-6 mg per year for gold and 10 mg per year for tetradrachms, though loss and hoarding are other factors that should be considered.\textsuperscript{39} Unfortunately, one does not know at what weight a tetradrachm would be considered substandard by mint officials, if there ever was any such rule. But one can attempt a calculation. If a weight reduction of 0.5 grammes was considered the limit, the average life of a tetradrachm would have been 50 years and the decay rate due to wear 2%. For a 1-gramme loss, the average life would increase to 100 years and the decay rate become 1%. Given the wide range weights of Seleukid tetradrachms one can observe in hoards, a decay rate nearer 1% is more likely.\textsuperscript{40}

But even with a decay rate of 1% in the mass of circulating coinage, Seleukid issues by themselves could not have changed the circulation pattern as one observes it in Mesopotamia. Therefore a net inflow of foreign tetradrachms must have taken place. What is important is that there is now evidence of a coinage policy whereby the supply of tetradrachms in the market was simply ‘topped-up’ with Seleukid issues whenever it fell below the level required by the economy. No attempt was made to replace systematically

\textsuperscript{38} Callataï(1995:303-304), at least for Roman Republican coinage, or even up to 3%.

\textsuperscript{39} Davesne/Le Rider(1989:245,256-258) estimate 5-18 mg loss annually from wear in the Meydancikkale hoard; also Davesne/Yenisoganci(1992:35).

\textsuperscript{40} e.g. in the Meydancikkale hoard with its 5215 coins (Davesne/Le Rider 1989).
the ‘Alexanders’ and ‘Lysimachi’ in circulation, which were just as much legal tender, along with other Attic-standard coinages, as Seleukid tetradrachms.41

2. Syria and Kilikia. As can be seen in Table 2, the ‘market share’ of Seleukid issues circulating in this region was much smaller than Mesopotamia’s until the reign of Antiochos III, when it seems to have grown sharply to 20-30%, though never reaching Mesopotamian levels. A significant increase in production can also be observed at this time, essentially at the Antioch mint. In Table 1 Newell-type issues for the region account for 40% of Antiochos III’s total production, while Golenko’s estimate is 46.3%.42 This is not justified by the economic needs of the region (see below on ‘peace-time’ coinage). The most likely explanation is that the new coinage was used to finance several military campaigns which used this area as a base, westwards to Asia Minor and southwards to Koile Syria, Phoenicia and Palestine.43 Part of this coinage seems to have found its way into circulation in the northern Syria/Kilikia region, probably for purchases of military equipment and supplies and as expenditure of returning soldiers.

The sharp growth in the ‘market share’ of Seleukid coinage circulating in northern Syria and Kilikia in the reign of Antiochos III corresponds to a replacement rate substantially greater than Mesopotamia’s, over 1%.

Then comes a rather sharp drop in the twenty or so years following the death of Antiochos III. This may simply be due to the nature of the hoard evidence of this period but, since the data comes from five reasonably-sized hoards (Coin Hoards List 1), a reason should be sought. One that rapidly comes to mind is the possible withdrawal from circulation of large quantities of Seleukid currency to pay the Roman indemnity. The Romans, it will be recalled, required payment of the 15,000 talents set by the treaty of Apameia (188) in precious metal coinage of a high standard of weight and purity, and Seleukid issues undoubtedly qualified as such.44 But the scale of Seleukid production

41 Golenko(1995:139) on the objective of the Seleukids to maintain the supply of currency, not reconstruct it.
42 Callatay(1993:24-25) also noted the sharp increase in production of the Antioch mint in this reign.
43 Houghton(1989b:16): the mint of Soli in Kilikia was opened at this time, with production matching that of Tarsos.
44 Le Rider(1992:268-275; 1993:50-52): the Romans were not interested in types, denominations or standards, but in silver of high purity to reach the total weight required, in coins rather than bullion.
does not seem to have been affected. At this time, the Pamphylian ‘Alexanders’ that had been in production since ca.220, with perhaps as their specific objective the Seleukid market, were joined by a spate of new Attic-standard issues from the recently-liberated cities of western and southern Asia Minor until the Attalids established numismatic control and a closed economy by switching to the production of the cistophori, perhaps as early as ca.175. Thus, for a few decades plenty of alternative Attic-standard coinage would have been available to fill any gap caused by the mass removal of Seleukid issues from circulation.

Following the death of Antiochos IV, the sharp revival in Seleukid issues can probably be attributed to reduced production of Attic-standard coinage from Asia Minor mints, following the general switch to cistophori, and the increased need to finance mercenary armies in the internecine struggle of rival houses for the Seleukid throne.

3. The Upper Satrapies

There is very little hoard evidence for this region and what there is comes mainly from the reigns of Antiochos I and II (Coin Hoards List 1). The indications are that somewhat more Seleukid royal currency may have circulated here than in Mesopotamia until the time of the loss of Baktria. This is to be expected, given the fact that no mint had been opened in this region by Alexander, the nearest being at Babylon. But under Seleukos and Antiochos I several mints were established, as discussed earlier, giving a new economic impetus to the region. Given also the distance posthumous ‘Alexanders’ and ‘Lysimachi’ had to travel and bearing in mind the arguments for relatively little inter-regional trade (Chapter 5.5), it is not surprising that Seleukid issues may have been more common here than further west. After the loss of Baktria and the East, it is likely that coinage circulation in Media did not differ greatly from that in Mesopotamia. By this

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47 Mørkholm (1979:50).
48 Mørkholm (1966:32) also notes an acute shortage of Seleukid silver at this time, remedied by counter-marking large quantities of Asia Minor coins with the Seleukid anchor.
time, the semi-independent dynasts in Persis may have been producing their own coinage for several years.\textsuperscript{49}

4. Asia Minor

Seleukid coinage never caught on in Asia Minor for two reasons: a) the strong competition from numerous local issues of posthumous ‘Alexanders’ and ‘Lysimachi’, from various city coinages and from those of powerful states of the region, the Pergamene kingdom and Rhodes, b) the relative instability of Seleukid rule in Asia Minor in the second half of the 3\textsuperscript{rd} century. Even when western and southern Asia Minor were reconquered by Antiochos III, coinage production does not seem to have been stepped up, as one might have expected, for the economic needs of the region.\textsuperscript{50} However, the hoard evidence in Table 2 shows that under Antiochos III Seleukid coinage did acquire a more respectable share of the currency circulating and this should probably be linked to increased military expenditure in the region, though with coinage that had probably been minted further east. This matches well with the increased production in northern Syria and Kilikia at this time, as noted earlier.

As for northern Syria and Kilikia, the sharp growth in the ‘market share’ of Seleukid coinage corresponds to a greater replacement rate than Mesopotamia’s, over 1%.

After Apameia and the loss of Asia Minor (188), there was, not unexpectedly, a dramatic drop in the volume of Seleukid currency circulating in western and southern Asia Minor to virtually zero. This was also partly due to the policies of the Attalid kingdom and Rhodes in creating more or less closed monetary areas in their spheres of political influence.

5. Koile Syria

After the conquest of this Ptolemaic province by Antiochos III, one can observe a very slow introduction of Seleukid coinage initially. No mint has been identified in this area

\textsuperscript{49} Koch(1988:84ff).

\textsuperscript{50} Only 8\% of Antiochos III’s production in Newell-type issues, or Golenko’s 2.4\% comes from Asia Minor. Houghton/Lorber (forthcoming) are hard put to identify any production from Sardeis, which had been an important mint earlier.
for silver issues under Antiochos III, who was apparently content to allow Ptolemaic currency to circulate freely. Under his immediate successors, the royal mint at Ptolemais-Akko was opened and those of the major Phoenician cities also began producing Seleukid issues. The interesting thing, however, is that the bulk of the Seleukid coinage minted in the region was produced on the Ptolemaic standard, as no doubt that is what the population was used to in its monetary transactions. Once more a financial measure can be seen that aimed at promoting production and exchange in the most efficient manner, or at least not upsetting the existing situation, for the ultimate benefit of the Seleukid treasury.

The very high proportion of Seleukid currency in circulation in this region in the period after Antiochos IV can probably be linked, as in northern Syria and Kilikia, to the continuous need of the various contenders to the Seleukid throne to issue coinage in order to pay their soldiers. At the same time, the Seleukid economy had become increasingly isolated from those of the other Greek states.

Small silver

With regard to small silver, mainly drachms, Coin Hoards List 2 presents the hoard evidence. The picture for Asia Minor seems to be that hardly any royal Seleukid issues circulated there throughout the third century and up to the loss of this area after Apamea (188). Life-time and posthumous ‘Alexander’ and ‘Lysimachos’ drachms dominated in the market. The pattern appears similar for Syria and Kilikia and it is only at the time of dynastic strife, from about 160 onwards, that perhaps as much as 20-30% of the small silver in circulation consisted of royal Seleukid issues, again probably in response to the increasing needs to finance armies. For Mesopotamia and the Upper Satrapies the corresponding figure in the third century may have been of the order of 5-10%, increasing gradually to 20-30% by the time these areas were lost to the Parthians in the mid-second century.

It seems clear both from the hoard evidence and the small number of drachm and fractional silver issues minted (see above) that the Seleukid kings were not as interested in

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51 Also Morkholm(1984:96), though Seyrig(1973:121) sees this as due to the strengthening of both political and economic ties with Ptolemaic Egypt from Alexander Balas onwards, since his predecessor, Demetrios I, minted only Attic in the region.
the small silver coinage market\textsuperscript{52} as in that of the tetradrachms, which better served their needs for payment of expenses and tax collection.

Gold

Hoards with gold coins are extremely rare (Coin Hoards List 3), as are the number of known gold issues (Newell 1977; 1978 and Table 1). One should not really speak of 'circulation'.

In Asia Minor only 'Alexander' staters appear in the reign of Seleukos. By the time of Antiochos III, however, Seleukid royal issues may have represented 20-30\% of the total. Further east, they predominate right down to the end of Seleukid rule, often 100\% and not less than 50\% of the content of hoards of gold coins. Even in the Greco-Baktrian kingdom ca. 180-170, 30\% of the gold circulating may have been Seleukid. One reason has already been suggested for this interest in gold and that is the overland trade with India.

Summary

This review of evidence for the circulation of Seleukid coinage, when linked to that for its production, suggests that the basic policy of the kings was not to tamper with the Attic-standard currency in circulation, principally 'Alexanders' and 'Lysimachi', but simply to keep it up to the right level with their own issues, as wear and loss took its toll. The mints of Mesopotamia and the Upper Satrapies essentially performed this function for their respective regions. This resulted in a gradual, but very slow, natural increase in 'market share' of Seleukid coinage. Up to a point the same situation existed in northern Syria and Kilikia, and to some extent in Asia Minor, which explains why there were so many mints, as each had the very limited, but specific task of monitoring the needs of its region and providing the necessary replacement coinage.

So, one can complete the picture presented earlier of taxes arriving at local treasuries in tetradrachms (and some small silver) and being passed on to regional treasuries after the

\textsuperscript{52} Le Rider (1994a:470) estimates that in the 3\textsuperscript{rd} century perhaps 95\% of the drachms in circulation were 'Alexanders'.

deduction of any sums required for local use. One may imagine mint officials sorting through the coins and setting aside those that were too worn to be allowed to circulate, thereby creating a reserve to be melted down and reminted when the needs of their region demanded it.

The campaigns of Antiochos III seem to have upset the balance somewhat. The mints in northern Syria and Kilikia produced more coinage than was necessary for their own regional needs, in order to finance campaigns of conquest in Koile Syria and Asia Minor. The conquered regions, already highly monetarized, were thus initially supplied with a replacement currency that could satisfy their needs for some time and did not require any new coinage. In due course, Asia Minor was lost while Koile Syria followed the pattern of northern Syria and Kilikia, with a speeding up of Seleukid production and increase in ‘market share’ primarily because of two factors, the greater isolation of the Seleukid economy and the intensification of military expenditure in the dynastic conflicts of this period.

The two key factors of Seleukid coinage policy, the ‘topping-up’ of the coinage in circulation and the bursts of military expenditure now need to be discussed further.

11.5 ‘Peace-time’ and ‘war-time’ coinage

A die study sometimes allows one to estimate the volume of a particular issue of coinage, with a greater or smaller degree of accuracy (Chapter 1.6). When a mint can also be identified and a plausible chronology for the issue established, one has at one’s disposal a piece of very useful data, that in a certain place at a certain time a particular quantity of gold or silver was minted. The next question is ‘for what purpose’? And this is where literary sources or plain common sense may provide a satisfactory answer, which can throw more light on the coinage policy of the Seleukid kings.

The Antioch mint of Antiochos IV

Mørkholm(1963) has carried out a detailed study of the silver coinage of the mint of Antioch under Antiochos IV, grouping the coinage into three series when major changes
of type or legend occurred and, within each series, into a number of issues determined by denomination and type.

The total number of obverse dies used at Antioch was: 2 for gold staters, 55 for tetradrachms, 2 for drachms, 1 for hemidrachms and 2 for diobols. As a rough indication of relative value, in drachm terms, the ratios between gold\textsuperscript{53}, large silver, small silver and bronze were 20 : 220 : 2.5 : 0.67. The huge importance of tetradrachms issues is evident in these figures.

Mørkholm's analysis showed 23 tetradrachms from 4 obverse dies for Series I (175-173/2), 89 from 17 for Series II (173/2-169/8) and 136 from 36 for Series III (169/8-164), though some dies span series. Using Esty's statistical method (Chapter 1.6), best estimates and 95% confidence limits for the total number of obverse dies for the three Series are 4.3 (1.3 to 8.3), 18.6 (10.1 to 26.0) and 42.2 (28.9 to 56.9) respectively. In terms of average annual usage, the best estimate for the Antioch mint of Antiochus IV is that it used approximately 2 obverse dies/year, or slightly less, for Series I, about 4.5 dies/year for series II and about 10 dies/year for Series III.

Series I represents the peaceful start of Antiochos' reign. One can associate Series II with the preparations for the war against Egypt, and probably the first campaign, and Series III with the second campaign against Egypt, the military effort to suppress the Maccabean revolt and the preparations for and expedition to the East in the last years of the reign of this king (Chapter 2).

I shall call Series I a 'peace-time' coinage. The needs of a population for an adequate supply of coinage so that the administrative payments - tax receipts cycle could work have already been discussed. Seleukid issues essentially represented a 'topping-up' of the coinage supply because of normal wear and loss, a replacement coinage. The marked increase in mint output in Series II and III would correspond to what I will term 'wartime' issues, which met the financial requirements of important military campaigns. Note that a 'war-time' issue at one mint might reduce or even supplant 'peace-time' issues for a number of years at the same or different mints, provided those receiving payment (mainly soldiers and suppliers of military equipment and provisions) spent their earnings in the regions served by those mints. Thus, in Antiochos IV's Antioch, for example, it might be

\textsuperscript{53} Note half die production (Chapter 1.6).
expected that soldiers returning from the Egyptian campaigns to the city, the staging point
for these and for the expedition to the East, would contribute with their expenditure to
the supply of circulating coinage.

For the moment one may simply note that the population of northern Syria was estimated
at about this time at 1½ - 2 million (Chapter 4.3). Therefore, its ‘peace-time’ needs seem
to have been met with a sort of rule-of-thumb of just over one tetradrachm obverse die
per million of population per year, equivalent to about 20 talents (Chapter 1.6).

The mint at Seleukeia-Kalykadnos

This minor mint in Kilikia Tracheia has been extensively studied. Tetradrachm
production commenced there with the conquest of the region by Antiochos III ca.197,
but was limited to the use of only one obverse die apparently. In subsequent reigns up to
and including that of Antiochos VII (to 129), the same low-key operation seems to have
continued, with production of one or two dies and sometimes none, making eight dies in
all, or one every nine years or so. So far, this clearly looks like a ‘peace-time’ coinage.
If one obverse die a year at Antioch served as a replacement coinage for the needs of
about one million people (see above), the region served by Seleukeia-Kalykadnos may
have contained a population of only about a hundred thousand, or perhaps twice this
number, if one considers that Kilikia Tracheia was not as heavily urbanized as northern
Syria or Mesopotamia or Kilikia Pedias and so had less need of coinage.

But then came a huge peak in production under Seleukos VI (126 known specimens from
44 obverse dies, giving a best estimate of 58 dies). Clearly an extraordinary minting effort
was going on, probably associated with the arrival of Seleukos at Seleukeia-Kalykadnos
in 98(?) and the commencement of military preparations there for his bid on the Seleukid
throne, which ended with the taking of Antioch in 94(?). So the mint was producing a
‘war-time’ coinage then. At about 20 talents to an obverse tetradrachm die (Chapter
1.6), roughly 1,200 talents were coined in up to four years for Seleukos’ war-effort.

In Chapter 10.1 soldiers’ pay was discussed and the suggestion was made that in the
Hellenistic period professional soldiers required an advance payment and regular pay

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54 Houghton(1989a); also quoted by Callatay(1993:22-23).
thereafter. Therefore, preparations for a campaign probably involved a considerable amount of minting of new coinage, which might continue at a lesser intensity during the campaign until it reached another peak, the paying-off at the end, if sufficient funds had not been coined already.

In Seleukos’ case, one does not know if his troops were paid off at Antioch with coinage minted at Seleukeia-Kalykadnos. On the assumption that they were, at the rate of one drachm/day/man (Chapter 10.1), 1,200 talents would have sufficed for 5,000 soldiers paid for four years or 10,000 for two years. The numbers sound about right for the force that Seleukos VI might have raised to take Antioch.

The Mesopotamian mints of Antiochos III and Seleukos IV

Mints operated for Antiochos III (223-187) and Seleukos IV (187-175) at Seleukeia-Tigris, Susa and Nisibis, and one may add Ekbatana just outside this region. The known specimens of tetradrachms and obverse dies used for this coinage are shown in the table below. An estimate has been made using Esty’s method (Chapter 1.6) of the probable total number of obverse dies used (k2’) and the 95% confidence limits of this prediction (95% k2’).

<table>
<thead>
<tr>
<th>King</th>
<th>Mint</th>
<th>Coins</th>
<th>Dies</th>
<th>k2'</th>
<th>Dies/yr</th>
<th>95% k2'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiochos III</td>
<td>Sel.-Tigris</td>
<td>55</td>
<td>49</td>
<td>343.8</td>
<td>9.6</td>
<td>783-143</td>
</tr>
<tr>
<td>(36 years)</td>
<td>Susa</td>
<td>23</td>
<td>17</td>
<td>51.1</td>
<td>1.4</td>
<td>121-17</td>
</tr>
<tr>
<td></td>
<td>Nisibis</td>
<td>171</td>
<td>57</td>
<td>72.2</td>
<td>2.0</td>
<td>95-57</td>
</tr>
<tr>
<td></td>
<td>MESOPOTAMIA</td>
<td></td>
<td></td>
<td>467.1</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Seleukos IV</td>
<td>Sel.-Tigris</td>
<td>17</td>
<td>11</td>
<td>24.5</td>
<td>2.0</td>
<td>59-11</td>
</tr>
<tr>
<td>(12 years)</td>
<td>Susa</td>
<td>18</td>
<td>9</td>
<td>14.6</td>
<td>1.2</td>
<td>20-9</td>
</tr>
<tr>
<td></td>
<td>Nisibis</td>
<td>38</td>
<td>16</td>
<td>22.2</td>
<td>1.9</td>
<td>38-16</td>
</tr>
<tr>
<td></td>
<td>MESOPOTAMIA</td>
<td></td>
<td></td>
<td>61.3</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>Antiochos III</td>
<td>Ecbatana</td>
<td>78</td>
<td>36</td>
<td>54.4</td>
<td>1.5</td>
<td>80-36</td>
</tr>
<tr>
<td>Seleukos IV</td>
<td>Ecbatana</td>
<td>5</td>
<td>3</td>
<td>5.9</td>
<td>0.5</td>
<td>26-3</td>
</tr>
</tbody>
</table>

Seleukos IV is not known to have organized any large-scale military operations in the East and so it might not be unreasonable to suppose that his eastern mints coined only what was sufficient for the current needs of the eastern satrapies, i.e. a 'peace-time' coinage. From the table above the best estimate for Mesopotamia is that he used about 61 obverse dies or 5.1/regnal year on average. For an estimated population of 5-6 million (Chapter 4.1), this is again consistent with a level of about one obverse die per million inhabitants, as at Antioch above. In fact, the two regions seem to have been quite similar in their high degree of urbanization, with increased currency needs. One can possibly even be more specific. Northern Mesopotamia (Nisibis) required 1.9 dies/year on average, central Mesopotamia (Seleukeia-Tigris) 2.0 and southern Mesopotamia (Susa) 1.2.

One may also consider Ekbatana, serving Media, with an output of 0.5 die/year on average. In terms of population, Seleukid Media should have possessed perhaps as much as a quarter of Mesopotamia's (Chapter 4.6) and one would have expected at least one die/year at Ekbatana. The smaller number might simply be an indication of the lesser need for coinage in a region not heavily urbanized where much of payment, taxation and exchange was still being conducted in kind.

Under Antiochos III, the picture is virtually the same at two mints, Nisibis, requiring 2.0 dies/year on average, and Susa 1.4, and so equivalent to the 'peace-time' output of Seleukos IV. But there is a dramatic change at Seleukeia-Tigris, where the best estimate of annual obverse die usage has gone up to 9.6. Admittedly, the 95% confidence limits of the prediction are quite wide because of the small index ratio of coins to dies, but even at the lower limit (143 dies at 4/yr) the result is much higher than any 'peace-time' output. To a smaller extent, this is the picture at Ekbatana where there is a tripling to 1.5 dies/year on average. Clearly an explanation is required.

It is not difficult to consider that the huge increase in output at the mint of Seleukeia-Tigris is a 'war-time' coinage issued to finance Antiochos III's Anabasis to the East between 210 and 205. The size of the army has been discussed in Chapter 10. For the purposes of this calculation I shall take 50,000 troops (35,000 'regulars' and 15,000 mercenaries) paid in silver and 20,000 eastern levies and 'allies', who were not (in an attempt to be as conservative as possible). At 1 drachm/day for infantry and twice that for cavalry, and with a cavalry:infantry ratio of 1:10, the daily cost of this army in silver
would have been about 10 talents. Over the five years of the campaign, a cost of the order of 15,000 talents is to be expected in silver alone.

Seleukeia would have been the logical staging point for the expedition. One may suppose that some payments were made there to the troops. Perhaps pay was issued at a reduced rate during the actual campaign, when the army was fed off the land or by the local rulers who acknowledged Seleukid suzerainty (Chapter 2). The return of Antiochos took place via Karmania and Persis, and so Susiane too. We are not told where any troops were disbanded, but again Seleukeia-Tigris seems a logical point and again its mint would have to come into play for any final payments. None of the other Mesopotamian mints, it was noted, shows any significant increase in silver output at this time, above any ‘peace-time’ currency needs.

From the table above, the entire production of Seleukeia-Tigris (best estimate 344 obverse dies) will be considered to have been devoted to the expenses of the Anabasis. At 20 talents to the die, this works out at about 7,000 talents, considerably less than the estimated cost of the expedition in silver. It is possible that Antiochos already carried with him a substantial war-chest of coined money when he arrived at Seleukeia-Tigris at the start of the campaign. It is also probable that some payments were made in gold. One other possibility is that the actual number of dies used at Seleukeia-Tigris may have been higher than the best estimate. The 95% confidence limit can indeed take us up to 783 dies or just over 15,000 talents, but the possibility is very small. A stronger possibility is that more coins than 30,000 were struck on average from an obverse tetradrachm die.

Perhaps Ekbatana also minted for the Anabasis, being on the direct route the expedition took and along which reinforcements and supplies might be expected to have traveled. It has been suggested that the gold and silver obtained from the sacking by Antiochos of the temple at Aine near Ekbatana, which produced 4,000 talents of coined money (Pol.10.27.12), was minted mostly there. But the die evidence goes against this. The best estimate of 55 obverse dies at Ekbatana for the whole of the reign of Antiochos III, discounting any need for ‘peace-time’ coinage, would amount to only about 1,000 talents of silver, far short of what Aine apparently produced. Nor is there any historical evidence that Aine yielded gold to the tune of nearly 3,000 talents, since Polybios is careful to

\[57\] e.g. Newell(1978:217-218).
detail the mainly silver ornamentation of the temple and the fact that other looters, Alexander, Antigonus and Seleukos had already passed through earlier (when it might be plausibly expected that they would have availed themselves of any gold in preference to silver). Nor is there numismatic evidence that Antiochos minted such huge quantities of gold staters that would have required about 60 obverse dies.58

There is perhaps a simpler explanation for the tripling of output of the Ekbatana mint under Antiochos III compared to Seleukos IV. The reestablishment of Seleukid political control in the East after the Anabasis must have created the need for more coinage to fuel the administrative payments - taxation monetary cycle. Mints that had once served this area, Artakoana in Aria and others in southern Iran and Afghanistan (see 11.1) no longer functioned. The mint at Baktra, which had also probably contributed earlier, was outside Seleukid jurisdiction, in the hands of Euthydemos. Only Ekbatana was in a position to supply the necessary coinage to what was quite a large region comprising not only Media, but probably also Aria, Drangiane, Karmania and perhaps Arachosia. If one considers these ‘re-affirmed’ provinces as similar in terms of degree of urbanization and economy to Media, roughly two million more people would need to be served with coinage at the rate of one obverse die per year, which does not fit badly with the independent assessment of population in Chapter 4.6. After Antiochos III’s defeat at Magnesia, control of these areas seems to have been lost once again, which could explain the reduction of minting output at Ekbatana under Seleukos IV.

11.6 The ‘special’ issues

The Seleukid ‘Alexanders’

‘Alexander’ tetradrachms were minted by Seleukid kings alongside their own royal issues. This continued well into the 2nd century and probably represented a substantial proportion of mint output.59 This is not surprising in the light of the coinage policy that seems detectable, i.e. that the basic intention of the Seleukids was to maintain the currency

58 At the rate of 50 talents to a die (Chapter 1.6).

59 The very large Meydancik kale hoard from Rough Kilikia, with burial date ca.240-235, is considered representative of what circulated in Asia Minor and Kilikia at this time. It has yielded 251 Seleukid tetradrachms, of which 147 ‘Alexanders’, and 10 Seleukid drachms, of which 8 ‘Alexanders’ (Davesne/Le Rider 1989:230,240).
supply at the right level and not to establish a Seleukid currency *per se*. What the coinage in circulation was appeared immaterial as long as it was based on the Attic standard (with the exception of Koile Syria later).

But why ‘Alexanders’? It may be that the Seleukid kings felt a need to reaffirm themselves to their subjects at the start of a reign, or when dynastic conflict or external problems posed a threat, or in newly-conquered territories, and so issued ‘Alexanders’ at the time, which received greater acceptance. ‘Alexanders’ also probably helped to develop a primary habit of coinage in areas where such had not circulated before. But a more detailed study is required so that the reasons for specific Seleukid ‘Alexander’ issues may be determined.

**The ‘lion’ staters**

These were coined by Alexander at Babylon alongside his official Greek-style coinage and this practice was continued by Seleukos I (who also introduced the ‘elephant’ stater) at Ekbatana and Susa also. However, the weight of the ‘lion’ stater is highly erratic and this suggests that it probably circulated as bullion, making it suitable for transactions in Babylonian markets when it was too soon to implement a Greek tri-metallic coinage.

The circulation of ‘lion’ staters was restricted to Babylonia and parts of western Iran and, in one (erroneous) view, was terminated by 275 when Antiochos I removed the last remnants of the civilian population of Babylon to Seleukeia-Tigris. Probably the lion staters ceased to be minted at about this time not because of the supposed evacuation of Babylon but in line with the increasing acceptance of Greek-style currency, though one could still think in terms of shekels. There is evidence from numerous Seleukid legal texts from Babylon and Uruk of prices expressed in shekels of silver and fractions of a shekel, frequently with the designation ‘in staters of Antiochos (or another king) in good condition’. A parallel exists in Greece today where the drachma is still sometimes called

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60 Golenko(1993:87).

61 The opportunity to do this may well arise after the publication of the new Houghton/Lorber catalogue.


63 For example in McEwan(1981), Doty(1977).
a franc in everyday speech, a throwback to pre-independence times when foreign coins were sometimes used as a medium of exchange.

The only reason why such a currency was issued alongside the normal Greek-style coinage would have been to facilitate transactions in an area with a long tradition of silver bullion-based exchange, but somewhat sceptical of coinage in the Greek sense, until public acceptance of the new system could be cultivated. As part of Seleukid coinage policy, it satisfied in the best way at the time the needs of the administrative payment - tax collection cycle in traditional Babylonia. The newly opened-up area to the east around Seleukeia-Tigris could be served better from the start by Attic-standard coinage.

The Phoenician-standard coinage

This has already been discussed briefly. It is the currency the Seleukids minted on a standard of 14.2 gr for a tetradrachm after the conquest of Koile Syria ca.200 from the Ptolemies, though not immediately. The region had, until then, entertained close commercial links with Alexandria, with mints at Berytus, Sidon, Tyre, Ake-Ptolemaïs and Joppa.

It facilitated the Seleukid administration to make certain payments and receive taxes in the area from the already existing stock of Ptolemaic coinage initially. This did not disrupt the economy. That is probably why Antiochos III minted no silver in the region after his conquest and one has to wait for the reign of Seleukos IV for the first Attic issue at Ake-Ptolemaïs. Under Antiochos V tetradrachms on the Ptolemaic standard were coined alongside Attic. This was not repeated by Demetrios I, but from Alexander Balas onwards several Phoenician mints were opened and Ptolemaic-standard coins began to predominate, with the occasional Attic.

It has been suggested that Attic-standard silver was eventually used in the new province only in the frontier areas and for certain payments the administration needed to make in this coinage to troops and administrative personnel only temporarily there. Indeed there

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64 Bellinger(1963:65): the coinage was acceptable to the local communities.
65 Seyrig(1973:121), Rostovtzeff(1941:868).
may have been a compulsory change of Attic by traders arriving from the rest of the empire. Though this may have been inconvenient, what was important was that the economy of the province be served in the best way. An alternative suggestion is that, as Ptolemaic influence increased, because of the support given to different pretenders for the Seleukid throne, the region became economically attached to Egypt and the Ptolemaic standard came to predominate.\textsuperscript{68} Perhaps the truth is that Ptolemaic-standard Seleukid coins were minted because the supply of true Ptolemaic coins in the area was dwindling because of natural wear and loss.

In line with their general policy, the Seleukid kings showed no concern to establish their own coinage in Koile Syria. Whatever could be shown to facilitate the tax-collection - payments cycle was acceptable: Ptolemaic-standard for the bulk of their needs, Attic-standard for the remainder.

11.7 Conclusions on coinage

The policy of the early Seleukid kings was to monetise the economy of the empire to the greatest extent and as rapidly as possible, so as to ensure for themselves and their successors an adequate supply of silver for their expenses, principally military.

Numerous mints were established to serve different regions. Their basic objective was to maintain the monetary supply at the desired level so as to fuel the payments - tax collection cycle (a 'peace-time' coinage). What coins were used for this was immaterial, but tetradrachms were far and away the most convenient. The Seleukids never made any effort to replace the 'Alexanders' and 'Lysimachi' completely, and indeed the numerous city and other silver tetradrachms and drachms that circulated within their domain, as long as they belonged to the Attic standard. In Koile Syria, they even relaxed this rule and minted on the Ptolemaic standard themselves, while permitting Ptolemaic coins to circulate at the same time, since this seemed to serve their needs more efficiently. In Babylonia, transactions were carried out for some years in coinage of a local standard until familiarity with Attic-standard coinage had been established.

The Seleukid 'peace-time' issues essentially replaced the coins that dropped out of circulation through wear and loss. The rate of production was roughly the output of one

\textsuperscript{68} Bikerman(1938:214). Le Rider(1993:54): Ptolemaic coins were admitted to Koile Syria after 200.
obverse die/year, or about 20 talents, for the needs of one million people in more urbanized provinces and perhaps half this in more rural ones.

At the same time, a reserve was kept of silver and gold in coin and bullion (from mine output or the melting-down of coins withdrawn from circulation as too worn). This was used when required for some major items of expenditure, almost always an important military campaign, and issued as a ‘war-time’ coinage.

The pattern of circulation of Seleukid tetradrachms, as evidenced by coin hoards, shows the effect of a steady natural replacement of the original and posthumous ‘Alexanders’ and ‘Lysimachi’ in circulation within the empire, as wear and loss took its toll. This progressed faster in Mesopotamia and the Upper Satrapies and also after the Seleukid realm became more isolated from the Aegean world following the loss of Asia Minor.

Finally, small silver issues were not preferred and bronze seems to have taken their place in the market, mostly from the time of Antiochos I. This had two benefits for the royal exchequer. It partly saved on silver for the more important tetradrachm issues and it also yielded a greater minting profit, because of the fiduciary nature of bronze. Gold was minted rarely, because of its scarcity, and usually only when there was a serious shortage of silver or some particular message of the royal ideology could be expressed alongside a utilitarian function, such as the payment of troops.
12. A MODEL FOR THE SELEUKID ECONOMY

In previous chapters population, production and exchange, royal revenue and expenses and coinage were considered separately. Logically there should be some relationships between all these parameters in the context of the Seleukid economy.

A very approximate model will be developed. Using source material and a measure of common sense, the magnitude of each factor of the economy will be estimated independently of the others. Plausible relationships between the factors will also be found independently in the same way. Then, if all the relationships actually hold between all the estimates, the model might be considered a reasonable one. Since the several parameters involved will have been derived independently, the possibility that they could fit together in this way by chance is wholly unlikely.

12.1 Population

It will be useful to retain some population estimates from Chapter 4. The Seleukid empire at its peaks ca.281 and ca.190 had about 20 million inhabitants, compared to perhaps 40 million in Alexander's at his death. Mesopotamia's population was estimated at 5-6 million, northern Syria's at 1½ - 2 million by the 2nd century and Judaea's at about ¼ million. The population of Egypt at this time may have been 5-6 million. The average population of a Greek city of Asia Minor and its territory was taken at 15,000, but the range could have been quite wide. The largest new foundation, Seleukeia-Tigris, may have been designed for about 100,000 inhabitants.

12.2 Revenue

The second parameter of the model, production and exchange, will be ignored for the moment and revenue considered instead.

Revenue examples

To begin with, regarding total revenue, Justin(13.1.9) gives the annual income of Alexander at his death as 30,000 Attic talents, but this includes a small contribution from
the European provinces as well. Antigonos Monophthalmos is said to have received 11,000 talents as that part of the revenue which ended up in his hands at the time (316) when he had established a certain measure of authority over all the Asian provinces (Diod.19.56.5). Ptolemy II reportedly obtained 14,800 talents from Egypt alone plus 1,500,000 *artabai* of grain (Jerome Daniel 11.5), while the income of Ptolemy Auletes in the mid-1*st* century amounted to 12,500 talents (Strabo 18.1.13).1

However, the total of 30,000 talents for Alexander’s revenue given by Justin is quite different from that which can be derived from Herodotos(3.89) for Darius, 8,100 Babylonian talents or a little over 9,000 Attic2. Consequently Justin has been rejected as too high, though some growth in economic activity, and so taxation, by the end of the Achaemenid period has been allowed.3 A simpler explanation is that Herodotos and Justin are simply not talking about the same thing. The one is referring to that part of the revenue of the satrapies that was passed on to the king after the expenses of the satraps had been taken care of, i.e. the surplus discussed in Chapter 9, the other to the total revenue of the king and his administration from all sources, including royal land and natural resources. The 11,000 talents of Antigonos would then be more akin to the tribute of Darius, i.e. they represent net rather than gross revenue.

**Revenue rates**

When these amounts of revenue are compared with the population figures derived earlier, a relationship seems to emerge. The Ptolemies come out, as one would expect, given their very strict control of the Egyptian economy, as the most intensive generators of revenue. 14,800 talents, or somewhat more, on a population of 5-6 million works out at about 2 ½-3 talents/thousand. If the population of Alexander’s empire was around 40 million, his revenue of 30,000 talents would represent a taxation rate of ¾ talent/thousand.

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1 Préaux (1939:424-425) for the total revenue of the Ptolemies.
2 The 360 talent tribute assessment of the Indian nome is considered to represent the value in silver of the gold dust actually paid; also Briant (1996:402).
3 Cavaignac (1923:109-113).
Looking now at different parts of the Seleukid empire, revenue from Judaea was noted as 300 talents under Seleukos IV (Sulpicius Severus *Chron.*2.17.5). Earlier it had been higher, before Antiochos III reduced the tribute by \(\frac{1}{3}\)d and made other concessions. Later it was to go up to 440 talents under Antiochos IV (Chapter 8.7). On a population of \(\frac{1}{4}\) million, a revenue rate oscillating around \(\frac{1}{2}\) talents/thousand seems to have applied, perhaps reflecting Ptolemaic influence.

Regarding Seleukid Mesopotamia, which was probably not too different from that of the Achaemenids, there is the interesting statement in Herodotos(1.192) that the satrap of Achaemenid Babylonia collected daily as the tax of the province a Babylonian *artaba* of silver, equivalent, according to Herodotos, to an Attic *medimnos* and four *choinikes*, or in modern terms to about 56 liters. A solid mass of pure silver of this volume would actually weigh about 590 kilos or nearly 23 Attic talents (at 10.5 gr/cu.cm). This corresponds to just over 8,000 talents annually. Obviously, neither is a sack-full of pieces of silver a solid mass, nor is Herodotos likely to have been exact. Still, one is led to a total annual revenue from Mesopotamia of the order of 5-6,000 talents. Most scholars have rejected Herodotos here because this figure is in total disagreement with what he gives for the tribute of Mesopotamia of only 1,000 Babylonian talents. But it does fit a population of 5-6 million taxed at the rate of about one talent/thousand inhabitants.

There is, of course, the need to explain the huge difference between the 5-6,000 or so talents total revenue of the satrapy and the only 1,000 talents apparently received by the king. Again, Herodotos is helpful because he informs us that one of the duties of the Babylonian satrapy was to ‘feed’ the king and his court for four months in the year, the remainder being provided for by the other satrapies of Asia (1.192). One reads in Athenaios(4.145a) that the daily expenses of the Persian king’s table (read ‘court’) amounted to 20 or 30 talents, or sometimes more. If this rate were maintained for four months in the year, as Herodotos tells us, one can calculate that the total expense would amount to 2,500 to 3,500 talents or more, making this probably the largest single item of expenditure for the satrap of Babylonia and the idea of 5-6,000 talents total revenue and only 1,000 talents net tribute more plausible4.

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4 Sancisi-Weerdenburg(1989:133-135) and Lewis(1987) for a discussion of the King’s Table.
Considering individual cities now, Aspendos was assessed for 50 talents by Alexander (Arr.Anab.1.26.2). The combined tribute of Kaunos and Stratonikeia to the Rhodians was set at 120 talents (Pol.30.31.7). These figures probably comprise tribute and all taxes. These were sizeable cities, probably above the norm for Asia Minor. With populations of, say, 30,000 - 40,000 each, their rates of revenue would have lain around 1 ½ - 2 talents/thousand. For comparison, Magnesia-Maiandros, which must have been larger, generated 50 talents for Themistokles in the Persian period, or nearer 1 talent/thousand (Thuc.1.138.5). In Chapter 8 it was suggested that the indemnity of 150 talents finally imposed on Seleukeia-Tigris (Pol.5.54.9) may have been equal to the annual revenue from the city. At an estimated population of 100,000, this would have amounted to 1 ½ talents/thousand. If the population of the city were higher at this time (ca.220), say at around 150,000, the revenue rate would have been only 1 talent/thousand.

For a rural community one has the evidence of the 3dr/adult head-tax for the village of the Kardakes (Chapter 8.6). This works out at only 1/4 talent/thousand of population, but may not have been the only tax. Mnesimachos’ villages ended up paying 50 gold staters in tribute, or 1,000 drs. With a population of, say, 500, this would have amounted to 2 dr/head or 1/3 talent/thousand. But this was after the grant to Mnesimachos. Prior to this, if the village had paid the king a 50% rent, the revenue generated would have been six times greater and reached 2 talents/thousand of population. There is no guarantee, of course, that the rent was as high as this.

Three points need to be made. The first is that revenue rates from subject cities seem to have been quite high when tribute and taxation were fully applied. This supports the idea in Chapter 8 that the king purposely made lighter the taxation of city land since he expected to gain from tolls and taxes on trade and industry. The second point is that many subject cities, temples and peoples did not pay the full rate because of the exemptions granted them. The third point is that revenue rates in Asia Minor appear to have been high compared to those in Mesopotamia. There is a simple explanation for this, the lower commodity prices prevailing in Mesopotamia (Chapter 5.6), which means that smaller amounts of silver would result from the sale of the same quantities of commodities that represented the taxation burden. Further east, one should make allowance for the fact that there was less urbanisation, with the possible exception of Baktria, and a smaller
degree of penetration of a monetary economy, as evidenced by mint activity (Chapter 11.2). Consequently, silver revenue rates were likely to be substantially lower.

What emerges from this very rough analysis is a spectrum of regional revenue rates ranging from about 1½ talents/thousand in urbanised Mediterranean regions to 1 talent/thousand in Mesopotamia and perhaps to as little as ½ talent/thousand in most of the Upper Satrapies.

**Total revenue**

Taking these facts into consideration and using the population graph of Chapter 4, the graph below may be indicative of how the total revenue of the Seleukid kings varied over time.

A peak of around 20,000 talents/year achieved at the end of the reign of Seleukos I and again just before Magnesia is possible. Antiochos III may have had earnings of the order of 15,000 talents/yr at the time of the Anabasis. As a comment, the loss of Asia Minor may have been equivalent in terms of population to the loss of the Upper Satrapies, but considerably more important in terms of revenue.
12.3 Production

Agricultural production

It is now time to deal with agricultural production, which has been postulated as the most important economic activity because of ps-Aristotle (Chapter 7), and to try to relate it to population and taxation.

Mesopotamia will be considered as an example, because it has the advantage of being an essentially ‘closed’ system from the point of view of agriculture, i.e. it is difficult to envisage the transport of bulk agricultural commodities across its borders. To the east lay the Zagros range, to the north the Anti-Tauros and mountains of Armenia, to the west and south the Syrian and Arabian deserts and the Persian Gulf. It was only in the northwestern corner that a corridor of cultivated land existed from the Euphrates to the Mediterranean. Even assuming that grain could easily have been transported up or down the Euphrates, the 7-day overland trip to the Mediterranean would have been expensive (Chapter 5.5). It is clear that Mesopotamia in this period is not likely to have been either an exporter or an importer of bulk agricultural commodities, except in special circumstances, such as supplying provisions for a military campaign.

What one can say about agricultural production, then, is that it must have been at least adequate to feed the Mesopotamian population, or about 15% more since an allowance should be made for some loss during transportation to city granaries and while held there in storage. Naturally one would expect a fixed running surplus to be kept in store to guard against a poor harvest, perhaps even a year’s supply, but average annual production must have about matched the needs of consumption over the long term.

Consumption

Barley was the staple commodity in Mesopotamia (Chapter 5.1). To survive, a working man needs about 1 ½ liters of barley per day. This is the typical ration one finds in many administrative texts of all periods from Babylonia. Barley has a smaller calorie content

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5 From accounts of Old Babylonian Larsa showing grain carried to the city from the surrounding district, Breckwoldt(1995/6:78) worked out a 5% maximum loss of grain during transportation; Adamson(1985:7) estimated 10% loss of grain in storage for the ancient Near East as a probably conservative figure.

than wheat and suffers a loss of 20% or more in preparation because the husk has to be removed first\(^7\). The net result is that 1 \(\frac{1}{2}\) litres of barley are roughly the equivalent in nutritional value of one \textit{choenix} of wheat, or about 1.1 litres, the typical soldier's ration of the Greek world. But these figures apply to an adult man in the prime of life doing fairly strenuous work. If one considers the calorie requirements of other members of the typical family\(^8\), and other classes of society not engaged in strenuous labour, one is left with an average figure of barley consumption that may have been nearer 1 \(\frac{1}{4}\) liters/person/day.

Man in Mesopotamia did not, of course, live on barley alone, but it probably satisfied 70-80\% of his daily dietary requirement, as in the ancient Mediterranean world, and consequently the actual barley consumption was less than that given above. However, one can consider the figure of 1 \(\frac{1}{4}\) liters/person/day as a barley-equivalent representing all foodstuffs, and this works out at about 450 liters/person/year.

What is the significance of this figure? When multiplied by population, it gives us an idea of what the total agricultural output of Mesopotamia may have been. If a value could be assigned to this, one would have an estimate of the economic base from which rent and tax were extracted by the administration.

**Price**

The Babylonian Astronomical Diaries (Chapter 5.6) give accurate commodity prices in the market of Babylon throughout the Seleukid period. The base price of barley works out at 20 \textit{suti} to the shekel or 1 drachm for 60 litres, subject to fluctuations because of good or bad harvests and the time of the year in relation to the harvest, but occasionally influenced by disturbances in or near Babylon.

The question is, of course, whether prices in the city of Babylon were representative of those in Mesopotamia generally. Certainly in southern Mesopotamia, Babylonia, where the bulk of the population was located (Chapter 4.1), river transport along the Euphrates and Tigris and the dense network of canals could move goods cheaply from areas of

\(^7\) Ellison(1983:149): one liter of barley gives 2,700 Calories but 20\% wastage effectively reduces this to about 2,200.

\(^8\) Foxhall/Forbes(1982:49).
temporary surplus to those of temporary shortage, so one would probably expect an evening-out of price.

The value of agricultural production

With a price of 60 liters of barley for a drachm, the average inhabitant of Mesopotamia’s consumption of foodstuffs of 450 liters of barley-equivalent per year would have been worth about 7 ½ drachms, rounded up to 8-9 drachmas to allow for the fact that the non-staples in the diet (20-30% of the total) were probably more expensive than barley. This, increased by the transportation and storage losses of roughly 15% suggested earlier, would have made the value of the average agricultural production per inhabitant of Mesopotamia about 10 drachmas, since self-sufficiency was the likely condition. With a population of 6 million, the total value of agricultural production in Mesopotamia works out at around 10,000 talents annually.

Agricultural production versus taxation

As noted earlier, at one talent/thousand of population the total annual revenue of the king and his administration from Mesopotamia was likely to have been around 6,000 talents. This, it will be recalled (Chapter 8), included taxation of various kinds but also rents from royal land and proceeds from the natural resources the king controlled, principally irrigation water.

It is not clear how much land was owned by the king. If the land was directly administered on his behalf, he obviously received the full revenue. If the land was leased to tenants, the king could expect not less than 50% of the crop as rent for the land, as the text from the Ebbabar temple showed (Chapter 8.1). But even if the land was held by a temple or an individual, taxation and water rights probably represented not less than a third of the harvest. The overall impression is that the king’s income from agriculture in Mesopotamia must have been high, probably around 40-50% of the value of total agricultural production. This was put earlier at about 10,000 talents annually and so 4-5,000 talents in royal revenue.

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9 Chapter 8.2 for the high cost of water in Mesopotamia.
The figure derived above constitutes the lion's share of the 6,000 or so talents that was estimated earlier to be the total royal revenue from Mesopotamia and provides support for ps-Aristotle's statement that revenue from land was far and away the most important (Chapter 7).

Other activities

It was suggested in Chapter 5.5 that in relative terms longer-distance trade was not as significant in the Near East as in the Mediterranean world. Ps-Aristotle seems to have known this well enough when he based his treatise on the Seleukid empire, as I have argued (chapter 7.3), and listed satrapal revenues in order of importance. The analysis of revenue from agriculture in Mesopotamia (see 12.2) also shows that perhaps only $\frac{1}{4}$ or $\frac{1}{3}$ of royal revenue may have been derived from animal husbandry, trade and industry and head taxes.

A similar picture can be obtained from inland Judaea, located well off important trade routes. The High-Priest Jason had offered 360 talents for the tribute of Judaea and only 80 for the other taxes (Chapter 8.7). It is tempting to see this as a distinction between the revenue that could be earned from land (and perhaps people) and that from taxes and tolls on trade and industry.

Along the Mediterranean coast the picture was undoubtedly different and trade played a much more prominent role in both economic life and Seleukid taxation receipts, perhaps more so than land in some cases, if the many tribute concessions and low rates of taxation of agricultural produce of the Greek cities of Asia Minor (Chapter 8.1) are anything to judge by.

12.4 Expenditure and surplus

In Chapter 10 an attempt was made to estimate the major expenses of the Seleukid kings. It might be useful to consider three points in time: just before Antiochos III's Anabasis (210), just before Magnesia (190) and at the end of the reign of Antiochos IV (164).

Revenue for Antiochos ca.210 was estimated at around 15,000 talents annually (12.2). In Chapter 10 the cost of his 'peace-time' army worked out at about 8,000 talents, that of
his administration, before the full conquest of western and southern Asia Minor and Koile Syria, at 2-3,000 talents and his own expenses perhaps as much again. So a small annual surplus is likely to have existed. However, once the Anabasis was under way, ‘war-time’ expenditure would quickly have done away with this and eaten into the royal treasury’s reserves. The ‘conquest’ of the East did not significantly affect the king’s revenue in silver terms and it was only when Koile Syria and, more importantly, Asia Minor were acquired that revenue may have increased to as much as 20,000 talents annually. But the cost of the ‘war-time’ army and navy were now much higher and administrative expenses had also increased because of the new acquisitions. I suspect that Antiochos must have been about breaking even at this point, as he seems to have been able to sustain high levels of military expenditure year after year until Magnesia (190).

At this point occurred the very important loss of Asia Minor and total revenue probably plummeted to around 13,000 talents or so. Reduced revenue may have been matched by a temporary decrease in size (and cost) of the ‘peace-time’ army under Seleukos IV, but this was up again to nearly former levels under Antiochos IV (Chapter 10.1). Nor is there any sign of a reduction in expenditure of the king and his court (Pol.26.1 and Chapter 10.4), while any reduction in the cost of administering those Asia Minor provinces held at the time of the Anabasis and now lost, was balanced by the corresponding expenses of Koile Syria. So let us say that Antiochos IV’s costs were roughly what Antiochos III’s had been before the Anabasis. Under these conditions there was unlikely to have been much annual surplus and, if any, it was required to pay the Roman indemnity of 1,000 talents annually. Incidentally, the Romans must have had a very good idea of what the Seleukid kings could afford and no more. The signs of cash-flow problems are there until the end of the reign of Antiochos IV, e.g. the resort to temple-raiding and the scheme to sell the population of Judaea in 165/4 to raise the last (delayed) 2,000 talents owed the Romans (Chapter 8.9).

The plunder Antiochos IV took from Egypt and the Temple of Jerusalem in 169/8 were probably intended to help finance his eastern Anabasis, since insufficient funds must have been available in his treasuries at the time. Had this campaign succeeded, the finances of the empire would have been placed on a better footing. But this did not happen because of the king’s death. It soon became clear that a powerful army could be maintained no
longer, hence the episode in which Demetrios I disbanded his regulars without full pay, keeping only the mercenaries and thereby provoking discontent (Jos. Ant. 13.130).

A downward spiral now set in for the Seleukid kings. Insufficient revenue to maintain an adequate army, because it was squandered in internecine warfare, led to loss of territory, to even less revenue and more loss of territory until the final collapse.¹⁰

12.5 Coinage

The last factor in the model of the Seleukid economy is coinage.

In Chapter 11.5 the idea of a ‘peace-time’ coinage was introduced. In the examples given there the ‘peace-time’ tetradrachm output of Mesopotamian mints under Seleukos IV amounted to about 5 obverse dies/year and of Antioch under Antiochos IV to about 2 obverse dies/yr. If Seleukid ‘peace-time’ issues were simply meant to replace losses in the total coinage in circulation, as has been suggested, then one can at least say that the amount circulating in the economies of these two regions should have been approximately in the ratio 5:2. Is it then a coincidence that the populations estimated independently for Mesopotamia and northern Syria were 5-6 million and 1 ½ - 2 million respectively (12.1)? This provides a rough rule of thumb, that the output of one obverse die/yr was necessary as replacement coinage to serve the transaction needs of one million people. There is a proviso here, that the regions involved were similarly structured economically. For Mesopotamia and northern Syria this may have been true, as both were highly urbanized at this time, but this may not have been the case further east, as evidenced by the relatively low ‘peace-time’ output of the Ecbatana mint under Seleukos IV of perhaps ½ an obverse die/yr (Chapter 11.5), when the population of Media was estimated at around 1 million. Asia Minor, on the other hand, with its longer and more wide-spread use of coinage, may have experienced a slightly higher requirement. But one obverse die/yr/million inhabitants seems a good empire-wide average.

At its peak, then, the Seleukid empire’s 20 million inhabitants would have required the output of roughly 20 obverse tetradrachm dies. Since each die was likely to strike 30,000

¹⁰ Austin (1986:461): an increase of territory led to an increase in revenue, a decrease sent Hellenistic dynasties into a spiral decline. This is true for the Seleukid empire at a certain point, the loss of Mesopotamia.
coins, or 20 talents-worth (Chapter 1.6), the total amount put annually into circulation at the time may have been of the order of 400 talents.

The newly-minted Seleukid coinage was, as has been shown in Chapter 11.4, intended mainly as a replacement coinage, to balance the losses due to wear and keep the total amount in circulation at the right level for the administrative payments - tax-collection cycle, at least until the reign of Antiochos III. In this it was facilitated by the net imports of foreign coins.

It was estimated (Chapter 11.4) that in the reign of Antiochos III the Seleukid coinage issued annually represented about 0.6% of the total amount in circulation in Mesopotamia and the Upper Satrapies and over 1% in northern Syria, Kilikia and Asia Minor. An average rate of around 1% appears reasonable.

If the 400 talents minted annually represented 1% of the amount in circulation, the total value of tetradrachms circulating in the Seleukid empire must have been around 40,000 talents. Since tetradrachms accounted for about 4/5ths of the value of all Seleukid coinage (Chapter 11.2), the total amount circulating was probably of the order of 50,000 talents at the time of Antiochos III. This does not appear to be an unreasonable figure for the Seleukid share of all Greek coinage then, if one considers what the starting point had been at the time of Alexander, the 180,000 talents or more of the Persian booty (Strabo 15.3.9), which was soon coined, plus whatever coinages already circulated in the Aegean world at the time, giving a total of, say, 200,000 talents. True, wear would have taken its toll on this mass, but new mining production may have been able to make up the losses.

Earlier it was shown that the administration's average revenue rate was around 1 talent/thousand of population. So, at the time of Antiochos III, the administrative payments/taxation cycle would have required about 20,000 talents annually, a very significant part of what probably circulated, which supports the idea that coinage was issued primarily for administrative purposes and only incidentally to facilitate trade, and mainly local trade at that.
12.6 Conclusion

The rather crude model that has been presented of the Seleukid economy makes use of numbers that have been derived from a set of separate analyses in this and preceding chapters. All its interrelated parts seem to fit together reasonably well, which would only be the case if the magnitudes of the different parameters and the nature of their relationships were roughly correct. What this means, I suggest, is that the various ideas and hypotheses and analyses that I have based my vision of the Seleukid economy on are not unduly off the mark.
13. FINANCIAL ADMINISTRATION

In previous chapters a case was made for a royal Seleukid economy whose different elements - the foundation and support of cities, the policy concerning royal land and its produce, the scope and level of taxation and the manner in which coinage was used - were planned in such a way as to ensure for the kings an increase in their revenue, mainly that in silver. What was required was an efficient system to collect the revenue.

In this chapter the rather scanty evidence is examined in an attempt to produce an outline and assessment of the Seleukid system of financial administration.

To begin with, it will be necessary to review what one knows of the Achaemenid system and any changes introduced by Alexander. Administrative practice throughout history has been relatively insensitive to political change. New masters are reluctant to replace something that works well as long as they continue to benefit, as their predecessors did before them. In principle, therefore, one would expect some continuity in going from the Achaemenids to the Seleukids, as the underlying problems remained the same and the method had proven itself over two centuries. While this is likely to be true, it has been more an assumption than a proven fact.

Fortunately one can make use of a so far underutilised source, the Persepolis Fortification Tablets (Chapter 1.4), which provide many details of Achaemenid administration. It is interesting how much clearer some Hellenistic epigraphic data become when tested against the Achaemenid material, suggesting that the assumption of a degree of administrative continuity between the Achaemenid and Seleukid empires is correct.

13.1 Achaemenid practice

The Persepolis Fortification Tablets (PFT)

This important collection of cuneiform texts was discussed in Chapter 9.1 in connection with the handling of the surplus. There it was suggested that the Fortification texts are evidence of the workings of a satrapal economy in the Persian homeland - later to become the Hellenistic satrapy of Persis - and so perhaps typical of how actual satrapies were administered. Parallel to the satrapal economy could be distinguished traces of a
royal economy, siphoning off commodity surpluses for the king's own use, but occasionally returning them when there was need.

The key to the workings of this satrapal economy were the more than one hundred storehouses at which commodity taxation was collected and from which rations were issued for the maintenance of Achaemenid officials, workers and animals. The storehouses came under the orders of the chief administrator of Persepolis, Parnaka, and his deputy, Zišawiš, in the period of the PFT (509 - 494) and an analysis of the texts indicates that there were three main departments involved.1

The first department collected the commodity tax and managed the storehouses, which were geographically grouped into districts under district officers. The districts themselves belonged to regions under regional officers. Districts and regions tended to follow the major roads spreading out from Persepolis.2 Within the storehouse organization there seem to have been two sub-branches, the first looking after the commodity stocks, the second seeing to their collection as tax. In the first, storekeepers, sometimes referred to as 'grain-handlers' or 'wine-carriers', handled day-to-day storehouse operations under the district officer. In the second, commodity tax was brought in by tax-collectors, whom the texts refer to as 'deliverers', while a 'delivery man' (ullira) is noted, who may have been the tax-inspector or tax-estimator for the district. In the accounts of most storehouses two officials were noted as representing the storehouse, the district officer (or sometimes the storekeeper) and the 'delivery man', suggesting that the latter was not the subordinate of the former, but of the regional officer above him. The third official who is normally present in the account is the 'apportioner', on whose behalf the particular stock was being maintained.

The second department of the financial administration consisted of these 'apportioners', who managed the work-groups and animals and determined the ration entitlement of each junior official, worker and animal. Here too a three-level hierarchy seems to have been in place using military titles: decurion apportioners reporting to centurions, with a handful of 'chiefs of workers' at the top. Between the two departments of the administration there appears to have been a regular interchange of personnel, a kind of side-stepping

1 Aperghis(1998;1999) for taxation in the PFT and the organisation at Persepolis; Briant(1996:Chs.9-11), Tuplin(1987b) for the administration of the Persian empire in general.

2 Aperghis(1996) for the road network.
advancement up the ladder of promotion, from decurion to centurion and then, presumably, chiliarch, given that this was the system of command we know of in the Persian army.

The procedure used at the storehouse for the receipt or issuing of commodities was a rather clever one. Senior apportioners maintained commodity accounts at many storehouses in anticipation of the rationing needs of the workers they controlled in the district, or who were likely to be moved in, in order to collect the grain or sesame harvest, for example. Thus a storehouse’s stock might be divided up into several such accounts. For most transactions two seals were applied to the tablets recording them, one representing the storehouse, which physically controlled the commodity, the other the apportioner, who determined who was entitled to receive what. In this way each department acted as a check upon the other. Only in the case of very senior apportioners or other high officials would one seal, their own, be sufficient for a commodity to be issued without the need of a storehouse’s ‘counter-signature’.

Finally, a third department of the financial administration collected the commodity surpluses and the products of exchange from the storehouses, along with the transaction tablets recording these, and brought them to Persepolis where the storehouse accounts were prepared. In the texts one can recognize senior accountants, who wielded personal seals and ‘signed’ the storehouse accounts, and more junior officials who were sent to the storehouses for collections.

One thing immediately becomes clear from a study of the texts, which will be very relevant for Hellenistic practice, that the chief administrator of Persepolis not only supervised the workings of the satrapal storehouses but also had the authority to requisition commodity stocks from the royal storehouses when he needed them. In other words, he acted as the king’s representative not only in the satrapal economy but in the royal economy too.

The satrap in the Achaemenid organization was responsible for financial administration for his satrapy, and so the chief administrator in the Fortification texts, Parnaka, should be the equivalent of a provincial satrap. This becomes clear also from the travel authorizations he was allowed to make, something that in travel ration texts can be seen to have been reserved for the king and provincial satraps and, apparently, their deputies only. A deputy,
Ziššawiš, is attested in the PFT for the ‘satrap’. He had very wide powers in managing the storehouses and apportioners and in issuing travel authorizations, matching those of the ‘satrap’, and it is possible that he was the official actually responsible for financial administration on a daily basis.

A schematic picture of the financial organization at Persepolis, and perhaps in the satrapies too, is given below:

13.2 The change with Alexander

Alexander introduced a major change in the workings of the empire. Because he apparently sought to give Persian nobles a share in government, he appointed several in command of satrapies. At the same time, however, he may have been concerned that his satraps might wield too much power and so the financial administration of at least some satrapies was placed under Greco-Macedonians, who reported directly to the king.

The situation is not clear-cut, as the sources identify some satrapies with their own chief financial administrator and others grouped together in what appear to be larger financial jurisdictions. In many satrapies no financial officers can be identified, in particular in those in the East.3

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3 The matter is discussed at length by Griffith (1964), who described the curtailing of the financial powers of the satrap as ‘an experiment in government’ that did not survive Alexander’s death. For the eastern satrapies he argued that no royal financial administrators were appointed because it appeared more politic to Alexander, as part of his policy of rapprochement with the Persians, to leave the Iranian peoples in this
Firmly attested as chief financial administrators of satrapies are Nikias in Lydia in 334 (Arr.Anab.1.17.7; 1.17.1) and Asklepiodoros in Babylonia in 331 (Arr.Anab.3.16.4). In the same year Kleomenes was made responsible for the revenues of all four nomoi into which the satrapy of Egypt had been divided (Arr.Anab.3.5.2). At some point Ophelias the Olynthian is noted as appointing a financial officer for an Egyptian nomos (ps-Arist.Oik.2.2.35). Presumably this could be done by the chief financial officer of the satrapy. A Krateuas is noted in Lydia, when Menandros was satrap there between 330 and 323, authorizing a land grant (Syll.1 302) and it has been plausibly suggested that he was the chief financial officer of the satrapy, perhaps following Nikias.4

Other situations involving financial administrators do not unequivocally point to single satrapies. In 331 Koiranos was authorised to collect the revenues of Phoenicia and Philoxenos those of Asia Minor west of the Tauros (Arr.Anab.3.6.4, 3.16.9), but these may have been short-term assignments, perhaps to gather the contributions of the cities in these areas.5 Harpalos is noted as being in charge of the central treasury in Ecbatana at first and in Babylon later (Arr.Anab.3.6.6; 3.19.7; Diod.17.108.4), but this is unlikely to have involved financial administration of a satrapy.6 This particular function seems to have been exercised by Antimenes in Babylonia, but he appears to have possessed authority in certain financial matters that extended beyond the borders of this satrapy (ps-Arist.Oik.2.2.34,38).7 But then Babylon occupied a special position as a capital of Alexander’s empire. Finally the appointment of Menes as hyparchos of Syria, Phoenicia and Kilikia is noted (Arr.Anab.3.16.9-10) and it has been suggested that this was a financial appointment.8

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4 Griffith (1964:30); Berve (1988: II,no.447)
5 Badian (1965:168).
6 Badian (1965:172) sees Harpalos’ role as that of a collector of tribute surpluses from the satrapies.
7 Andreades (1929) for a fuller discussion of Antimenes and Kleomenes.
Alexander also left in place the Achaemenid system whereby the king appointed and controlled the commanders of the garrisons in the satrapies.\(^9\) This had always been good policy as it served to balance the military power of the satraps, but the new measure restricted their financial power as well.

Thus, at Alexander’s death a tripartite system may have been in place in most, if not all, satrapies: a civil governor with some military capability, a financial administrator and one or more garrison commanders. That this is likely to have been so can be seen from the case of Eumenes (13.3).

13.3 The period of the Successors

Alexander’s tripartite system did not survive him very long. In the scramble for power amongst his generals it was natural for these to seize the financial power in their satrapies in order to make it serve their political aims, when there was no central power strong enough to check them. A number of examples point in this direction.

Plutarch reports (Eum.3.6) that, when Eumenes took over his satrapy of Kappadokia soon after the settlement at Babylon following Alexander’s death:

\[... \ τάς \ μὲν \ πάλιν \ τοῖς \ ἄντι \ φίλοις \ παρέδωκε, \ καὶ \ φρουράρχους \ ἐγκατέστησε \ καὶ \ δικαστὰς \ ἀπέλιπε \ καὶ \ διοικητὰς \ οὓς \ ἤθελε, \ τοῦ \ Περδίκκου \ μηδὲ \ ἐν \ τούτοις \ πολυπραγμονώτως \ ...\]
‘... he placed the cities under the authority of his friends and installed garrison commanders and set in place those judges and dioiketai that he desired, as Perdikkas did not involve himself at all in these matters’.

There are three groups of officials involved, if one excludes the judges: the friends administering the cities, who represent the civil administration, the garrison commanders and the dioiketai for the financial administration (13.5).

Kappadokia was newly conquered then and it was presumably to be administered exactly like other satrapies in Alexander’s empire. The ‘\(μὲν\)’ in the text seems to distinguish the city appointments from the rest, which are then linked to the mention of Perdikkas and the fact that he did not involve himself in this selection, suggesting that he would have been

expected to do so\textsuperscript{10}. If one accepts that the appointment of garrison commanders and financial administrators in satrapies, and their direct control, had been Alexander’s prerogative, Perdikkas would simply have been following in his footsteps as his \textit{de facto} successor. In other words the satrap was not expected to appoint or control the garrison commanders or financial officials of his satrapy, but Kappadokia became an exception as Perdikkas had other worries at that moment and could apparently count upon the loyalty of Eumenes, as subsequent events showed.

With Alexander’s death and that of Perdikkas, there was no longer any central authority strong enough to impose this system and the Successors soon concentrated all the powers of their respective satrapies in their own persons.\textsuperscript{11} Seleukos himself, as satrap of Babylonia, was required by Antigonos Monophthalmos to present his accounts (Diod.19.55.3). If Antigonos, acting as the representative of the kings, controlled the financial administration of the satrapy, he would presumably not have needed to make such a request.

Nevertheless, the system of separate financial administration in the provinces directly under the central authority had been tested and was awaiting the right conditions to reappear in the Seleukid empire.\textsuperscript{12}

### 13.4 Seleukid financial administrators

A number of officials appear in the context of financial administration in Seleukid sources: e.g. \textit{διοικητής, οἰκονόμος, ὁ ἐπὶ τῶν προσόδων, ὁ οἰκονομῶν τὰ τοῦ --, ἐκλογιστής, λογευτής, etc., and it will be necessary to examine the function of each separately in the context of the relevant texts. Some of these terms were also used in the Ptolemaic administration, but it would be dangerous to assume that they represented identical functions; so Ptolemaic interpretations will be ignored unless they were applied to Ptolemaic possessions outside Egypt.

\textsuperscript{10} Also Griffith(1964:28-29).

\textsuperscript{11} Corsaro(1980:1173-1184).

\textsuperscript{12} The centrifugal tendencies after the death of Alexander became centripetal as the new monarchies consolidated (Corsaro 1980:1184).
The information necessary is gleaned from a number of Seleukid-period inscriptions and literary texts discussed below.

13.5 The dioiketes, the oikonomos and the epi ton prosodon

The Skythopolis dossier (Document 4)

Dating to the 190's, the Ptolemaios inscription or Skythopolis dossier comes from Palestine just after it had been taken by the Seleucids from the Ptolemies. Antiochos III wrote to a number of officials ordering them to carry out certain personal requests made to him by his governor of the newly-conquered satrapy of ‘Syria and Phoenicia’, Ptolemaios.

Ptolemaios’ concerns, as I read them in the inscription, were to regulate matters of judicial jurisdiction and to obtain anepistathmeia, i.e. freedom from billeting of troops, for certain villages which had belonged to him before and others given him by Antiochos more recently.

In the first memorandum (text D, lines 12-14) Ptolemaios requested that his own officials be allowed to handle disputes arising between the laoi in his own villages (όσα μιᾶς ἤν ἦν ἐν τοῖς κώμαις [μου τοῖς λαοῖς], πρὸς αὐτούς ἐξίσους διεξάγαγαν ἐπὶ τῶν παρ᾽ ἐμοῦ), while those involving the inhabitants of other village should be dealt with by the oikonomos and official in charge of the area (όσα δ᾽ ἂν ἦν πρὸς τοὺς τῶν ἄλλων κώμῶν δὲ τὸ ὁικονόμῳ καὶ ὁ τοῦ τόπου πρὸς τοὺς τοῖς τῶν άλλων κώμων δὲ τὸς ὁικονόμῳ εἰπεὶ σκόπον ὑμῶν). In the case of homicide or matters of greater importance, the satrap (Ptolemaios himself) should be involved. Furthermore, the garrison commanders and officials in charge of districts should lend assistance to whoever needed it (τοὺς δὲ φοινάρχους καὶ τοὺς ἐπὶ τῶν τόπων τεταγμένους μὴ περὶδεῖν κατὰ μνημένα τρόπου τοὺς παρακαλοῦντας).

‘Topos’ in the above context is likely to be an administrative district, in which case ‘ὁ τοῦ τοποῦ προεστήκος’ is ‘the person in charge of the topos’, i.e. the civil district commander.13 This official may well have been a toparch - and we do have references to

13 The precise meaning of τόπος here is the subject of disagreement. Bertrand(1982:171) considers that it refers to Ptolemaios’ estate and has no official administrative sense. Thus ὁ τοῦ τόπου προεστήκος would be Ptolemaios’ own official, his ‘regisseur sur place’. But if so, why change the wording and not use παρ᾽ ἐμοῦ as before? The implication would also be that the ὁικονόμος was capable of settling all matters, whether of a civil or financial nature, which is not the picture we have of a Seleukid ὁικονόμος (see
toparchies in Seleukid Judaea, as well as regional commands, meridarchies, into which the satrapy of 'Syria and Phoenicia' was subdivided. There is no mention in Seleukid Palestine of the hyparchy, the only administrative subdivision of a Seleukid satrapy attested elsewhere, but there is in Ptolemaic Palestine. The Ptolemaic hyparchies may have been too large as administrative units when compared with the small hyparchies of, say, Asia Minor (see below). Furthermore the new satrapy was made up of quite disparate regions. It may have made sense therefore to introduce the intermediate subdivision of the meridarchy and apply a different term to the smaller units to avoid confusion.

Note that the garrison commanders (phourarchs) are distinguished in Ptolemaios' request from the administrators of the districts ("oi epi ton topon tetagmenoi"). One can see that the former were not under his orders as satrap, as why else would the king need to become involved? As for the latter, this could be a catch-all term for every other official in a district, civil and financial. Some, such as the civil district commander, would have reported to Ptolemaios anyway. Others might have been under the king's direct control, the oikonomoi, for instance (see below).

As will be noted in other inscriptions later, a pair of officials was frequently associated in implementing decisions of the Seleucid administration, the one with greater responsibility for civil/military matters, the other more involved with financial ones. Where the dividing line was would not always be clear, so sometimes both officials needed to act together. In his first memorandum Ptolemaios was apparently claiming exemption from administrative interference in his own villages as long as it was an internal matter.

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14 In I.Macc. 11.34-35 Demetrius II conceded to the Jewish High Priest, Jonathan the revenue of three nomoi of Samaria which were to be added to that of Judaea. Josephus refers to the same agreement and 'tων τριών τοπαρχίων Σαμαρείας' in one line (Ant. 13.125) while specifying their names as nomoi in another (Ant. 13.126), obviously reflecting the Ptolemaic terminology of pre-Seleucid Palestine. It is clear that taxation was assessed at the level of a toparchia. See Bikerman (1938:198).

15 Meridarchai in Jos. Ant. (12.201) and I Maccabees (10.65). Also Bikerman (1988:123) for subdivision of the satrapy of Koile Syria into merides and these into toparchiae (nomoi); likewise Morkholm (1966:108-109), e.g. Samaria (with Judaea), Idumaia (with Jamnia).

16 Bagnall (1976:14,18-19): a hyparchy was the primary administrative unit in Ptolemaic Koile Syria, each with an oikonomos.

17 Also Corsaro (1985:93) for the coincidence of fiscal and military districts.
The first memorandum of Ptolemaios was sent by the king to two dioiketai, Kleon and Heliodoros, with orders that Ptolemaios' request be implemented (text B). The individuals concerned each received an identical letter suggesting that each was in charge of financial matters in a region/province within the satrapy in which some of Ptolemaios' villages happened to have been located, so probably in a meridarchy. They were to issue instructions to the relevant oikonomoi, while Ptolemaios would presumably inform his own subordinates, the 'epi ton topon proestekotes', i.e. the toparchs.

Clearly there was not just one topos involved but more, as Ptolemaios had villages in two administrative regions (meridarchies), since two dioiketai were called upon to intervene. So reference to the 'o tou topon proestekos' is probably to each relevant toparch. In the same context reference to the oikonomos may be to each oikonomos, suggesting that there was one in each administrative district within a region headed by a dioiketes. One notes that in Ptolemaic Palestine each hyparchy had its oikonomos (C.Ord.Ptol. 22.1.5).

The second part of the Skythopolis dossier deals with the problem of freedom from billeting for his villages requested by Ptolemaios and granted by the king, who so ordered four officials. There would be a 10-fold financial penalty for damages caused in Ptolemaios' villages if the king's orders were violated. Copies of each of the four letters went to four other officials, one of whom has the same name as Heliodoros, one of the two dioiketai mentioned previously.

There have been a number of suggestions as to the precise functions performed by these eight officials. My own view is that, since the problem concerned damages caused by troops who were not under Ptolemaios' control, else he could have taken action himself, the first four officials must have been military commanders of troops and garrisons in four regions (meridarchies) of the satrapy. The second four officials were the corresponding financial officers of these regions, the dioiketai. The first group bore primary responsibility to ensure that the king's orders were carried out by their men, the second would take care of any damages to Ptolemaios if it became necessary. The idea that the

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18 *contra* Gauthier(1989:44) for administrators of royal domains. Corsaro(1980:1195) suggests that the dioiketai here may have been from the central administration, but allows for the possibility of two in a satrapy or its subdivisions.


20 e.g. Corsaro(1980:1195): lower ranking officials; Sartre(1989:124): perhaps some were dioiketai.
second group consisted of oikonomoi is unlikely, as why would the king have communicated with them directly and not with their superiors, the dioiketai, as he had done earlier? The question may, of course, be asked, why were four dioiketai involved with Ptolemaios' problems when his villages were apparently located in the regions of only two? Presumably this is because troops moved around and there is no reason why those heading for one garrison commander might not pass through one of Ptolemaios' villages and cause trouble. The king was apparently taking no chances. It is relevant that one dioiketes of the judicial memoranda, Heliodoros, is common to the billeting memoranda, the other Kleon is not. This is not a problem as the dates are different and officials may change positions. Finally, Strabo(16.2.1) refers to the four ‘satrapies’ into which Koile Syria was divided. This may well be a reference to earlier meridarchies.

Here again there appears to be a dual organization, this time at the regional level, a military commander associated with a financial officer, the dioiketes. One would have expected a civil administrator to be paired with the dioiketes, but this was a newly conquered province and it is possible that a meridarch combined both civil and military functions and reported to the king. At the district level their respective subordinates would have been the toparch and the oikonomos.

What is interesting in the Skythopolis dossier is that the king communicated directly with the dioiketai of regions after he had been asked to do so by the governor of the satrapy. It leads to the conclusion that the satrap had no direct authority over the financial officials, dioiketai and oikonomoi, operating within his satrapy.

It may be argued, however, that this financial administrative organization was applicable only to this newly-conquered Ptolemaic territory and not general throughout the Seleukid empire. An examination of other sources will show if this was indeed the case.

The case of Eumenes (again)

The appointment by Eumenes of dioiketai in Kappadokia has already been discussed. It is possible that the use of the plural here by Plutarch is a mistake and that he is simply referring to the financial officials of the satrapy in general, irrespective of rank. However,

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21 Le Rider(1995:392) notes the division of Koile Syria into two satrapies after 162.
an archidioiketes is mentioned in Kappadokia of the 2nd or 1st century. This does not specifically apply to a province, but to the Kappadokian kingdom as a whole.\textsuperscript{22} So it is possible that there may have been regional dioiketai in Kappadokia.

The Boulagoras inscription (\textit{SEG} 1.366)

This text refers to the efforts of Boulagoras to secure from Antiochos II the return of confiscated lands on the mainland opposite Samos:

\begin{quote}
`.. καὶ περὶ τούτων ἐκώμησεν ἐπιστολὰς [π]αρὰ Ἀντίοχου πρὸς τὴν πόλιν ἡμῶν καὶ πρὸς τὸν ἐν Ἀναίαις ὑπ’ αὐτ[ό]ν τεταγμένον φρούραρχον καὶ πρὸς τὸν διοικητήν, δι’ ὁν οἱ τότε ἀφαὶρεῖς ἐγκρατεῖς ἐγένοντο τῶν ἰδίων ..’ (lines 15-18)
\end{quote}

`... and on these matters he carried letters from Antiochos to our city and also to the garrison commander reporting to him in Anaia and to the dioiketes, according to which those who had had their property confiscated came into possession of it ..’.

In command of the region of Anaia was the phrourarch, as military commander of a newly-reconquered territory and, apparently, the dioiketes, as financial administrator. The king had been followed by Boulagoras from Ephesos to Sardeis (lines 10-11). So when he wrote, the dioiketes was obviously not at the capital of the Lydian satrapy, but Boulagoras caught up with him in the region of Anaia, Ionia. Though not certain from the wording of the text, the dioiketes may have had regional jurisdiction only in Ionia, or else he just happened to be visiting the region.

The Laodike letter (Document 6)

Here is the relevant portion of the letter, sent by Laodike, the wife of Antiochos II, to the city of Iasos (lines 15-18):

\begin{quote}
`. . I have written to Strouthion the dioiketes to deliver to the representatives of the demos each year, for ten years, a thousand Attic medimnoi of wheat, carrying it along with him to the city ..’
\end{quote}

\textsuperscript{22} Robert(1963:474).
Strouthion was instructed to deliver the wheat physically to the city, presumably from nearby royal storehouses, suggesting that he was not likely to have been stationed very far away. The verb ταρακομίζω is translated in LSJ 'to carry along with one, escort, convoy'. Either a satrapal or a regional jurisdiction within a satrapy is possible. 23

The Apollonia-Salbake inscription (Document 7)

The hipparch in command of the soldiers based in the area of Apollonia proved to be of great help to the city when ambassadors were sent to Ktesikles the (function unknown) and Menandros the dioiketes on matters concerning the interests of the demos (.. πρεσβευτῶν ἰπὲ πεμφθέντων περὶ τῶν συμφερόντων τῶν δήμων πρὸς τὸν Κτησικλῆν τὸν [-- ca.14 --] καὶ Μένανδρον τὸν διοικητὴν .. ).

How one assesses the level of jurisdiction of Menandros the dioiketes is really determined by the missing function of Ktesikles, which is confusing. 24 That Ktesikles was a military/civil administrator then appearing alongside a financial administrator is likely and 'στρατηγῶν Καριάς' would fit the lacuna. Ktesikles also appears, however, in connection with the earlier grant of timber by Antiochos III to Sardeis already referred to (Document 9), concerning which the king wrote to his governor-general, Zeuxis, and to him. There Ktesikles' function is likely to have been financial, since royal property was involved and Zeuxis represented the civil/military authority. I suggest that both inscriptions hold to the norm of paired civil and financial authority and that Ktesikles simply changed jobs in the course of his career, from dioiketes of Lydia ca.213 to strategos of Karia later. However, what both inscriptions imply is the position of dioiketes at the satrapal level and not the regional one within a satrapy. The pattern of multiple dioiketai in the satrapy of Koile Syria cannot be seen to have held in Asia Minor, just as the regional meridarchy did not appear there either.

23 Corsaro (1980:1192) for a a possible dioiketes here for Ionia, a subdivision of a satrapy; Gauthier (1989:44): a dioiketes was not an official of the central administration.

24 Robert (1954:292) could not fix Ktesikles' position, but suggested an ἐν τῶν προσίδων, which would fit the lacuna. All he could say was that he resided in the same place as Menandros. Gauthier (1989:42ff) considered Ktesikles of high rank, but refused to speculate further, though noting Robert's solution as possible.
Other references to *dioiketai*

Direct communication of the king with a *dioiketes* can be seen also in Antiochos III’s letters to Nysa$^{25}$ and Herakleia-Latmos (Document 10), where the king was confirming financial assistance to the city promised by his governor-general, Zeuxis. But note that, though Zeuxis was so highly-placed, it was still the king who sent instructions to the *dioiketes* on these matters.

The pairing of financial and civil/military officials that has been observed in the inscriptions discussed above may also be found in the Amyzon decree honouring Menestratos, whose good deeds consisted of writing several times to Zeuxis, Antiochos III’s governor-general of western Asia Minor, and to Nikomedes and Chionis, the official in charge of Alinda (τὸν ἐπὶ Ἀλινδαν ΤΕΤΑΓΜΕΝΟΝ).$^{26}$

The inscription deals with the return of confiscated property and the synoikism of the Artemision, both matters necessarily involving both a civil and a financial administrator. Chionis may have been the epistates of the city; Nikomedes is likely to have been a *dioiketes* and was himself honoured later.$^{27}$

In their petition to Antiochos IV concerning their sufferings as a result of the Maccabean revolt, the Samaritans asked the king to issue instructions to two officials, Apollonios and Nikanor (Jos. Ant 12.261). The first was the meridarch of the region of Samaria, the second is associated with the financial calculation that captured Jews could bring in 2,000 talents required by the royal treasury (II Macc. 8.9) and may have been the *dioiketes* of the region.

The ‘*epi ton prosodon*’

It has been suggested that the official entitled ‘ἐπὶ τῶν προσόδων’ was the chief financial officer of the Seleukid empire.$^{28}$ The evidence usually called upon is Appian (Syr. 45)

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$^{25}$ Welles (1934: no.43); Ma (1997: no.43).
$^{27}$ Robert (1983: no.16); Ma (1997: no.11).
$^{28}$ Bikerman (1938: 128-129); Merkholm (1966: 103). Ma (1997: 109) for the post as a very high one, at the same level as the governor-general, Zeuxis. Corsaro (1980: 1196-1197) for this official as heading a separate branch of financial administration in a province, distinct from that of the *dioiketes*. 
referring to Antiochos IV (.. Σωφίας καὶ τῶν περὶ αὐτήν ἐβιβάσεις, σατράπην μὲν ἔχων ἐν Βαβυλῶνι Τίμαρχον, ἐπὶ δὲ ταῖς προσόδοις Ἡρακλείδῃν ..).

However, the ‘μὲν’ and ‘δὲ’ clearly relate the two officials in the text to a particular satrapy, Babylonia, where Timarchos was in charge of civil and Herakleides of financial administration, again a pairing of the two functions. But one would have expected Herakleides’ title to be that of dioiketes. True, but here it is a function that is being described, that of being responsible for revenues, which is not necessarily a title, just as ‘epi ton pragmaton’ indicates someone acting for the king, who may be a Zeuxis, governor-general of Asia Minor, or simply a Heliodoros on a mission to Jerusalem as the king’s representative to investigate alleged misuse of Temple funds (II Macc.3.7), or even a Nikanor as the king’s agent (Jos.Ant.12.261: τὰ βασιλικὰ πράττειν).

There is one other mention of an ‘epi ton prosodon’ that might settle the issue: in OGIS 238, Menandros was honoured by the phylakitai of the hyparchy of Eriza. But Menandros was the satrapal dioiketes in the Apollonia-Salbake inscription of the same period (above) and was in all probability the same person.29

There is a problem, however, in that an ‘epi ton prosodon’ at Antioch-Pyramos (Mopsuestia) suggests a low-level official30 and similarly one making a dedication at Susa to a strategos.31 An oikonomos is perhaps better indicated in these cases.

So ‘epi ton prosodon’ may not have been a title, but simply the description of the most important function of a financial administrator, that of the collection of revenue.

The oikonomos in the Laodike sale (Document 3)

This important inscription, involving an oikonomos, Nikomachos, in connection with a sale of royal land for which a survey was required, will be discussed in more detail later (13.9).

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29 For the ἐπὶ τῶν προσόδων, e.g. Kreissig(1978:60): responsible for taxes from cities; Rapin(1996:461): an official reporting to a dioiketes; Corsaro(1980:1191): the title oikonomoi took in the reign of Antiochos III.


31 Cumont(1931:288-289).
Sardeis land transfer (Document 11)

Something similar appears to have been going on at Sardeis, where the queen was giving instructions concerning some villages and fields(?) that some individual would receive in the ‘peri Sardeis oikonomia’. Note that the terminology here matches that of the ‘peri Erizan hyparchia’ in OGIS 238, i.e. the district round a city, but possibly outside the city chor(a) and so administered directly by royal officials. In my view it is probable that a hyparchy and an oikonomia describe one and the same district, depending upon the function of the official concerned, civil or financial. This would fit well with the pattern of dual responsibility at regional and district levels that has been observed several times already.\(^{32}\)

The stele of the Apollon Pleurenos temple.

This inscription\(^{33}\) probably dates to 188, immediately after the takeover of Seleukid cities in Asia Minor by the Attalids. It concerns a request by Kadoas, the priest of Apollo, to his superior, the high-priest Euthydemos. The request had been made previously to Nikanor, the Seleukid high-priest of all Asia Minor, but to no avail, presumably because of the change in the political situation. Kadoas had asked for something quite straightforward, that the high-priest, his superior, write to Asklepiades, the oikonomos, so that he might grant permission for a stele to be erected with the names of initiates. Euthydemos did so, but directed his letter, addressed to Asklepiades, to a certain Diotimos, who then passed it on to another official, Attinas, who was presumably Asklepiades’ superior. This would place the oikonomos, Asklepiades, on a rather low rung of the hierarchical ladder responsible for a relatively insignificant local matter.

Economic texts from 2\(^{nd}\) century Ai-Khanoum

Though from the Greco-Baktrian successor-state of the Seleukids, inscriptions found on jar fragments in the treasury of Ai-Khanoum may indicate procedures followed in the Seleukid empire as well.

\(^{32}\) Gauthier (1989:132-134): the district of the oikonomos was relatively restricted, probably the royal domains around Sardeis.
A typical text\textsuperscript{34} reads: ‘From Zenon. Were counted by Oxyboakes and Oxybazos 500 drachms. Oxyboakes sealed (this container).’ (παρὰ Ζήνωνος ἥρθησαν διὰ Ὀξυβάκου καὶ Ὀξυβαζοῦ δορὶ ἔσφραγισαν Ὀξυβαζόνης).

Similar texts mention other senders: Timodemos(4b), Philiskos(4c, 6), Straton(8d) and Nikeratos(12c). Oxyboakes appears again in his role. The interpretation given is that he and his colleagues carried taxes from the oikonomoi of districts to the central treasury at Ai-Khanoum. The use of jars was a normal way of transporting money in the ancient world.\textsuperscript{35}

For comparison, one may note the that ‘accountants’ of the Persepolis Fortification texts transported the commodity surpluses of storehouses and the animals and šaumaraš (silver?) collected from exchange to Persepolis (Chapter 9.1). A class of texts, the so-called ‘labels’, record the contents of containers, presumably being carried and stored. Many are found on tablets with a conical shape, which suggests that they may have served as ‘pot-stoppers’.

The Mnesimachos inscription (Document 5)

This important text, used several times already, gives us some idea of financial administration in the early Hellenistic period.

Mnesimachos listed his villages and kleroi and the tax chiliarchies in which they had been assessed (.. φόρος τῶν κωμῶν εἰς τὴν Πυθέου [.......χιλιαρχίαι, . . . εἰς τὴν [.......καρίου χιλιαρχίαι, . . . εἰς τὴν Σαγαρίου Κόρειδος χιλιαρχίαι ..]).

It is not surprising that the tax regions here are called chiliarchies if one recalls that the officials in charge of tax regions in the Persepolis Fortification texts were likely to have had the rank of chiliarch (see 13.1). Now the name of an official might change from Achaemenid to Hellenistic terminology, a satrap to a strategos, for example, but that of the geographical jurisdiction he exercised might not. The term ‘satrapeia’ was retained and perhaps now the ‘chiliarchia’ was too, at least in the very early period to which the

\textsuperscript{33} Malay/Nalbantoglou(1996).

\textsuperscript{34} Rapin(1983:326, no.4a).

Mnesimachos land-grant refers (end 4th century). The name of the official in charge may have been changed, perhaps by Alexander himself, so as to avoid confusion with the military ‘chiliarchos’ of the Macedonian army, since this was no longer a ‘military’ appointment, given the removal of financial administrative powers from the satraps.36

There are two possibilities. The first is that the Achaemenid chiliarch became a Greek dioiketes. This would fit well with the Fortification texts where the chiliarch was responsible for a region and had under him district officers (now oikonomoi), each responsible for a number of villages and storehouses. In favour of this is the fact that the Mnesimachos text locates a village first in a district and then in a chiliarchy. Against it is that this would result in several dioiketai within a satrapy, which one has tended to exclude, except in the special circumstances of Koile Syria.

The second possibility is that the Achaemenid chiliarch became a Greek oikonomos and that the chiliarchiae later became oikonomiae. This is more likely, as oikonomiae are attested and probably corresponded to hyparchies, the name of the administrative division simply depending upon one’s point of view, civil or financial (see above). However, one then lacks the Seleukid administrative organisation reporting to the oikonomos. If the Fortification texts are a guide, local officials may have supervised groups of villages. The next level up from the regional financial administrator was the satrapal one, Ziššawiš, the deputy of the ‘satrap’. I suggest that his was the post later given to a dioiketes when financial administration was placed directly under the king.

Conclusion

It is likely that Seleukid satrapies under strategoi were subdivided into administrative districts referred to as hyparchies in Asia Minor and pahatu in Babylonia (see 13.7), which were probably quite small and often centred on a city. A parallel financial organisation existed, answerable to the king and not the satrap. The epigraphic evidence called upon earlier suggests that this organization was in place at least from the time of Antiochos II, if not earlier.37 The dioiketes was the financial counterpart of the strategos

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36 contra Corsaro(1980:1204) for chiliarchies from the military organisation of Alexander.

37 Those who recognize the existence of a separate financial branch tend to place the change in the reign of Antiochos III, e.g. Bengtson(1944:127-128), Bagnall(1976:248). But Corsaro(1980:1190): with the first Seleukids. An interesting possibility is raised by the tri-lingual inscription from Xanthos of the very
in each satrapy and the oikonomoi of the hyparchs. The terms ἰπαρχία and οἰκονομία refer to the same geographical district, but from different points of view.

The responsibilities of the dioiketes seem to have included matters of land and labour, the royal storehouses, revenue and expense and it is possible that he may also have had jurisdiction over any royal mints in his area. Certain decisions apparently had to be taken jointly with the satrap. The term ‘epi ton prosodon’ was sometimes used for the dioiketes, perhaps because revenue collection was his main responsibility.

The oikonomos reported to a dioiketes and worked hand-in-hand with the hyparch, with whom he sometimes took decisions jointly. He also collaborated with the religious authorities in his district. His main function seems to have been to manage royal land, look after local taxation receipts and settle small-scale expenses of the administration. In one satrapy only is there likely to have been a slightly different organisation, Koile Syria, where an intermediate subdivision of a satrapy had been introduced for whose financial matters dioiketai became responsible. There was thus no dioiketes at the satrapal level. This did not, however, change the authority of the dioiketai in any way or their direct control by the king.

13.6 The eklogistes and the logeutes

The Achaios decree (Document 8)

This text, found in western Asia Minor and dating to 267, refers to honours granted by the villagers of Neoteichos and Kiddioukome to two functionaries of the elder Achaios to

end of the Persian period. The dating formula in the inscription refers to Pixodaros as the satrap and to two archontes of Lykia plus an epimeletes of Xanthos (Metzger 1979:32). The possibility that one archon was a civil/military hyparch and the other a financial administrator should not be excluded.

38 Also Ma(1997:110) and Musti(1984:186), who also suggested a central dioiketes, as did Bengtson(1944:113). Grainger(1990b:134-138) considers that Seleukos I eliminated satrapies in some areas and made hyparchies the top administrative units, e.g. in Syria and Mesopotamia.

39 There are widely diverging views on the role of the oikonomos. Rapin(1996:461): an oikonomos sometimes corresponded to an ‘epi ton prosodon’ and sometimes to a gazophylax, who managed a royal treasury. Musti(1984:186): the ‘epi ton prosodon’ replaced the oikonomos in later Seleukid history. Bagnall(1976:247): oikonomoi were managers of royal estates, not part of the administration. Rostovtzeff(1941:465): the royal land and laoi were entrusted to the financial officials; Ma(1997:110): specifically to the oikonomoi. Corsaro(1980:1191) for the oikonomos as the financial director of a satrapy, except in Koile Syria, where a low rank. He was placed directly under the satrap/strategos, with special responsibility for royal land, in the initial Seleukid period. Haussoullier(1901:29): the oikonomos saw to rents and taxes from the satrapy, with the ‘epi ton prosodon’ as his superior.
whom these villages apparently belonged. These functionaries were Banabelos, ‘ho ta tou Achaiou oikonomon’, and Lachares, ‘ho eklogistes ton Achaiou’). Both received exactly the same yearly sacrifice of one ram each, as compared to a bull for Achaios. The officials are twice mentioned, the second time with the order reversed. This suggests that they must have been of equal rank, i.e. independent of one another hierarchically.

We may take ‘ho oikonomon ta tou’ to be the same as an oikonomos, but for an individual and not the king. Thus Banabelos would essentially have been managing the property of Achaios. There is a parallel in the Laodike land sale (Document 3), where the land being sold to the ex-queen was transferred on her behalf to Arrhidaios, ‘ho oikonomon ta tes Laodikes’.

In LSJ ‘eklogistes’ is rendered as ‘accountant’, ‘reckoner’. That Lachares was a financial official seems clear from this, but how did his function differ from that of Banabelos? The term suggests that calculation was involved and an assessor of taxes/rents for the villagers of Achaios would not be an unreasonable supposition. Since Achaios was a member of the royal family, one may suppose that his estate was rather large, a royal land grant whose management was modeled closely on that of a financial district. The Fortification texts provide us with a clue from the Achaemenid period. The accounts of every storehouse were ‘signed’ by the district commander (or storekeeper) and the tax-inspector (ullira), who was apparently responsible not only for assessment of commodity tax but also its collection. The eklogistes of Achaios may have fulfilled this role.

The Apollonia-Salbake decree (Document 7)

This text, used earlier, makes mention of an eklogistes in the royal administration, a certain Demetrios, who had intercepted the Apollonian ambassadors on their visit to Ktesikles and Menandros the dioiketes and brought up the business of two sacred villages, after a complaint had been lodged by Demetrios, the official in charge of sanctuaries.

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40 Also Ma(1997:122).

One does not know what the problem was, but can speculate that it was a question of whether the sacred villages belonged to Apollonia, and so paid taxes to the city, or whether the royal administration was entitled to tax them itself. So the function of Demetrios the eklogistes may well have been that of a tax assessor/inspector, matching that of Lachares in the Achaios decree. Since Demetrios was not approached in the first place by the Apollonian embassy, he is unlikely to have been at the level of Ktesikles, the satrap(?) or Menandros, the dioiketes, whom the embassy came to see. So Demetrios may have been a subordinate of the dioiketes, at the same hierarchical level as an oikonomos, which matches what I have deduced from the Achaios decree.

The conclusion then is that there were at least two branches of the financial administration under a satrapal dioiketes, the first comprising the oikonomoi of districts, responsible for the land and the handling of revenue and expenses, the second including one or more eklogistai, responsible for tax assessment and probably collection.42

The Baktrian parchment

This interesting text43 refers to one of the small Greco-Bactrian kingdoms, probably in western Baktria, and is dated to ca.170. A city, Asangorna, is noted. The part that interests us reads:

Though this is not strictly speaking a Seleukid document, it is likely that the Greco-Baktrian kingdom continued administrative practices with which it had been familiar as a Seleukid satrapy until 246 at the latest.

42 Robert(1954:292-293); also Corsaro(1980:1193-1194) for eklogistai as assistants of the dioiketes responsible for calculation, sharing out and control of taxes. Ma(1997:109): as tax-collector or financial controller

43 The version of Rapin(1996) has been used; cf. Rea/Senior/Hollis(1994), Bernard/Rapin(1994).
Menodotos the *logeutes* may have been a tax collector - one of many, since he is not referred to with 'the' - receiving some payment from a tax payer, S----os, son of Dataes (*ἐχει...ἀπὸ*) in the presence of two other officials. The first of these, , -eos, was the representative of a department of the administration headed by Demonax, to which Menodotos apparently also belonged because they had been sent together (*συναποσταλμένου*). This could logically have been the tax assessment/collection department and one might just read *ἐκλογέως* (from *ἐκλογέων*) as an alternative to *ἐκλογιστοῦ* from (*ἐκλογίζειν*) for the position of Demonax. The second official, Simos, was employed by the collector of revenues Diodoros, either a *dioiketes*, or, more probably, the *oikonomos* of the district centred on Asangorna (an *oikonomia*?).

The picture of two departments involved in the collection of tax seems to resemble that of the Achaemenid storehouses and also that observed at Apollonia-Salbake (see 13.5).44

One question that arises is whether revenue was collected by officials of the Seleukid administration or tax-collectors. The *logeutes* in the Baktrian parchment may have been a tax-man on his rounds, as in Achaemenid Persis earlier (13.1). There is no mention in the sources for the use of Seleukid tax-contractors, other than the High-Priests of Judaea, but one cannot discount the possibility, certainly for the revenue of cities.

13.7 Other financial officials

Mint officials

On Seleukid coinage a symbol is frequently used to identify a mint, but control marks are usually present also to identify mint officials. Sometimes a primary control is quite long-lasting and associated with a range of secondary controls, each used for a number of issues. The control marks can usually be identified as consisting of letters from the names of mint officials, but no study has as yet been undertaken of these.45

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44 Bernard/Rapin (1994:269-271) agree to Menodotos as tax-collector, but suggest that those present were witnesses to a sale of sacrificial victims on behalf of the state treasury. The *'ἐπὶ τὸν προσωδόν'* is taken as an official reporting to a *dioiketes*, sometimes an *oikonomos* and sometimes a *gazophylax*, who managed a royal treasury.

45 The Houghton/Lorber catalogue (forthcoming) provides details of all control-marks used at Seleukid mints and will facilitate such an analysis.
The epistates

The epistates, mentioned in the sources as the Seleukid representative for subject cities\textsuperscript{46} or temples, may have played a financial role as well, e.g. in supervising the collection of tax or the erection of stelae.\textsuperscript{47} Amyzon honoured Menestratos, the epistates of the Artemision, for helping with the return of confiscated goods and the synoikismos of the Artemision, both good deeds certainly involving a financial element.\textsuperscript{48} Furthermore, the epistates corresponded directly on these matters with Nikomedes, who was considered to be a dioiketes, and Chionis ‘ton ep’ Alindon tetagmenon’, who may have been his counterpart at Alinda. An oikonomos might have been expected to handle such matters, who does not appear in the inscription, and so perhaps the epistates fulfilled his role as far as a city was concerned.

The gazophylax

This is clearly the title of the commander of a treasury, but the guarding of precious metal and commodity stocks was not necessarily a function of a financial official. Sometimes it seems to have been that of a garrison commander. Since both these and financial officers reported to the king and not the satrap, royal control could be exercised effectively. It is possible that the the eklogistes and the oikonomos saw to the collection and disbursal of funds and the gazophylakes were only responsible for their safekeeping.\textsuperscript{49}

The agoranomos

The market supervisor, or agoranomos, is a classic feature of any Greek city. But could he also have been the king’s representative for the collection of taxes in the marketplace? Simon, ‘the protector of the sanctuary’ in Jerusalem had wished to exercise the agoranomos function in place of Onias, the High-Priest, probably as a tax-contractor for market dues (II Macc.3.4).


\textsuperscript{47} Apollodoros at Laodikeia-Nehavend (Robert 1949:7,22).

\textsuperscript{48} Robert(1983:no.15); Ma(1997, no.10).

\textsuperscript{49} Rapin(1996:461): the oikonomoi sometimes corresponded to gazophylakes.
If this is accepted, a different reading of Antigonos’ letter to Teos (Document 1) becomes possible. In §11 Antigonos gave instructions, couched as suggestions, that all movements of grain in and out of the city be declared in the *agora*. Also those living outside the city should register the quantities of crops they wished to move out of their farms so that they might pay the appropriate dues to the *agoranomos*. This official is not really seen supervising the workings of the market here but actually collecting tolls and sales taxes. Since these were important sources of taxation for Seleukid kings from many cities, one wonders whether the *agoranomos* also functioned here as a royal tax-collector.

An inscription from Tyriaion of Phrygia Paroreios of the time of Eumenes II does show the king donating to the city the revenue accruing from the office of the *agoranomos* so that oil might be purchased for the gymnasium (.. καὶ δίδομεν ὑμῖν εἰς τὸ ἄλειμμα κατὰ τὸ παρὸν τὴν ἀπὸ τῆς ἀγορανομ[ῆς] πρόσοδον ..). This city had probably become subject to the Attalids after Magnesia.

In one of his reputed antics, Antiochos IV stood for election as *agoranomos* in the city of Antioch (Pol.26.1.5). The citizens were not amused. Taking on the role of tax-collector, if such it was, may not have been considered in the best of taste.

**The bibliophylax**

The *bibliophylax* is referred to in the Laodike dossier (Document 3), where this official, Timoxenos, was mentioned as having been sent instructions to record the sale to Laodike, along with the land survey, in the royal registry (*βασιλικαὶ γραφαὶ*) at Sardeis. It will be suggested later that this official was the subordinate of a satrapal dioiketes.

One clay medallion from Uruk is stamped with a *bibliophylakikos* seal, perhaps signifying some sort of purchase or grant of royal land. A royal registry at Uruk is a possibility but it is more likely that this office was located at a major capital, Seleukeia-Tigris, just as a transaction in Hellespontine Phrygia (above) had to be recorded at Sardeis.

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51 Rostovtzeff(1932:71).
Local land registries may also have existed, with their appropriate officials.\(^{52}\)

**The chreophylax**

In Chapters 8.2 and 8.3 the *chreophylax* appeared with his seal on some *bullae* of Uruk, (χρεοφυλακικός "Ορχης or χρεοφυλακικός ἐν "Ορχης) and Seleukeia-Tigris (χρεοφυλάκων). The χρεοφυλάκων, or registry office, of the Greek world was used to register and store both public and private documents.\(^{53}\) It is possible that at Uruk or Seleukeia certain transactions had to be registered at the *chreophylakion* so that tax could be collected, but it is difficult to prove any link. Indeed the evidence would suggest that the *chreophylax* was not linked to the tax operation. No *bulla* from Uruk, with a stamp for the salt tax (*alikes*) or port dues (*limenos*), also has a *chreophylakikos* and only some with an *eponiou* or *andrapodikou* stamp and not others. The *chreophylakon* at Seleukeia is not associated with any tax stamp other than the *katagrafes*, which may have been not a tax, but simply an official registration, possibly of slaves.

Rather than viewing the *chreophylax* as an official of the administration, one may probably consider him a municipal officer, whose primary role was the safe-keeping of documents, both of an official and a private nature. In a smaller centre, such as Uruk, it is possible that he performed a dual function and cooperated in some way with the fiscal authorities.\(^{54}\)

**Local officials**

The titles and exact functions of Seleukid administrative officials in Babylonia are somewhat confusing. The *paqdu* may have been the king’s representative in the temples of Babylon and Uruk, but the king also communicated directly with the chief administrators of the temples, the *šatummu* at Babylon or the *rab-ša-reš-ali* at Uruk. The *pahat* of Babylon and the *šaknu* of Uruk were likely to have been royal appointees and

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\(^{52}\) Westermann(1921:16).

\(^{53}\) McDowell(1935:131-137); Rostovtzeff(1932:57ff).

\(^{54}\) Also McDowell(1935:136); *contra* Rostovtzeff(1932:63) for an official of the administration.
may have corresponded to *epistates* for these cities or hyparchs for their respective districts (*pahatu*).55

A *dioiketes* possibly appears in a cuneiform inscription from Uruk relating to the sale of ration rights with the note that ‘.. afterwards these rations were fully entered in the communication of the *dioiketes* (di-iqe-te-e-su) of the house of the king ..’.56 The suggestion of taxation is quite strong and this is possible evidence for the position of *dioiketes* in Babylonia.

‘Royal assessors’ (*emidu ša šarrī*) are also noted57, who may have corresponded to *eklogistai*.

Simon, ‘the protector of the sanctuary’ (*prostates tou ierou*), was the king’s representative for the Temple of Jerusalem, probably responsible for tax-collection.58 His informing the king of the alleged mismanagement of temple funds led to the ‘raid’ of Heliodoros (II Macc.3.4). ‘Prostates’ here may actually be a synonym for ‘*epistates*’.59

**Financial administration of temples**

Standing somewhat apart from royal land and city land, that provided most of the tribute and taxation and were possibly administered in the manner described above, the temples were also sources of revenue and areas of expenditure for the kings.

Under Antiochos III, Nikanor was appointed high-priest for Asia Minor, responsible for all the sanctuaries and their revenue (. . *ωἰόμεθα δεῦν εἶναι αὐτῶν καὶ ἐπὶ τῶν ιερῶν καὶ τὰς προσόδους τούτων ..*).60 However, the high-priest may actually have had limited authority. Euthydemos, who must have succeeded Nikanor under the Attalids, was obliged to write to the *oikonomos* Asklepiades via the latter’s superiors so that the priest of the temple of

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59 cf. the reference to a prostates at Amyzon in the period of the Successors (Robert 1983:97).

60 Ma (1997:no.4); cf. Malay (1987); *SEG* 37.1010; Gauthier (*BE* 89,276).
Apollon Pleurenos could obtain permission for a quite simple matter, the setting up of a stele with the names of initiates.\textsuperscript{61}

At Apollonia-Salbake in the reign of Antiochos III (Document 7) Demetrios the official in charge of the sanctuaries (ὁ πεταγμένος ἐπὶ τῶν ἱερῶν) had complained to the eklogistes Demetrios about some matter in connection with sacred villages, very possibly whether they were to pay tax to the city or to the royal treasury.\textsuperscript{62} Located probably at Sardeis alongside the other officials visited by the Apollonians, Demetrios may have had a satrapy-wide jurisdiction over revenue from sanctuaries and was interested in adding the sacred villages to his list.

Demetrios was not given the title of high-priest (ἀρχιερεύς) of Asia Minor and it is possible that this position was created later in the reign of Antiochos III.\textsuperscript{63} The dossier of inscriptions regulating Nikanor's appointment to the post (see above) gives no indication that Nikanor was to replace someone else. The king went to a lot of trouble to spell out to Zeuxis what was involved as when the post had been held by a certain Dion at the time of his grandfather, Antiochos II. So the high-priesthood of Asia Minor had probably fallen into abeyance when the Seleukids had lost much of the region in the intervening period.

At the same time chief-priesthoods were apparently created in Koile Syria, where Ptolemaios, the strategos of the satrapy, is noted as the archiereus (Document 4), and also at Daphne, the suburb of Antioch.\textsuperscript{64}

Financial administration of the armed forces.

A separate financial administration for the armed forces is also likely. A military accounts office is noted at Apameia (Strabo 16.2.10: τὸ λογιστήριον τὸ στρατιωτικόν). Clearly pay and supplies for the standing army and navy would have been the responsibility of some

\textsuperscript{61} Malay/Nalbantoglou(1996).
\textsuperscript{62} Also Ma(1997:110).
\textsuperscript{63} Debord(1982:270) for a global policy for sanctuaries by Antiochos III, with possibly a fiscal organisation.
\textsuperscript{64} Welles(1934:no.44); Austin(1981:no.175).
department of the administration, probably reporting directly to the king in view of the importance of military expenditure (Chapter 10), but more than this one cannot say.

A chief secretary of the army (ἀρχηγομαματεύς τῶν δυνάμεων) appears in a late 2nd century inscription from Palestine\textsuperscript{65} and also in Polybios (5.54.12), concerning the appointment by Antiochos III of such an official, Tychon, as strategos of the satrapy of the Erythraian Sea. It is possible that this position entailed financial responsibilities.

13.8 Comparison with Achaemenid practice

The structures of the Achaemenid and Seleukid systems of financial administration were derived from separate bodies of evidence, the former from the Persepolis Fortification Tablets, the latter from Greek texts. They show considerable similarity if one ignores the accounting function, for which one has no Seleukid information, and the Achaemenid apportioner function, for which there was no Seleukid counterpart, as is to be expected, since a mainly monetary economy was now in place. Financial administration was exercised in both empires at regional level (regional officer v. dioiketes), with district subdivisions where two functions were distinguished: revenue generation by tax inspector and tax collectors ('delivery man'/deliverers' v. eklogistes/logeutai) and revenue safekeeping and expenditure (district officer v. oikonomos).\textsuperscript{66} In the Achaemenid system the administrative area of Persis, at least, was subdivided into regions (13.1), which was also the case in Seleukid Koile Syria. Elsewhere, each Seleukid satrapy may have constituted one financial region. What the Achaemenid situation was, one does not know.

On one point only was there a significant difference. The Achaemenid satrap was probably responsible for financial administration in his satrapy, whereas the Seleukid king had taken away this function from his own satraps.

\textsuperscript{65} Landau (1961).

\textsuperscript{66} A village was defined by district and region, e.g. in northern Syria the Baitokaike inscription (Welles 1934:no.70): κόμης τήν Βαιτοκαϊκην ... ἐν Τουργόνα τῆς περὶ Ἀπάμων σατραπίας; in Parthian Kurdistan (Minns 1915:28-29): ἐν ὑπαρχείς Βασιλείου πρὸς σταδίῳ Βαιναβαστος ἐν κόμη Καπανε; in the Mnesimachos inscription (Document 5): κόμη Περασασωστρα ἐν Μόρου Ῥηθατ ... εἰς τῆς [-----]αρίου χαλιαρχίαν.
13.9 A need to reinterpret some texts

It has been argued that the financial administration in satrapies was conducted by the *dioiketai* and their subordinates, *oikonomoi* and *eklogistai*, who received their orders directly from the king. In some matters, joint decisions had to be reached with the civil and military authorities, satraps and hyparchs or phrourarchs.

In this light, some well-known inscriptions may have to be rethought in terms of the roles of the officials appearing in them.

The Laodike land sale (Document 3)

Metrophanes was informed by the king of the conditions of the sale and instructed to a) transfer the land to Laodike’s bailiff, b) see to the recording in the registry office at Sardeis and c) prepare five stelae publishing the act (no.18). Instructions from an unnamed official to a subordinate were to prepare two stelae and pay the necessary expense (no.19). The hyparch of the district where the land was located received orders from the *oikonomos*, Nikomachos, to conduct a survey (no.20).

Metrophanes is usually considered as the satrap of Hellespontine Phrygia and the unnamed official of RC19, issuing orders to Nikomachos.67 Thus a chain of command is established: satrap to *oikonomos* to hyparch.

However, there are arguments against this.68

1) In the second letter (RC 19) the orders issued by its author to the recipient were that two stelae be erected at Ephesos and Didyma detailing the sale and the survey, while the information was provided that the *bibliophylax* at Sardeis had also been instructed to register the sale and the survey. Any actions by the recipient were restricted to Ionia, while the author seems to have had jurisdiction over all Lydia, but the actual land was situated in Hellespontine Phrygia.

67 e.g. Ma(1997:113), Musti(1965:156-157). Haussouillier(1901:22) was categorical that the king only communicated with the highest functionary in the satrapy, the strategos.

68 Lockhart(1961:188-192) accepts the chain of command, but considers that the second letter (no.19) was addressed to an official in another city for the erection of the two *stelae* there. Also Musti(1957:267-277).
2) Only two stelai are noted in these orders, those of Ionia. There was to be one more erected in the satrapy of Lydia, that at Sardeis, one at Ilion and one abroad in Samothrace.

3) The hyparch, who is normally considered a civil/military administrator, a subordinate of the satrap, is here seen taking orders from a financial official and not receiving them directly from his superior.

An interpretation of the texts that would fit all the details they contain is as follows:

1) Metrophanes was the dioiketes for Hellespontine Phrygia and the king communicated with him directly about a financial matter, this time concerning royal land, as he habitually did with his dioiketai.

2) Metrophanes instructed his oikonomos of the district, Nikomachos, for a survey to be carried out (not extant).

3) Nikomachos requested a survey from his colleague, the civil administrator of the district, the hyparch -krates (hyparchy = oikonomia), who had the specialised personnel for the task. The hyparch obliged with his report (no.19) which was forwarded by Nikomachos to Metrophanes.

4) Metrophanes next saw to the recording of the sale and survey. He forwarded the king’s instructions and the hyparch’s survey to his colleague, the dioiketes of Lydia (not extant).

5) He, in turn, instructed his oikonomos in Ionia to erect two stelae, informing him at the same time that he had ordered the bibliophylax at Sardeis, who may have been under his orders, to register the transaction in the royal registry (no.19).

6) The bibliophylax received his orders and recorded the sale (not extant).

7) At the same time the dioiketes of Lydia issued orders to the oikonomos responsible for Sardeis (see above for its oikonomia) to erect a stele there too.

8) Meanwhile, Metrophanes had already issued orders to his oikonomos responsible for the Troad to erect a stele at Ilion (not extant).

9) One final act of Metrophanes would have been to communicate with the king’s representative in Samothrace to see to the erection of the fifth stele or, perhaps, one
of his *oikonomoi* may have been required to manufacture and ship it there (not extant).

What has finally survived is only what affected the Didymeion sanctuary where the inscription was found, the king’s instructions, the survey and the communication of the financial officials responsible for that particular area.

**Other inscriptions**

In the Aristodikides land-grant (Document 2) the king wrote to Meleagros, who is normally considered to have been the *strategos* (satrap) of Hellespontine Phrygia. His task was to arrange for transfers of royal land to Aristodikides.

Three inscriptions record instructions sent out by Antiochos III regarding the appointment of a high-priestess in each satrapy for the cult of his wife, Laodike. In all cases the king wrote the same letter to a senior official with instructions that his decision be recorded on stelae to be set up in the most visible locations (καὶ τὰ ἀντίγραφα τῶν ἐπιστολῶν ἀναγραφέντα εἰς στήλαις ἀνατεθῆτω ἐν τοῖς ἐπιφανεστάτοις τόποις). The primary recipients sent a copy of the king’s letter to subordinates with orders to do just that, Anaximbrotos to Dionytas for his district in Karia or Phrygia, Menedemos to Apollodoros and the city of Laodikeia-Nehavend, and again to Thoas for his district somewhere in Media. Presumably other subordinates received the same orders. The primary recipients have been considered satraps, their subordinates hyparchs or, in the case of Apollodoros, the royal epistates of the city.⁶⁹

A similar procedure was used in the instructions sent by the king via Zeuxis, his governor-general in the West, to Philotas and then on to Bithys regarding the appointment of Nikanor as high-priest in Asia Minor and its announcement on a stele.⁷⁰ Again, other subordinates of Philotas probably received the same orders. Philotas has been considered a satrap, Bithys a hyparch.

In the Failaka inscription Ikadion wrote to his subordinate, Anaxarchos, about matters which the king wished dealt with concerning sanctuaries on the island of Ikaros, land

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grants, tax exemptions etc, and also with instructions that the king’s orders be displayed on a stele. Anaxarchos passed on Ikadion’s letter to the inhabitants of Ikaros and his own order that it be displayed on a stele as soon as possible.71

I suggest that in all the cases listed above, the primary recipient may have been the dioiketes of the relevant satrapy and not the strategos, who then passed on the king’s orders to an oikonomos in each district or an epistates in the case of a city. The matters were clearly of a financial nature - transfer of royal land, erection of stelae - which fell within the jurisdiction of financial officials. Furthermore the king communicated directly with his dioiketai on these matters. The apparent anomaly in the Laodike land sale, where the hyparch received orders from the oikonomos can be explained by the fact that both together were responsible for the district (hyparchy = oikonomia). The oikonomos transmitted the king’s instructions to his colleague only because he had the personnel capable of carrying out the survey. Whether satrap or dioiketes, the above inscriptions need rethinking.

13.10 Antiochos I as financial administrator

Though much in Seleukid financial administration was a continuation of Achaemenid practice, several changes were initiated by Seleukos I in pursuance of his goal of transforming the economy into a money-based one. Had it not been, however, for his son and successor, Antiochos (I), the empire might have foundered early on. Antiochos should be given equal credit for placing it on a sound footing.72

Some of his measures one has already caught glimpses of. The establishment of the first new cities was his father’s work, but Antiochos continued it with intensity in the East from the time he became viceroy there ca.291/0 (Chapter 6.1). In this connection, the policy of granting land with the right of attachment to a city may also have been his idea, and for the reasons outlined in Chapter 6.1. The earliest inscription that mentions this is the Aristodikides land-grant from his reign (Document 2).


72 Oelsner(1977:79) for Antiochos as the real organiser.
The creation of mints in the Upper Satrapies, apart from Ekbatana, is Antiochos’ work (Chapter 11.1) and probably linked to his efforts to urbanise. The change from small silver to a fiduciary bronze coinage can also be attributed to him and its introduction at Babylon can be dated to the time of the Astronomical Diary of 274 (Chapter 11.3).

Changes in the form and contents of administrative and legal cuneiform texts are noted at about this time in Babylonia, which have been attributed to fiscal and administrative measures by Antiochos I. New formulary seems to be used in contracts for urban land after 279. Slave sale contracts appear only to 274 and those for arable land to 273. This is not to say that there were no such sales, but simply that Aramaic or Greek on parchment or papyrus may have been used in preference to Akkadian and cuneiform tablets. The suggestion, however, that registration and taxation of slaves were introduced at this time by Antiochos will not hold, as this was certainly an Achaemenid practice also.

The proliferation of taxes in the Seleukid empire (Chapter 8) is not to be found in any document dating to the reign of Seleukos I. This does not prove that Antiochos was the initiator of a more complex and comprehensive tax system than his father’s, but, added to the other evidence, might suggest it. Certainly the *galatikon* tax imposed on Greek cities, ostensibly to pursue the war against the Galatians, was Antiochos’ invention. Also, the earliest *bullae* from Seleukeia-Tigris with a salt-tax stamp dates to 287/6 (Chapter 8.2), when Antiochos was co-ruler, responsible for the East.

Finally, the direct involvement of the king with financial administration in the provinces, his link to *dioiketai*, is certainly attested in the reign of Antiochos II (13.5 - the Boulagoras inscription) and, in my view, in the reign of Antiochos I with the interpretation that may be given to the Aristodikides inscription (see 13.9).

It was argued in Chapter 7 that, mainly because of the reference to stratagems of men ‘long since dead’ and the appearance once more of a ‘whole’ empire with Seleukos’ conquest of Asia Minor, the *Oikonomika* describes the situation there after 280, which administrators-to-be would be interested in learning about. Linking this to what has been

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74 Stolper(1989).
discussed above, it is difficult not to see a re-organisation of finances and financial administration of the empire by Antiochos I ca.275.

13.11 Conclusions on financial administration

Evidence from different regions and periods suggests that the Seleukid system of financial administration must have been quite uniform, particularly after changes possibly introduced by Antiochos I ca. 275.\(^\text{75}\)

A parallel organisation to the satrapal, independent of the satrap and local military commanders, dealt directly with the king. The *dioiketai* were the financial representatives in the satrapies, and in subdivisions of at least Koile Syria, and were responsible for revenue and expenditure in their respective areas of jurisdiction. They may also have supervised royal mints and registry offices (*bibliophylakia*). In matters of joint jurisdiction they cooperated with satraps and garrison commanders.

Under the *dioiketai*, the *eklogistai* were mainly responsible for setting the level of taxation and perhaps seeing to its collection by *logeutai*. The *oikonomoi* managed the royal land and revenue, once it had been received, and controlled expenditure in their financial districts, cooperating with hyparchs, whose districts probably coincided with their own. A separate group of officials (*epi ton ieron prosodon*) supervised temples and their revenue and there may have been a department of the administration dedicated to military expenses of the regular army.

In certain areas, the Seleukid supervisor (*epistates/paqdu* etc.) of a city or temple possibly filled the role of both hyparch and *oikonomos* for the city, cooperating with the *dioiketes* of the satrapy on financial matters. In military districts (*phylakai*), or those with fortified treasuries, garrison commanders might sometimes take on the task of collecting tribute and taxation and guarding it (*gazophylakes*).

\(^\text{75}\) Rostovtzeff(1941:517) for a uniformity of administration and taxation generally. *contra* Avi-Yonah(1978:219) that it was objectively impossible to set up a control apparatus over such a wide area as the Seleukid empire.
GENERAL CONCLUSIONS

In previous Chapters conclusions have been presented on the policies of the Seleukid kings, and their results, with regard to land, revenue, the handling of surpluses, expenditure and coinage and on their system of financial administration. None of this will be repeated here.

What will be considered instead is whether the problem posed in Chapter 3 was indeed solved. Seleukos I had need of silver, with which to face the predominantly monetary expenses of a Hellenistic king. His task was to transform an essentially commodity-based economy of his empire into a monetary one, from which to extract as much revenue as he could. Did he and his successors succeed?

The answer, in my view, is an unqualified ‘yes’.

City-building on an unprecedented scale and the strengthening of existing urban centres created the markets where rural communities could sell their produce for silver and so pay their taxes in coin, which they were increasingly required to do. The administration then had the means to settle its expenses in silver rather than commodities, which had been the norm under the Achaemenids.

An adequate supply of coinage was created by locating mints in most regions to serve local needs, but Seleukid issues were only intended to maintain the supply at the appropriate level required by the administrative payments - tax collection cycle. Foreign issues were allowed to circulate freely, and indeed constituted the majority of all coins in circulation for most of the time, as long as they helped promote local economic activity and so benefit the royal treasury.

Revenue was systematically maximised, to the limit that could be afforded by subject communities and in a variety of ways, using whichever suited a particular situation best. When a lessening of the burden was granted, there was normally a short-term political gain envisaged by the kings or a long-term economic benefit.

The personal interest of the kings in the financial matters of their realm is reflected in the close control they kept of their provincial financial administrators, who were independent of the satrapal governors.
The success of these measures is evident in the results. This was a 'strong' state, that endured for nearly two centuries as an empire (to 129), suffering territorial losses in this time, but able to recover from them. When it eventually succumbed, this was not so much due to internal problems, but because it was unfortunate enough to encounter at the same time two rising powers, Rome and Parthia, which, in the end, proved too strong for it.
SUPPORTING DATA

COIN HOARDS LISTS
1. Hoards containing large silver coins and percentage distributions
2. Hoards containing small silver coins and percentage distributions
3. Hoards containing gold coins and percentage distributions

DOCUMENTS AND TRANSLATIONS
1. Antigonos’ letter to Teos regarding the synoikism with Lebedos
2. The Aristodikides dossier
3. The Laodike dossier
4. The Ptolemaios dossier
5. The Mnesimachos inscription
6. The Laodike letter to Iasos
7. The Apollonia-Salbake decree
8. The Achaios decree
9. The letter from Antiochos III to the Sardians
10. The letters of Antiochos and Zeuxis to Herakleia-Latmos
11. A land conveyance in the oikonomia of Sardeis
12. Antiochos III’s letter concerning Jerusalem
13. Demetrios I’s letter to Jonathan
14. Demetrios II’s letter to Jonathan
15. The Baitokaike grant

The version of each text used is that of the first reference given in each case, unless otherwise stated. Only relevant parts of the texts have been provided, with my own translation.
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Document 1. Antigonos’ letter to Teos regarding the synoikism with Lebedos

Welles (1934: no. 3)

Summary §1-9. Antigonos Monophthalmos settled the details of the synoikism between Teos and Lebedos.

Summary §10. Lines 72-80. The Lebedians wished to be allowed to set up a fund to import grain in order to create a reserve, which the Teians seconded and even asked for more money. Antigonos was not pleased at the idea...

‘.. In the past we did not desire to give any city the right of importing grain or of creating a reserve store of grain, because we did not wish the cities to spend money on these things which were often not necessary. And neither did we desire to do this now, as the taxed land is close by, so that, if there were need for grain, we believe that as much as necessary could be easily obtained from it.’

Summary §10. Lines 85-94. The king explained that he did not normally allow cities to import grain because he did not wish them to fall into debt, but in this case he would make an exception. He then introduced a new subject..

§11. tōn de ótton

(95) kai ēsagwghn kai ἐξαγωγὴν πάντων ἀποδεικθήναι[εν τῇ στοίχῃ τῆς ἀγο-] rάς, ὥσπερ ἐάν τι καὶ μὴ λυστελή κατάγοντι εἰς τῆς ἀγορᾶς ἀπὸ τοῦτο νοίμων[τοις] σοι[ς·] τῇ τῶν ἐξαγωγής, ἐξουσία ὑπὲρ τῆς τέλη ἐπὶ τῶν[ἐν τῇ ἀγορᾷ ἀποδείκτης] ἱθικότων ἐξάγειν· ὅσα δ’ ἂν κάκωμα ἡ ἐπαύλιη ὅσιν ἐξω τῆς πάλεως[τιμών, νομίζομεν δέν προσαφορισθήναι ἐκάστωτε ἐγγράφῳ μὲν ὀπόσον ἂν καρ-] (100) [ποὺς] ἐξάγειν βούλεται ἀπὸ τῆς ἀγορικίας, ἐπαγγείλαν[τα δὲ τῶν ἀγορανόμων καὶ τα] [τῆλη διορθωσάμενον ἐξάγειν.
§11. ‘The movements in and out (of the city) of all grain should be declared in the portico of the agora so that, if it were not profitable for someone to bring (his produce) to the agora in order to send it out from there, he should have the right to send it out, having paid the dues on what was declared in the agora. And with regard to those villages and farms that are outside your city, we think that it would be a good idea to require each person to register the amount of produce he wished to send out of his farm, so that he might send it out, having informed the market commissioner and paid the dues.’

Summary §12. Finally, three men each from Teos and Lebedos would be nominated to see to any details concerning the synoikism that might have been omitted.
Document 2. The Aristodikides dossier

Welles (1934: nos. 10-13)

No. 10. First land grant to Aristodikides

Βασιλεὺς Ἄντιοχος Μελέα-γροι χαίρειν· δεδώκαμεν Aristodikidei τῷ Ἀσσίωι γῆς ἐργασίμου πλέθρα δισχίλια προσενέγκασθαι πρὸς τὴν Ἰλίεων πόλιν ἢ Σκηνθίων· σὺ οὖν σύνταξον (5) παραδίδεις Aristodikidei ἀπὸ τῆς ὁμορούσης τῇ Γεργίσῃ ἢ τῇ Σκηνθίᾳ, οὐ δὲν δοκιμάζῃς, τὰ δισχίλια πλέθρα τῆς γῆς, καὶ προσφέρεις εἰς τὴν Ἰλίεων ἢ τὴν Σκηνθίων. Ἐξερρωθείνειν.‘

‘King Antiochos to Meleagros, greetings. We have given Aristodikides of Assos two thousand plethra of cultivable land to be attached to the city of Ilion or that of Skepsis. So issue orders that from the land bordering on that of Gergis or Skepsis, whichever you think best, 2,000 plethra of land be conveyed to Aristodikides and attached to that of Ilion or Skepsis. Be in good health.’

No. 11. Second land grant

Βασιλεὺς Ἄντιοχος Μελέαγροι χαίρειν· ἐνέτυχεν ἡμῖν Aristodikideis ὁ "Ἀσσίος, ἄξιοι δοῦναι αὐτῶι ἡμᾶς ἐν τῇ ἐφ’ Ἑλλη-πόντου σατραπεῖαι τὴν Πέτραν, ἢ πρότερον (5) ἔχειν Μελέαγρος, καὶ τῆς χώρας τῆς Πετριδῆς ἐργασίμου πλέθρα χιλιάς πεντακόσια, καὶ ἄλλα γῆς πλέθρα δισχίλια ἐργασίμου ἀπὸ τῆς ὁμο-ρούσης τῆς πρότερον δοθείσην αὐτῶι μεριδίον. Καὶ ἡμεῖς τῆν τε Πέτραν δεδώκαμεν αὐτῶι, εἰ (10) μὴ δέδοται ἄλλωι πρότερον, καὶ τῆς χώρας τῆς πρὸς τὴν Πέτραν καὶ ἄλλα γῆς πλέθρα δισχίλια ἐργασίμου, διὰ τὸ φίλον ὁντα ἦμετέρον παρε-χθήσατί ἡμῖν τὰς καθ’ αὐτῶι χρείας μετὰ πάσης εὐνοίας [κ]αὶ προθυμίας· σὺ οὖν ἐπισκεφθάμενος, (15) εἰ μὴ δέδοται ἄλλωι πρότερον αὐτὴν ἢ Πέτραν, πα-ράδειξον αὐτῆν καὶ τὴν πρὸς αὐτὴν χώραν Aristodikideis, καὶ ἀπὸ τῆς βασιλικῆς χώρας τῆς ὀμο[]- ρούσης τῆς πρότερον δεδομένη χώραι Aristodikideis.
'King Antiochos to Meleagros, greetings. Aristodikides of Assos came to us and requested that we give him in the Hellespontine satrapy Petra, which Meleagros formerly held, and 1,500 plethra of Petra’s cultivable land and another 2,000 plethra of cultivable land from that bordering on the first lot given to him. And we gave him Petra, as long as it had not been given to someone else previously, and the land of Petra and 2,000 more plethra of cultivable land, because he has provided services for us as our friend with goodwill and eagerness. So, after having investigated whether Petra had not been given to someone else previously, transfer it and its surrounding land to Aristodikides, and, from the royal land that is adjacent to that given earlier to Aristodikides, order the measurement and transfer to him of 2,000 plethra, and allow him to attach it to whichever city he wishes of those in (our) country and alliance. (Regarding) the royal laoi of the district in which Petra lies, if they wish to reside in Petra for reasons of security, we have ordered Aristodikides to allow them to live (there). Be in good health.'

No. 12. Revision of the second land grant

Βασιλεὺς Ἀντίοχος Μελεάγρων χαίρειν· ἐνέπτυξεν ἕν- μον Αριστοδικίδης, φάμενος Πέτραν τὸ χωρίον καὶ τὴν χώραν τὴν συγκυριοῦσαν, περὶ ὧς πρότερον ἐγράφαμεν διδόντες αὐτῶι, οὕτω ἔτι καὶ νῦν παρεισφήναι διὰ τὸ Ἀθη- (5) ναίοι τῶι ἔπι τοῦ ναυσταθμοῦ ἑπικεχωρίσθαι, καὶ ἡξίωσεν ἀντὶ μὲν τῆς Πετρίτιδος χώρας παραδεχθῆναι[1] αὐτῶι τὰ ἵσα πλέθρα, συγκροτήθησαι δὲ καὶ ἄλλα πλέ- θρα δισχίλια, προσενέγκασθαι πρὸς ὧν ἦμι βούλομαι τῶι πόλεωι τῶι ἐν τῇ ἡμετέρᾳ συμμαχίᾳ, καθά- (10) περὶ καὶ πρότερον ἐγράφαμεν· ὀρθῶτες οὖν αὐτῶι εὖνοι ὄντα καὶ πρόθυμοι εἰς τὰ ἡμέτερα πράγματα[α-] τὰ βουλόμεθα πολυεφεῖν ταλαύριστον, καὶ περὶ τούτων συγκροτήθησαμεν· φησὶν δὲ εἰναι τῆς Πετρίτιδος χώρας τὰ συγχρησθέντα αὐτῶι
'King Antiochos to Meleagros, greetings. Aristodikides has come to us saying that the place Petra and the land belonging to it, about which we had previously written giving them to him, has not as yet been received, because it had been assigned to Athenaios the commander of the naval base, and he requested that be conveyed to him, instead of the land of Petra, the same number of plethra, and that be given to him another 2,000 plethra to be attached to whichever city he wishes of those in our alliance, as we wrote earlier. Seeing therefore that he is well-disposed and eager with regard to our affairs, we wish to favour the man greatly and have conceded this. He says that the land of Petra conceded to him was 1,500 plethra. So order that be measured and conveyed to Aristodikides both the 2,500 plethra of cultivable land and, in place of that around Petra, another 1,500 plethra of cultivable land from the royal land bordering on that given to him by us initially. And also allow Aristodikides to attach the land to whichever city he wishes of those in our alliance, just as we wrote in the previous letter. Be in good health.'

No.13. Covering letter of Meleagros

Μελέαγρος Ἰλιέων τῇ βουλή καὶ τῶν δήμων χαί- ρειν. ἀπέδωκεν ἡμῖν Ἀριστοδικίδης ὁ Ἀντίοχος ἐπιστολάς παρὰ τοῦ βασιλέως Ἀντιόχου, διὸ τὰντίγρα- φα ὡμίλῳ ὑπογεγράφαμεν· ἐνέτυχεν δ’ ἡμῖν καὶ αὐ- (5) τὸς φάμενος, πολλῶν αὐτῶι καὶ ἐτέρων διαλε- γομένων καὶ στέφανον διδόντων, ὄσπερ καὶ ἡ- μεὶς παρακολούθομεν διὰ τὸ καὶ πρεσβεύσαι ἅ- πο τῶν πόλεων τινας πρὸς ἡμᾶς, βούλευσα τὴν χώραν τὴν δεδομένην αὐτῶι ὑπὸ τοῦ βασιλέως Ἀν-
Meleagros to the Council and Assembly of the Ilians. Aristodikides of Assos has given me letters from the king, of which I have prepared copies for you. He also visited me himself saying that, although many others had spoken to him and presented him with crowns - something which I also observe as some of the cities have sent embassies to me too - he wishes to attach the land that is given to him by King Antiochos to your city, both because of the sanctuary and of his good-will towards you. So those things which he requires that the city should do for him, he will inform you of himself. You would do well to vote the full range of privileges for him and whatever he may agree to and record these on a stele and set it up in the sanctuary, so that everything agreed to may be secured for you for all time. Be in good health.'
No. 18. Land sale to Laodike

Βασιλεὺς Ἀντίοχος Μητροφάωνε χαῖρειν. Πεπράσκω
καμέν Λαοδίκη τῇ Πάννιν κόμην καὶ τῇ βάριν καὶ τῇ προσῳ-
σαν χώραν τῇ κόμη, ὁρὸς τῇ τῇ Ζελείτιδι χώραι καὶ τῇ Κυκ-
ήνῃ καὶ τῇ ἀδώ τῇ ἀρχαί, ἢ ἢ μὲν ἐπάνῳ Πάννον κόμην, στὸν
(5) ἑαυτοῦ διασεβέσθαι τῷ χωρίῳ - τῷ μὲν Παῦλον κόμην ὑπαρχοῦσαν συμβαῖ-
μενε ὑπερευνάμενα - καὶ εἰ τινὲς (ε)ἰς τῇ χώρᾳν ταύτῃ ἐμ[πί-]!
πτοσεν τόποι καὶ τοὺς ὑπάρχοντας αὐτοῖς λαοὺς παὶ·
νοικοῖς σὺν τοῖς ὑπάρχουσιν πᾶσιν καὶ σὺν ταῖς [τοῦ ἑ-]

(10) όστιν καὶ πεντηκοστοῦ ἔτους προσόδος, ἀρ[γυ-]
ρίου ταλάντων τριάκοντα - ὁμιοίως δὲ καὶ εἰ τινὲς ἐ-

(15) τῆς κόμη ταύτῃ ὑπερευνάμενα λαοῖ συνεξελεύθαι εἰς ἄλλους-
ς τόπους - ἐρ' ἐκοῦν ἀποτελεῖ εἰς τὸ Βασηλικὸν καὶ κυρία, ἐς τῇ
ται προσφερομένη πρὸς πάλιν ἢ ἢν βούληται· κατὰ ταῦτα δ[ἐ]

(20) καὶ οἱ παρ' αὐτῆς πριάμουν ἔναδίκαι τῶν ἐξου-
σιῶν κυρίων καὶ πρὸς πάλιν προσοισοῦνται ἢ ἢν ἢ βούλων
νται, ἐκατέρρημεν ἡ Λαοδίκη τυχήκαι πρότερον προσευχή-
μένη πρὸς πάλιν, οὕτω δὲ κεκτήσασθαι οὐ ἢν ἢ χώρα ἢ ἢ προ-
σφερομένη ὑπὸ Λαοδίκης· τῇ δὲ τιμῆς συντετάχα-

(25) μὲν ἀνανεγκεῖν εἰς τὸ κατὰ ἈΣΤΡΑΥΕΙΑΝ γαζοφυλάκις
νὸν ἐν τρισὶν ἀναφορὰς, ποιομένους· τῇ δὲ μὲν μίαν ἐν τῶν Αὐ-
δανίων μητρὶ τῶν ἐν τοῖς ἐξηκοστῶν ἑτεὶ, τῇ δὲ ἐτέραν ἑν]

τῶν Ξανθίκων, τῇ δὲ τρίτην ἐν τῶν ἐχομένων τριμήνοις
σύνταξον παραδέχεσθαι· Ἀριθμῶν τῶν οἰκονομοῦν τὰ Λαο-

(30) καὶ τῇ δὲ τῇ κόμη καὶ τῇ βάριν καὶ τῇ προσοισᾶν χώραν
καὶ τοὺς λαοὺς πανοικίας σὺν τοῖς ὑπάρχουσιν αὐτοῖς
πᾶσιν, καὶ τῇ ἴδιῃ ἀναγράψαι εἰς τὰς βασιλικὰς γραφὰς
τὰς ἐν Σάρδεσιν καὶ εἰς στῆλας λυθίας πέντε· τού-
των τῷ μὲν μίαν θεῖαι ἐν Ἰλίῳ ἐν τῶι ἱερῶι τῆς Ἀθη-

(35) τῇ δὲ ἐτέραν ἐν τοῖς ἱερῶι τῶν ἐν Σαμοθραίκῃ, τῇ δὲ ἐτέ-
ραν ἐν Ἐβέδεω ἐν τοῖς ἱερῶι τῆς Ἀρτέμιδος, τῇ δὲ τε-
τάρτῃ ἐν Διδύμωι ἐν τοῖς ἱερῶι τῆς Ἀπάλλωνος, τῇ
δὲ πέμπτῃ ἐν Σάρδεσιν ἐν τῶι ἱερῶι τῆς Ἀρτέμιδος· εὐ-
θέως δὲ καὶ περιορίσχαι καὶ στηλώσασθαι τῷ χώρᾳ καὶ [προς-]
[ἀναγράψαι τοῦ περιορισμοῦ εἰς τὰς στήλας τὰς πρὸ-]
[εἰσημένας· ἔρρυσα. ἦδ'] Δίου ἑ'.

Document 3. The Laodike dossier

Welles (1934: no. 18-20)
'King Antiochos to Metrophanes, greetings. We have sold to Laodike the village of Pannos and the mansion and the land belonging to the village, bounded by the land of Zeleia and by that of Kyzikos and by the ancient road that lies above the village of Pannos, which has been ploughed by the neighbouring farmers, so that they may take the place for themselves - it happens that the present village of Pannos was established later - and (have sold) any settlements that may be included in this land and the laoi that live in them, with all their households and all their belongings and with the income of the fifty-ninth year, for thirty talents of silver - and similarly, if some from this village, who are laoi, have been moved to other places - on the terms that she will owe nothing to the royal treasury and will have the right to offer (to attach the land) to whichever city she chooses. In the same way, those buying or receiving from her will also have the right to attach (the land) to the city of their choice, unless Laodike has not made an earlier attachment to a city, in which case they will own the land as part of the city attached to by Laodike. We have ordered that the price be paid at the Strateia treasury in three instalments, the first being made in the month of Audnaios of the sixtieth year, the other in (the month of) Xandikos and the third in the following quarter. Issue orders that the village and the mansion and the surrounding land be conveyed to Arrhidaios, the bailiff of Laodike, along with the laoi with all their households and all their belongings, and record the sale in the royal registry at Sardeis and on five stone stelai. Of these one is to be set up at Ilion in the temple of Athena, another in the temple (of the Gods) in Samothrake, another at Ephesos in the temple of Artemis, the fourth at Didyma in the temple of Apollo and the fifth at Sardeis in the temple of Artemis. Survey the boundaries of the land and mark them with boundary stones immediately and record the survey on the [above-mentioned] stelai. [Be in good health. Year 59], the 5th of Dios...................'

No.19. Covering letter of Metrophanes

[ ] α? [ τὸ ἀντίγραφον τοῦ]
[προστάγματος τοῦ γραφέ]ντος ὡς αὐτο[υ]]
[ ] τοῖς δὲ ἄλλοις [ ]
[ θεῖωι τὰς στῆλας ἐν ταῖς δεδηλωμέ-]
(5) [ναὶς πάλεσιν· σὺ ὁλιγῇ ἐπακολουθήσας τῇ παρὰ τοῦ βα-
[σιλέω]ς ἐπιστολὴν ἀπέγγυσιν ποίησαι καὶ σύντα[ξον]
'[the copy of the order written by him and to the others] to set up the stelai in the [designated cities.] So, in accordance with [the king’s] letter, issue the contract and order that both the sale and survey be recorded on two stone stelai, and that of these one be set up at Ephesos in the temple of Artemis, the other at Didyma in the temple of Apollo, the payment required for this being made from the royal treasury. Make it your duty to see that the setting up of the stelai is done as quickly as possible and, when it is completed, inform me in writing. I have sent instructions also to Timoxenos the bibliophylax to record the sale and the survey in the royal registry at Sardeis, as the king wrote. [Year 59] Daisios.'
The copy of the survey of the village of Pannos [and the mansion and the surrounding land and the existing] laoi. [Was conveyed] to Arrhidaios, the bailiff of Laodike, by ...rates the hyparch, the village and the mansion and the surrounding land, according to the written order of Nikomachos the oikonomos, to which were attached that of Metrophanes and that which the king wrote to him, according to which it was necessary to make a survey. Starting from the east, from the land of Zeleia, which is towards Kyzikos, along the ancient royal road leading to the village of Pannos above the village and the mansion - that shown by Menekrates, the son of Bacchios, from the village of Pythos, and Daos, the son of Azaretos, and Medeios, the son of Metrodoros, from the village of Pannos - which is ploughed by those neighbouring the land (of the village of Pannos). From this (road), and from the altar of Zeus that lies above the mansion, to the tomb to the right of the road. From this tomb along the royal road leading through the Eupannese to the Aisepos river. Markers were also set up along the boundaries that were pointed out.
Document 4. The Ptolemaios dossier


Text A

(1) [Βασιλεύς Αὐτίκος Πτολεμαίων χαίρειν] [--
[ήμ?]ώς σύνταξον ἀναγράφαντας] ἐν στήλαις λυθίναις --
[τὰ ᾧ ἐπιστολάς ἁναθεῖναὶ ἐν ταῖς ὑπάρχουσαις [σοι κόμιαις· γεγράφαμε] δὲ
περὶ τοῦ τυχόν Κλέωνι καὶ 'Ηλιάδωρῳ τοῖς διοικηταῖς ὦλα ἐπακολουθοῦσιν.]
ζῷ', 'Τερπθερ[παίον, --]

'King Antiochos to Ptolemaios, greetings. ...order that the letters be inscribed on stone
stelai and set up in the villages belonging to you. We have written to Kleon and Heliodoros,
the dioiketai, to follow up these matters. Year 117(?), month of Hyperberetaios, ..'

Text B

(5) [Βασιλεύς Αὐτίκος Κλέωνι χαίρειν· τὰ καταγραμμένα παρ' ἡμῶν?] τῶι
στρατηγοῖν
[-]ΠΙΤΝ [--] καὶ ἀπὶ[-]ΜΧΑΙΕΣ [-]ΕΝ[---]ΤΗ[--]ικώτιν κατὰ τὸ
[---]θεῖν διὰ [---]ΝΓΩ [-]ΔΟΜΗ[--]ικώτιν τὴν [κλωφαι.]

'King Antiochos to Kleon, greetings. What we have written concerning the general ....

.....

And the same (letter) to Heliodoros.'

Text C

[Βασιλεύς Αὐτίκος Κλέωνι] χαίρειν· τοῦ ὑπομνήματος οὐ ἐδοκίμασα ἡμῶν Πτολεμαίων
[ὁ στρατηγός καὶ ἀρχιερέως ὑποτέκται τὸ ἀντίγραφον· γενέσθω [οὐδὲν ὦσπερ ἀξίοι.
[ιο', --, --]

'King Antiochos to Kleon, greetings. A copy of the memorandum given to us by
Ptolemaios the general and high-priest is attached. Do as he requests. Year 114(?), ...'

Text D (Bertrand)

(11) [Βασιλεύς Αὐτίκος ὑπόμνημα παρὰ Πτολεμαίων] στρατηγοῦ καὶ ἀρχιερέως περὶ τῶν
[γνωμῇν] ἐγκυκληματων· ἀξίω γραφήμαι [ὑποικ.] ὡσα μὲν ἡν ἢ ἐν ταῖς κόμιαις [μου]
‘Memorandum to King Antiochos from Ptolemaios the general and high-priest concerning disputes that arise. I request that written instructions be issued to the effect that my own people handle those (disputes) that arise between the laoi of my own villages, while those that involve the inhabitants of other villages be examined by the oikonomos and the official in charge of the area. If it is a matter of homicide or is considered of greater importance, it should be sent on to the general of Syria and Phoinike. The garrison commanders and the officials in charge of the districts should not ignore in any way those who appeal to them (for assistance). And the same (memorandum) to Heliodoros.’

Text E

(18) [Ba]σιλεὺς Ἄντιόκχος Κλέωνας χαίρειν. [τοῦ ὑπὸμνήματος οὗ ἐδιώκεν ἡμῖν]
[Πτολεμαῖος ὁ στρατηγὸς καὶ ἀρχιερεύς ὑποτέτακτα] τῷ ἀντίγραφῳ [γενεσθώ οὖν καθάπερ ἀξίοι.]
di', Αὐδαιόν, ὅ'.

‘King Antiochos to Kleon, greetings. Attached is the copy of the memorandum which Ptolemaios, the general and high-priest, gave us. Do as he requests. Year 114 (?), 4th of the month of Audaios.’

Text F

(21) [Βασιλεῖ] Μεγάλω[ν] Ἀντίσχοχος ὑπόμνημα [παρὰ Πτολεμαίοιον] στρατηγῷ
[kai] ἀρχιερεύς- ἀξίω, εἰπ' οὐ καὶ φαινότα, [Βασιλεῖ, [γραφθεῖν --] πρὸς τε
[Κλέωνα καὶ Ηλιοδώρον] [τοῦ] διοικητὰς εἰς τὰς ὑπάρχουσας μοι κό- μας
[ἐγ]γράψει καὶ εἰς τὴν πατρ[ικίων καὶ εἰς τὰς οἱ προ[σ]τατε[ξες καταγράφαὶ]
[μη]δέ ἐτέρως ἐπανγ' ἔγγειν μηδ' ἐπιβολήν πανήγυρον[θ]αι ἐπὶ τὰ [κ]τήματα
μη[δ]ὲ λαοῖς εξάγειν τὴν αὐτ[ῆ]ν Ἡλιοδώρον.

‘Memorandum to Great King Antiochos from Ptolemaios the general and high-priest. I request, if it appears so to you, o king, that you send written instructions to Kleon and Heliodoros, the dioiketai, so that no one should have the authority, under any pretext, to billet in the villages that I own by right of inheritance and in those that you ordered be
transferred to me, nor bring others there, nor requisition any possessions, nor carry off the laoi. And the same (memorandum) to Heliodoros.'

Text G

(28) B [α]σιλεύς Ἀντίοχος Μαρσύας χαίρειν· ἐν[ε]φ[ά]ψεν ὑμῖν
καταλύειν τε μετὰ βίαια ἐν ταῖς κώμαισι αὐτοῦ [καὶ] ἄλλα ἀδικήματα
ἀλλὰ καὶ ξη [μιῶν] ἰνταί δεκαπλαίς αἷς ἄν ποιώνται βλάβα[ίς] --
[ὁ] αὐτή Λυσαφίαϊ, Λέοντι, Διονίκωι.

'King Antiochos to Marsyas, greetings. Ptolemaios the general and high-priest has informed us that many of those passing through take quarters by force in his villages and commit not a few other crimes, paying no attention to the orders we have sent about these matters. So make it your duty not only to prevent them, but also to fine them ten times the cost of the damage they do. The same (memorandum) to Lysanias, Leon and Dionikos.'

Text H

(35) [Β]ασιλεύς Ἀντίοχος Ἡλιοδύ[ψ]οι χαίρειν· τῆς ἐπιστολῆς ὅς
[γ]ραφαμεν πρὸς Μαρσύαν ὑποτετακται τὸ ἀντίγραφον[ν] σὺ δ’ οὖν
ἐπακολού[θει] ζῷ’ Εἰ[α]ρδίκοι, -]

'King Antiochos to Heliodoros, greetings. Attached is a copy of the letter we have written to Marsyas. So follow this up.'

Text I

(38) [Τ]πετάξῃ ἡ πρὸς Μαρσύαν· ἡ αὐτὴ Θεοδότων τῆς [πρ]ὸς Λυσαφία[ν,]
Ἀπολλοφάνει τῆς πρὸς Λέοντα, Πλοῦτογό[νε] τῆς πρὸς Διόνικον.

'Attached is the (memorandum) to Marsyas. The same (memorandum) to Lysanias for Theodotos, to Leon for Apollophanes, to Dionikos for Ploutogenes.'
Column I

[-- ca.36 --] ἐπερωτήσαντος Χαϊρέων ὑπὲρ τοῦτον διαφέρει[ας]
[γεγενημένης]ς καὶ ὡστερον ἐπέκρινε μοι τὸν οἶκον Ἁντίγονος· ἐπειδῆ νῦν οἱ νεωποία τὸ
χρυσόν τῆς
[παρακαταθήκης]ς τὸ τῆς Ἀρτέμιδος ἀπαίτοῦσιν παρ’ ἐμοί, ἐγώ δὲ οὐκ ἔχω πόθεν ἀποδώσω
αὐτῶς, ἔστι οὖν
[τὸ καθ’ ἐν τοῦ οἰκοῦ κώμαι αἷδε (αἱ) καλοῦνται Τοβαλμουρα κόμη ἐν Σαιριανῶι πεδίῳ ἐν
"Ἰλοῦ ὀρεί" προσκόρουσιν δὲ
(5) Ἰπρὸς τὴν κόμην ταύτην καὶ ἀλλά ἐκ τῆς ποιητὴς Τανδόου καὶ Κομβίλλιτία, φόρος τῶν
κωμῶν εἰς τὴν Πυθέου
------ χιλιαρχίαν τοῦ ἐναιστού χρυσοί πεντήκοντα· ἔστι δὲ καὶ κλῆρος ἐν Κιναραὶ πλησίον
Τοβαλμουρα,
[φόρος τοῦ] ἐναιστού χρυσοὶ τρεῖς· ἔστι δὲ καὶ ἀλλή κόμη Περιασσαστρα ἐν Μορστοῦ ὑδαίτι,
φόρος εἰς τὴν
[----------]λαῖον χιλιαρχίαν τοῦ ἐναιστού χρυσοὶ πεντήκοντα ἔπτα· ἔστι δὲ καὶ (ἐν) Μορστοῦ
ὑδαίτι κλῆρος
ἐν Ναλγρίοα, φόρος εἰς τὴν Σαγαρίου Κόρειδος χιλιαρχίαν χρυσοὶ τρεῖς ὀβαλοὶ χρυσίου
tέσσαρες· ἔστι δὲ
(10) καὶ ἀλλή κόμη ἐν Αττουδδόις ἡ καλεῖται "Ἰλοῦ κόμη, φόρος τοῦ ἐναιστού χρυσοὶ τρεῖς
ἀβαλοὶ χρυσά τρεῖς
ἐκ πασῶν ὄν τῶν κωμῶν καὶ ἐκ τῶν κλῆρων καὶ τῶν οἰκοπέδων προσκυρώντων καὶ τῶν λαῶν
πανοικίων
σὺν τοῖς ὑπάρχουσιν καὶ τῶν ἀγγείων τῶν οἴνῃρων καὶ τοῦ φόρου του ἀργυρικοῦ καὶ τοῦ
λιθωρικοῦ καὶ τῶν
ἀλλών τῶν γινόμενων ἐκ τῶν κωμῶν καὶ χωρίς τούτων ἐπὶ πλέον, τῆς διαφέρεισες γενομένης,
ἐξαιρήμα Ελαβεν Πάθεος καὶ Ἀδράστος ἐν Τ(ο)βαλμουροις αὖλην, καὶ ἔξω τῆς αὐλῆς εἰςίν
οἰκία τῶν
(15) λαῶν καὶ τῶν οἰκετών καὶ παράδεισοι δύο σπόρου ἄρταβδῳ δεκαπέντε, καὶ ἐν
Περιασσαστροίς
οἰκόπεδα σπόρου ἄρταβδων τριῶν καὶ παράδεισοι σπόρου ἄρτα(β)ῶν τριῶν καὶ οἰκέται οἱ
κατοικούντες
ἐν τούτωι τῶι τόπωι, ἐν Τ(ο)βαλμουροις Ἠβεσσος Ἀδράστου, Καδος Ἀδράστου,
Ἡρακλείδος Βελετρου,
Τύνος Μανου Καΐκου, ἐν Περιασσαστροίς οἱ κατοικούντες Καδος Αρμανανδου, Ἀδράστος
Μανου.
Chaireas having inquired into these matters, a division was made and afterwards Antigonos confirmed the estate for me. Since the temple officials are now demanding from me the money of the loan of Artemis, and I do not have the means to pay them, named here are the villages comprising each part of my property:

Tobalmoura village in the plain of Sardeis in the district of Ilos. Belonging to this village are other villages named Tandos and Kombdilipi, the tax of the villages of fifty gold staters annually (being paid) in the chiliarchy of Pytheos ... There is also an allotment at Kinaroa near Tobalmoura (paying) a tax of three gold staters annually.

There is also another village, Periasasostra, in Morstos Waters (district), (paying) tax of fifty-seven gold staters annually in the chiliarchy of ..........arios.

There is also in Morstos Waters (district) an allotment at Nagrioa (paying) tax of three gold staters and four gold obols annually in the chiliarchy of Sangarios the son of Koreis.

There is also another village in the district of Attoudda called the village of Ilos, (paying) tax of three gold staters and three gold obols annually.

So from all the villages and allotments and the housing plots associated with these and the laoi with all their households and possessions and the wine jars and the money tax and the labour tax and the other things which are produced from the villages, and apart from these even more, when the division was made, Pytheos and Adrastos received a portion set apart:

In Tobalmoura, a country house and, outside the house, the dwellings of the laoi and the slaves and two cultivable plots (of an area) requiring fifteen artabai of seed.

In Periasasostra, housing plots of (an area) requiring three artabai of seed and cultivable plots (of an area) requiring three artabai of seed.

And the slaves living on this land, in Tobalmoura: Ephesos of Adrastos, Kadoas of Adrastos, Herakleides of Beletros, Tyios of Maneas, the son of Kaikos, and those living in Periasasostra: Kadoas of Armanandos and Adrastos of Maneas.'
Column II

[--- ca. 16 --- μηθ' έχει μήτε έμοι μήτε [τοις ἐμοίς ἐκγόνοις μήτε] [--- ca. 10 ---]

μήτε ἀλλ' ὑπερὶ ἁγάμητι ἀπολύσασθαι καὶ εὰν τις ἐμποίηται ὑπὲρ τινὸς τῶν κωμῶν ἢ τῶν κληρῶν
ἡ ὑπὲρ τῶν ἀλλῶν τῶν ὑδε γεγραμμένων ἐγὼ καὶ οἱ ἐμοὶ ἐκγόνοι βεβαιώσομεν καὶ τὸν ἀντιποιούμενον
ἐξαλλάξας(ο)μεν, εὰν δὲ μὴ βεβαιώσομεν ἢ παρὰ τὴν συγγραφὴν παραβιάσωμεν τίμει γεγραμμένην

(5) ἐπὶ τάς κώμας καὶ τοὺς κλῆρους καὶ τὰ χωρία καὶ τοὺς οἰκήτας ἀπαντας εἰς τὰ
'Ἀρτέμιδος ἐκέτωσον,
καὶ οἱ νεωποιοὶ ὑπὲρ τοῦτον ἐκδικαίουσθωσαν καὶ κρίνεσθωσαν πρὸς τοὺς ἀντιποιούμενους
ὡς ἂν βούλωσαν, καὶ ἐγὼ Μηνὴμαχος καὶ οἱ ἐμοὶ ἐκγόνοι ἀποτείσαμεν εἰς τ(α) Ἀρτέμιδος
χρυσοὺς δισεκοῦς ἐξακούσας πεντήκοντα, καὶ ὑπὲρ τῶν γενημάτων καὶ τῶν καρπῶν
ἐὰν μὴ κατεύθυνατον ἐν ἐκείνῳ τοίς έτει εἰς τὰ Ἀρτέμιδος ὁπόσου οὖν ἀρσενίου ἰώμα ἢ καὶ
tαῦτα

(10) ἀποδώσωσομεν, καὶ τῶν οἰκοδομη(μά)των καὶ φυτευμάτων τῶν τῆς Ἀρτέμιδος ἡ ἄλλο τι ὃ
τι ἂν ποιήσωμεν
ὕσου χρυσίου ἰώμα ἢ τὴν ἰώμαν ἀποδώσωσομεν, μέχρι δὲ ὅσου μὴ ἀποδώσωμεν ἐστώ ὡμών ἐν
παρακαταθήκην
tέως ἂν ἂν ἄπαν ἀποδώσωμεν· ἐν δὲ τάς κώμας ἢ τοὺς κλῆρους ἢ τῶν ἀλλῶν τι τῶν ὑποκεμένων
ἐὰν ὁ βασιλεὺς ἀφάληται τῇ Ἀρτέμιδι διὰ Μηνὴμαχον, τὸ χρυσίν οὖν τὸ ἀρχαῖοι τὴν
παρακαταθήκην
tοὺς χιλίους τριακοσίων εἰκοσιτένε ὁρυσούς αὐτοὶ παραχρήμα ἀποδώσωσομεν εἰς τὰ Ἀρτέμιδος
(15) ἐγὼ Μηνὴμαχος καὶ οἱ ἐμοὶ ἐκγόνοι, καὶ τῶν οἰκοδομη(μά)των καὶ φυτευμάτων τῆς
Ἀρτέμιδος
ὕσου ἂν ἰώμα ἢ τὴν ἰώμαν ἀποδώσωμεν παραχρήμα, καὶ ὑπὲρ τῶν γενημάτων καὶ τῶν καρπῶν
ἐὰν μὴ κατεύθυνατον ἐν ἐκείνῳ τοίς έτει εἰς τὰ Ἀρτέμιδος ὁπόσου ἂν χρυσίου ἰώμα ἢ καὶ
tαῦτα
ἀποδώσωσομεν, μέχρι δὲ ὅσου μὴ ἀποδώσωμεν ἐστώ ἂν ἂν ἐν παρα(κα)ταθήκη καὶ ἐν τοῖς ἐμοῖς
ἐγγόνοις
ἐὼς ἂν ἂπαν ἀποδώσωμεν εἰς τὰ Ἀρτέμιδος· καὶ ἡ πράξεις τέως ἂν ἐξ ὡμών μῆπω γένηται
ἐξείναι.

'....... it shall not be permitted either to me or to my descendants or to ... or to anyone else to be released any longer from (this agreement).
And if someone makes a claim concerning one of the villages or the allotments or concerning the other things that have been written here, I and my descendants will act as guarantors and turn away the contenders, and if we do not act as guarantors or (if we)
violate the written agreement concerning the villages and the allotments and the plots of
land and the slaves, let all belong to Artemis, and let the temple officials take the
contenders to court and be judged in whatever manner they wish. And I, Mnesimachos,
and my descendants will pay Artemis 2,650 gold staters. And for the (grain) produce and
(fruit) crop, if they have not been harvested that year for Artemis, as much money as they
are valued at, and we shall pay this. And for the buildings and plantings of Artemis and
for any additions they make, we shall pay whatever sum they are valued at. And as long
as we have not paid something, let this be considered a loan until we have paid
everything.

And if the king takes away from Artemis, because of Mnesimachos, the villages or the
allotments or any of the other things, I, Mnesimachos, and my descendants will
immediately pay back to Artemis the original loan, the 1,325 gold staters. And,
concerning the buildings and plantings of Artemis, whatever the value is that amount we
will pay immediately. And, concerning the (grain) produce and (fruit) crop, if they have
not been harvested that year for Artemis, we will pay whatever sum they are valued at.
And, as long as we have not paid something, let this be considered a loan to me and to my
descendants until we have paid everything to Artemis. And let action (of recovery of
debts) be permitted (against us) as long as we do not do so.'
Document 6. The Laodike letter to Iasos

Pugliese Carratelli (1969)

‘... and because I am also inclined to act in accordance with his (the king's) interest and consideration, and because of this to perform some benefaction for citizens in need and a good deed for the city as a whole, I have written to Strouthion the dioiketes to bring to the city and deliver to the representatives of the city each year for ten years a thousand Attic medimnoi of wheat. So you will do well to order the financial officials, upon receiving it, to sell a regular amount and to (order) the prostatai, and whomever else you decide, to arrange that the resulting income be set aside as dowries for the daughters of poor citizens, giving not more than three hundred drachmas of Antioch to each of those due to be married.’ . .
‘.. When ambassadors were sent to Ktesikles the --- and Menandros the dioiketes on matters concerning the interests of the city, he gave freely of his time when the ambassadors left and, accompanying them, sought eagerly to bring about everything that we were requesting.

And also, when Demetrios the eklogistes summoned the ambassadors on the matter which had been brought before him by Demetrios, the official in charge of sanctuaries, and entered into a dispute with them (the ambassadors) regarding the sacred villages of the Saleioi of the mountains and the Saleioi of the plains, interceding(?) he asked Demetrios not to include within his jurisdiction(?) anything that had previously belonged to the city, but to allow it to remain as before.’
When Antiochos and Seleukos were kings, in the forty-fifth year, in the month of Peritios, when Helenos was epimeletes of the district, an assembly having taken place, the following was decided by the Neoteichitai and Kiddiokomitai:
Since Banabelos, the *oikonomos* of Achaios, and Lachares, son of Papos, the *eklogistes* of Achaios, have become their benefactors in all things, and and (since) both the communities and each person individually received help from them during the Galatian War, when many were taken prisoners by the Galatians, (whom) they ransomed acting on behalf of Achaios,

1) that they be praised and their benefaction recorded on a stone *stele* and that (this) be set up in the sanctuary of Zeus in the village of Baba and in that of Apollo in the village of Kiddion,

2) that the privilege of a front seat at public festivals be given to them and their descendants,

3) that an annual sacrifice be offered for Achaios, as lord of the place and saviour, of an ox in the temple of Zeus and for Lachares and Banabelos, as benefactors, two rams in the sanctuary of Apollo at Kiddion village, a total of three sacrificial animals,

so that others should learn that the Neoteichitai and the Kiddiokomitai know how to return honours to those who do them some good.’
Document 9. The letter from Antiochos III to the Sardians 1


-ATAA---KEIANT-I -- ca.22-24 -- Ω

diaorbwostebo en eteisin triis, e [v]be [w]s de kai xulin
eis ton syneikismhon tis poleos koyai kai exagagiasbai
(4) ek twon en Taranzos ulon kai' an synchrin Zeuxis' vac.
parakomemon de kai tis prosediblheisias eikostis
epi tin politinyn kai to gumnasion ou proteron ekrhise
syntetaxamen apokatasthsai umiv kai ngrafamem
(8) peri panton pro Zeuxin kai Ktesikhn' uper auton de
touton apaggeloi[lo]sion umiv kai o peri Metrodorou. vac.
"Ephwiste. th' Xandikou e'.

'... should be dealt with within three years; and immediately to cut the (necessary) wood for the reconstruction of the city and to take it from the forests of Taranza, as Zeuxis may decide. We also exempt you from the one-twentieth (tax) that had been added to the city tax and have ordered that the gymnasium you used previously be returned to you. On all these matters we have written to Zeuxis and Ktesikles. Metrodoros and his colleagues will inform you about these things. Be in good health. (Year) 99, the 5th of Xandikos.'
A. Letter of Antiochos

N I

(8) .. Θέλοντες δὲ καὶ κατὰ τὰ λοιπὰ πο-
[λυ]ωρεῖν ύμῶν τὰ τὸ ὑπὸ Ζεύξιδος συγχωρηθέντα ύμην κυροῦμεν
[kai] πρὸς τῶν ὑποκειμένων πλήθει εἰς ἐλαιοχρίστιον τοῖς νέοῖς ἀπο-
[τάσισμα καὶ τῇ ἐνιαυτῷ καὶ ἄλλοις μετρητάς τριάκοντα. Τὸ τε
(12) ἐσόμενον ἄνθησιμα εἰς τὴν ἐπισκεψίην τοῦ υδραγωγοῦ οἰόμε-
[νὰ δὲν δίδοσθαι ἐκ βασιλικοῦ ἐφ᾽ ἔτη τριά, καὶ περὶ τούτων γεγράφαμεν
[-- ca. 8/9 -- τῷ διοικητῇ.]..

‘... And because we also wished to look after your welfare in the future, we have both
confirmed the concessions made to you by Zeuxis and have assigned for the anointing of
the youth another 30 metretai of oil a year in addition to that already allocated. And as
for the funds that will be required for the repair of the aqueduct, we think it right that
these should be paid from the royal treasury for three years, and on these matters we have
written to .. the dioiketes. ..’

B. Letter of Zeuxis

Ambassadors of the Herakleians had appeared requesting concessions by the king, which
Zeuxis repeated in his preamble:

N II

.. καὶ παρακαλέσαντας τὰ τὸ ὑπὸ τῶν βασιλέων συγκεκριμένα
[συνθηκοθεμέναις ὑπὸς ὑπάρχχαι καὶ μετὰ ταῦτα ή τῇ ἀνεπισταθμεία τὰ
(16) [-- ca. 16/17 -- κ]αὶ τὰ τέλη καὶ ἐγγαία καὶ τὰ ἐισαυγώγια καὶ ἐξαυγώγια

‘... and asking that both the concessions already granted by the kings be maintained as they
are (today) and also that, after this, freedom from billeting and ... and sales taxes and
tolls and import and export custom duties ..’
‘.. sale, and shall be given from the royal treasury for the use of the city as before, preferably more, but at least - talents; and that the supply of oil that was designated for the anointing of the youth, which was purchased from the (proceeds of the) public auction of port dues, remain (as before); and requesting that tax-exemption be granted to the citizens on all agricultural produce and on pasturage rights for animals and bee-hives for as many years and yokes as judged appropriate; and that they (the ambassadors) be mindful (to request) that free grain be supplied to the city and tax-exemption on that imported into the city and that sold there, and that those who brought (grain) from royal land to the city both for their own use and for sale be tax-exempt’

This was followed by Zeuxis’ answer, with a reference to imports: εἰςπαγωγη, and ..

N IV

(6) -- ἐπικωφοὶμεν δὲ ὡμῶν καὶ τὴν πανήγυριν ἀτελὴ συντελεῖν ο[υ-]
[τοὺς ὦστερ] καὶ πρότερον εἰσέβεβε ἄγειν ..

‘.. and we permit you to conduct the religious festival tax-free in the same manner that you used to earlier ..’
Document 11. A land conveyance in the *oikonomia* of Sardeis

Ma (1997: no.41), cf. Gautier (1989: no.7, Inv.64.6)

-- [ἡ] βασίλισσα γέγρα[φεν] --
-- ἜΝΕΙ τῶν περὶ ἩΜΑΣΒΙ --
-- ἐν τῇ περὶ Σάρδεις οἰκονομία[ι] --
(4) -- Πορσουδδα κόμην καὶ ΣΑΝΝ.ΦΕ --
-- ΤΑΙΣ κατὰ τοὺς προϋπάρχοντ[ας περιορισμοὺς?] --
-- ΣΙΝ ἐν ταῖς κόμις[ατίς καὶ τοῖς] ἀγ[ροῖς?] --
-- ΤΑΙ αὐτός τε καὶ οἱ ἐγγονοὶ αὐτοῦ --
(8) ------ Τ -- ΠΛΗ.ΩΝΤΟ --

'.. (Laodike) the queen has written to ..... -enes of our .. in the *oikonomia* of the district of Sardeis ... the village of Porsoudda and .... according to the pre-existing (surveys?) ... in the villages and fields(?) .. he and his descendants ..'
King Antiochus to Ptolemaios, greetings. Inasmuch as the Jews, from the very moment when we entered their country, showed their eagerness to serve us and, when we came to their city, gave us a splendid reception and met us with their senate and furnished an abundance of provisions to our soldiers and elephants, and also helped us to expel the Egyptian garrison in the citadel, we have seen fit on our part to reward them for these acts and to restore their city which has been destroyed by the hazards of war, and to repopulate it by bringing back to it those who have been dispersed abroad. In the first place we have decided, on account of their piety, to furnish them for their sacrifices an allowance of sacrificial animals, wine, oil and frankincense to the value of twenty thousand pieces of silver, and sacred artabae of fine flour in accordance with their native
law and one thousand four hundred and sixty medimnoi of wheat and three hundred and seventy-five medimnoi of salt. And it is my will that these things be made over to them as I have ordered, and that the work on the temple be completed, including the porticoes and any other part that it may be necessary to build. The timber, moreover, shall be brought from Judaea itself and from other nations and Lebanon without the imposition of a toll-charge. The like shall be done with the other materials needed for making the restoration of the temple more splendid. And all the people of the nation shall have a form of government in accordance with the laws of their ancestors, and the senate, the priests, the scribes of the temple and the temple-singers shall be relieved from the head taxes which they pay and the crown-tax and the salt-tax. And, in order that the city may the more quickly be repeopled, I grant both to the present inhabitants and to those who may return before the month of Hyperberetaios exemption from taxes for three years. We also relieve them for all time from the third part of the tribute, so that their losses may be made good. And as for those who were carried off from the city and are slaves, we herewith set them free, both them and the children born to them, and order that their property be restored to them.
... to you, give pleasure, if you wish. If you wish, give me as a gift the salt tax and the crown tax, which you offered me. And now I grant to you from now on the value of the third part of the grain crop and the half of the fruit crop, which was my due. And I grant to you from now and for all time that which was given to me as head taxes by those living in Judaea and the three toparchies of Samaria adjoining it and Galilee and Peraia. And let Jerusalem be sacred and inviolate and exempt up to her boundaries from tolls and taxes. I cede control of the citadel to Jonathan, your High Priest, that he may place those whom he judges faithful and friends in it as guards, so that they may guard it for us. And every Jew, who has been taken prisoner or enslaved in my kingdom, I set free. And I order that the animals of Jews not be requisitioned. And let the sabbaths and every feast-day and three days before a feast-day be tax-free. And in the same manner I will let the Jews living in my kingdom be free and undisturbed...

For I will free you from most of the tribute and taxes that you paid to the kings before me and myself. And now I free you from the tribute you always paid. In addition, I exempt you from the salt tax and the crown tax, that you offered me, and I exempt you from this day on of the value of the third part of the grain crop and the half of the fruit crop which was my due. And I grant to you from now and for all time that which was given to me as head taxes by those living in Judaea and the three toparchies of Samaria adjoining it and Galilee and Peraia. And let Jerusalem be sacred and inviolate and exempt up to her boundaries from tolls and taxes. I cede control of the citadel to Jonathan, your High Priest, that he may place those whom he judges faithful and friends in it as guards, so that they may guard it for us. And every Jew, who has been taken prisoner or enslaved in my kingdom, I set free. And I order that the animals of Jews not be requisitioned. And let the sabbaths and every feast-day and three days before a feast-day be tax-free. And in the same manner I will let the Jews living in my kingdom be free and undisturbed...
I Maccabees 11.34-35

... ἐστάκαμεν αὐτοῖς τὰ τε ὤρια τῆς Ἰουδαίας καὶ τοὺς τρεῖς νομοὺς Ἀθέραιμα καὶ Λύδδα καὶ Ῥαμάθαιμ προσετέθησαν τῇ Ἰουδαίᾳ ἀπὸ τῆς Σαμαρίτιδος καὶ πάντα τὰ συγκυροῦντα αὐτοῖς πασὶ τοῖς θυσιάζοντι εἰς Ἰεροσόλυμα ἀντὶ τῶν βασιλικῶν, ἃν ἔλαμβανεν ὁ βασίλειος παρ᾽ αὐτὸν τὸ πρὸτερον κατ᾽ ἐναυτὸν ἀπὸ τῶν γενημάτων τῆς γῆς καὶ τῶν ἀκροδύκων καὶ τὰ ἄλλα τὰ ἀνήκοντα ἡμῖν ἀπὸ τοῦ νῦν τῶν δεκατῶν καὶ τῶν τελῶν τῶν ἀνηκόντων ἡμῖν καὶ τὰς τῶν ἅλλος λίμνας καὶ τοὺς ἀνήκοντας ἡμῖν στεφάνους, πάντα ἔπαρκέσσαμεν αὐτοῖς. ..

‘.. And we have confirmed to them (the Jews) the boundaries of Judaea. And the three districts of Apheraiama, Lydda and Ramathaim have been added to Judaea from Samaria, with everything belonging to them, in favour of those who sacrifice at Jerusalem instead of paying royal taxes, which the king received from them earlier each year from the crops and fruit trees. And the other things that belong to us of the tolls and taxes and the salt tax and the crowns due to us, all these from today we relieve them of…’
Document 15. The Baitokaike grant

Welles (1934: no. 70), cf. Jalabert/Mouterde (1970)

Lines 1-3. Order of a king Antiochos to Euphemos to execute the following instructions.

‘Having been informed of the power of the god Zeus of Baitokaike, I have decided to grant to him for all time that from which the power of the god is derived, namely the village of Baitokaike, which Demetrios, the son of Demetrios, the son of Mnasaios, formerly possessed in Tourgona (district) in the satrapy of Apameia, along with everything that goes with it and belongs to it within the existing boundaries, and also the harvests of the current year, so that the revenue from these be expended on the monthly sacrifices and the other things which contribute to the prosperity of the sanctuary by the priest of the sanctuary, as is habitual. And let festivals that are exempt from taxation be held each month on the 15th and the 30th days. And let the sanctuary be inviolable and the village free from billeting, since no objection has been made to this. …’
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