

CHAPTER

Taxation in the Achaemenid Empire

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Abstract

The present contribution treats taxation in the Achaemenid, or First Persian, Empire, which lasted from 538 to 330 *b.c.e.* Its focus lies on information derived from the cuneiform texts discovered in Babylonia and Iran. Until very recently, Greek authors, in particular Herodotus, were used almost exclusively as sources of information on taxation. However, the original sources from the empire itself show that the reality had little in common with the view perpetuated by Herodotus. The differences are discussed here, and an overview of tax bases is given for the satrapy Babylonia because most of the relevant source material comes from there.

Keywords: Achaemenid Persia, taxation, fiscal administration, tribute, Babylonia, Persepolis Fortification Archive

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Introduction

The Achaemenid (or First Persian) Empire (538–330 *b.c.e.*) stretched from Libya to modern-day Afghanistan and from Greece to India, covering a surface of approximately 8 million square kilometers. It was much larger than the two preceding empires in the Near East, the Neo-Assyrian (ninth century–612 *b.c.e.*) and Neo-Babylonian (626–539 *b.c.e.*); and most importantly, it united a large number of different ethnic, linguistic, and cultural realms under its imperial umbrella. The various areas in the empire were on different stages in the development of state institutions. The core countries Iran, Babylonia, Greater Syria, and Egypt possessed a long administrative tradition before they became part of the Achaemenid Empire, while the less populated periphery, such as Arabia and Bactria–Sogdiana, had no or few such structures. The diversity of local customs and institutions posed an unprecedented administrative challenge. Taxation in the Achaemenid Empire is therefore diverse and underwent a steady evolution during the roughly 200 years of its existence.

The best information based on primary sources comes from Babylonia. Numerous clay tablets enable us to evaluate which fiscal and administrative features were inherited from the Neo-Babylonian Empire and which features rather developed under the Achaemenids. Next in number and importance are clay tablets written in Elamite from the Persepolis Fortification Archive. They are part of the local provincial administration in the Persepolis area and reflect on neighboring areas in Iran. Occasionally, the royal administration in a narrower sense linked up with the provincial administration, in particular when the king was present in the area. Otherwise, the highest-tier state administration was probably kept in the Aramaic language on parchment and papyrus. These perishable materials were preserved only rarely, under specific climatic circumstances. We have some remains of the correspondence of satraps and other officials from Egypt and Bactria. Apart from these fragments, state archives are not available. Greek authors provide some

information on taxation, but as usual it is difficult to evaluate the trustworthiness of this information. In particular, Herodotus (*Hist.* 3, 89–97) has suspiciously exact numbers about the total revenue of each province and the empire as a whole, but it remains highly questionable whether these numbers are of any value at all.

Taxation Versus Tribute

The use of the word “tribute” implies that the payment of an amount of valuables (in specie or in kind) is imposed on a subjected area or nation by a higher sovereign. The question of how these funds are raised on the local level is not of immediate relevance. When we discuss taxation, we imply a systematic revenue collection based on assets, income, or the body (in case of a poll tax). Ancient empires, such as the Achaemenid, the Seleucid, and the Roman, are commonly described as tributary empires. Yet, our primary sources demonstrate that elaborate elements such as systematic and regular taxation with a specified tax basis existed. The pertinent ancient sources did not distinguish between tax and tribute. The Old Persian term used for “tax/tribute” is *bāji*, in Elamite *baziš*, which means something like “the king’s share.” The word corresponds to *mandattu* in Akkadian, for example, in Darius’s trilingual Bisotun inscription (edition by Bae 2001). In Akkadian contexts, *mandattu* designates tribute brought by foreign nations but also the payment due to the owner of a slave when the slave is hired out or works on his or her own account. *Mandattu* is best defined as a payment due to a sovereign (German *Gewalthaber*), that is, the king or the state in the context of taxation. State income was derived from two sources: revenue from the tribute/taxation of the provinces and revenue from royal domains. The levy on the provinces was doubtlessly the largest and most important.

Nontax State Revenues

Royal domains existed throughout the empire: we have them attested in Egypt, Greater Syria, Babylonia, Iran, and Bactria–Sogdiana. Domains were households run by local administrators on behalf of the king, the queen, other members of the royal family, or high state officials (see, e.g., Stolper 1985, chap. 3). Their loyalty and their services were remunerated by the income from these domains. Yet, at the same time they were part of a system of institutional households scattered all over the empire that, together with smaller road stations, served as supply stations for traveling state officials, messengers, and military contingents. The number of attestations for royal domains increased in the Achaemenid era with respect to preceding periods. The domains are possibly a Persian strategy, on the one hand, to create and maintain loyalties and, on the other, to make travel and information flow efficient over huge geographical distances.

Herodotus (*Hist.* 3, 91–97) mentions another state income, namely, gifts (*dōra*) from peoples at the periphery who “belonged” to the empire, yet no tribute (*phoros*) was imposed on them. These are the Ethiopians at the border of Egypt, the Arabs, and the Colchians with their Caucasian neighbors. According to Herodotus, they sent presents, allegedly on a regular basis: the Ethiopians sent gold, ebony, and ivory every 3 years; the Arabs sent incense every year; and the Colchians sent slaves every five years. Arabia and Kush (Nubia, south of Egypt) are listed among the subject peoples in Darius’s inscriptions, but it is by no means certain whether they can be identified with the Arabs and the Ethiopians known to the Greeks. However, at least for Northern Arabia (in particular in the town of Time) an Achaemenid administration is attested.

Taxation as a Sovereign Right

The Achaemenid kings left us only few informative royal inscriptions. Darius I's triumphal relief and trilingual inscription at Bisotun is of some relevance here as it lists the subject nations of the empire. Darius makes an explicit connection between his sovereignty and taxation. The payment of the king's share (*bāji/baziš/mandattu*) is the sign of subservience under his rule, together with a general obedience or compliance with his orders. Sovereignty is thus, rather straightforwardly, understood as the reason for the right to impose tribute/taxes. The ideological importance of gift giving as a (symbolic) sign of embracing Persian rule is mirrored in the pictorial program of Persepolis. The staircase of the Apadana is decorated with reliefs showing delegations from the subject nations who bring diagnostic goods from their countries. These scenes probably depict ideal versions of real scenarios, when delegations from various countries took part at an audience. The audience gifts were not taxes in kind but symbols of the support of the nations. Achaemenid royal inscriptions claim that Persepolis itself was built as the royal capital by all the nations: the empire's nations contributed highly valued items (e.g., cedar wood for the roof) but also *corvée* labor (e.g., bricks made by Babylonians, craftspeople from Greece and Egypt). Persepolis became a symbol for the empire as a whole. Its pictorial program is a metaphor for the transfer of material goods as a subject duty, and the thrones or pedestals of Darius and Xerxes in Susa and Persepolis, which are held up by the peoples, present all subjects' "voluntary" efforts to support Achaemenid rule.

Achaemenid Taxation According to Greek Sources

Herodotus (*Hist.* 3, 90–96) gives a detailed list of the yearly tribute/tax revenue that Darius allegedly received from the various provinces or tax units (for a tabular overview of this list, see Briant 2002, 391). Most amounts are stated in Babylonian talents of silver (one Babylonian talent = ca. 30 kg). Only rarely are additional deliveries in kind (e.g., wheat for a garrison in Egypt, 360 horses from Cilicia, and 500 eunuch boys from Babylonia) mentioned. The province “Babylon and the rest of Assyria” was the largest single contributor with 1,000 talents of silver. India’s tribute, actually higher than Babylonia’s, was the only one that was paid in gold. The list has been evaluated contrarily: some authors believe that the detail of the information suggests that Herodotus had access to official documents from royal archives (e.g., Briant 2002, 392), others reject any historicity of Herodotus’s allegations (Jursa 2011b, 444), while some believe that the sum for the total income of the Achaemenid Empire is more or less accurate but the sums for the provinces were Herodotus’s invention (see Armayor in Tuplin 1987, 141; Tuplin 2011, 57). The geographical order of the list betrays a strong Greek point of view which renders the use of official Achaemenid sources as models unlikely (Klinkott 2005, 106). Most importantly, everything we know from primary records contradicts Herodotus’s idea that large amounts of silver were shipped to Persia to be hoarded in the Achaemenid treasuries. Taxes in Babylonia, for example, consisted mainly of military and corvée labor services, only secondarily of payments in kind and possibly in (smaller) amounts of silver. This has led to propositions that the value of labor and the deliveries in kind were transferred into silver on a higher level of administration and that a certain proportion of the locally raised taxes was spent locally, while the remainder was indeed shipped to Persia in the form of silver (Klinkott 2005, 272–274). Herodotus’s account (*Hist.* 3, 90–91) indeed mentions a few cases where a part of the income was expended in the province. Such a case is Cilicia, where 140 of the 500 silver talents were spent on the cavalry of the “guard of Cilicia,” and Egypt, where some of the grain (mentioned in addition to silver) was given for the maintenance of the garrison in Memphis. The occasional references to spending within the province and to “tribute” in kind make clear that otherwise silver payments in specie to the Achaemenid court were truly meant, not a calculation of the total of taxes (in the form of labor or in kind) in silver value. According to Herodotus (*Hist.* 3, 96), the tribute silver was smelted and poured into earthenware. When the king needed money, the vessels were broken and the silver was minted into coins. This also reflects a Greek vantage point. Coins were virtually absent in the core areas Iran, Babylonia, and Greater Syria, where silver was weighed; coins circulated mostly in the northwestern periphery of the empire, which had a tradition in coinage. Greek historians who described Alexander’s conquest reported impressive amounts of silver in Achaemenid royal treasuries. This, in connection with Herodotus’s account, has in the past led some scholars to reconstruct economic difficulties resulting from overtaxation and an alleged drain of silver from the empire (Olmstead 1948, 298ff.). We can now be sure that there was no lack of specie in Babylonia and elsewhere during the Achaemenid period. On the contrary, in the middle of the reign of Darius I we see a severe inflation of prices in Babylonia (Jursa 2010, 746). Furthermore, as Stolper (1985, 144f.) remarked, the silver in the treasuries harvested by Alexander constituted no more than 5% of the total silver tribute of the 190 years between Darius I and Darius III, according to Herodotus’s tribute list. Some scholars emphasized that Herodotus’s number for the total income of the Persian Empire, 14,460 talents per year, is not an absurd amount as this is about thirty times more than the Athenian tax income and about 30% more than Antigonus Monophthalmus was able to raise in the Diadochi period (Tuplin 2011, 54). Nevertheless it is preferable not to attribute historical value to Herodotus’s numbers. The structure of the text and its content contradict what we know from primary sources from Iran and Babylonia. According to Jursa (2011b, 444), it is unlikely that the Achaemenid administration “would have been able to establish the monetary equivalent of the labour that Babylonia made available to the Great King on a yearly basis.”

Apart from occasional references to taxation in various authors, there is one other Greek work that also deals with taxation, namely, the second book of Pseudo-Aristotle’s *Oeconomica*. At the beginning the text provides structural but very general information on the economy of the Late Achaemenid and Early Seleucid periods. The author divides the economy of the empire into four spheres:

1. The royal economy, responsible for coinage, imports and exports, as well as the expenditures of the empire.
2. The provincial or satrapal economy headed by the governor of a province (satrap). It is interrelated

with the royal economy and derives most of its income from land. Further revenue comes from peculiar products, merchandise, taxes, cattle, and other resources.

3. The “political economy” which operates on the city level. Its income derives from merchandise, scarce resources, and taxes.
4. The personal economy on the individual level. Individuals earn a living based on landed property and other various business opportunities.

Most of the tax bases mentioned here can be corroborated by primary sources. Nevertheless, the treatise leaves much to be desired. We do not hear about hierarchies and interrelations between these four levels, for example, that individuals pay taxes to the city and/or the provincial economy and that the provincial economy hands assets over to the royal. Possibly the city was indeed a separate tax unit, but we must be careful not to overinterpret unclear or ambiguous information from contemporary primary sources in the light of the Greek sources. Following this structural overview, Pseudo-Aristotle’s *Oeconomica* continues with anecdotes of dubious revenue collection that are arranged in an awkwardly disconnected manner. They pertain to Asia Minor, the Levant, and Egypt.

Other Greek sources and the biblical books Ezra and Nehemiah give more or less credible but very scattered hints on tax bases and tax collection (references are collected by Tuplin 1987), but no other source approaches the matter in a structural manner.

Achaemenid Taxation According to Contemporary Primary Records

The largest corpus of primary texts consists of clay tablets from Babylonia, written in the Akkadian language. Therefore, most of what we know about various taxes and the basis for taxation pertains to this province. Some, but by no means all, tax types can be assumed for other provinces as well. It is likely that the most important tax bases differed according to the nature of the province. Provinces with a substantial agricultural production, such as Babylonia, Syria, and Egypt, had land as the primary basis for taxation, while in other areas taxes on natural resources or on the growth of herds will have been prominent. The Persians inherited various systems of taxation from preceding states and left, at least initially, most elements in place (Joannès 2006, 55). Some taxes were due empire-wide, such as the provisioning duty “table-of-the-king.” According to Herodotus, this tax was levied in addition to the tribute paid (allegedly) in silver. Certainly, the Persian kings introduced this tax. It was imposed on the subjected territories in addition to the taxes that had been paid by the population to their sovereigns before they became part of the Persian Empire.

Provisioning of the Royal Court and the Royal Administration

The enormous distances between various administrative centers of the empire were a great challenge, not only logistically but also with respect to the subject nations' lasting submission under imperial royal domination. Royal power had to be imminent and visible, at least for a certain period every year. In order to showcase and implement royal power effectively, the king and his court traveled, supposedly routinely, to dwell in four or five different capitals of the empire during various seasons. These capitals were Susa, later Persepolis, Ecbatana, Babylon, and Sardis. The royal entourage traveled slowly. For the convenience of king and court road stations could take the form of royal estates featuring small palaces with gardens, the *paradeisoi* of the Greek sources. Some of these "pavilions" have been excavated; an example is Taokè (near Borazjan [Bushir region]; Tolini 2011, §2.1) at the Iranian coast of the Persian Gulf. These domains were run by administrators who took care of the agricultural facilities belonging to it. When the royal court traveled in a large formation, the expenses exceeded the productive power of the royal domains. The population in the vicinity as well as the local state administrations (such as the Persepolis administration) and temples (attested in Babylonia) had to provide additional foodstuffs. They also bore the burden of grinding the grain into flour. The king's table served the meals not only for the king and his family but also for numerous courtiers, officials, accountants, servants, and armed guards traveling with the king, as well as the horses and mules used during the journeys. In the words of Henkelman (2010, 686), "the king's table" was perceived as "an institution, as a complex organisation with its own rules and hierarchy, with very specific needs and demands, and with its own administrators." Henkelman (2010, 684–689) has shown that the daily amounts of food (cereal, meat, dairy, fruits, wine, beer, and fodder) which Polyaeus (*Strat.* 4.3.32) relates correspond roughly to hypothetical amounts that can be calculated from actual delivery accounts from the Persepolis Fortification Archive. The amounts were huge, and the burden was consequently shared by various contributors—royal estates, temples, and the provinces (via the satrapal administration). A Persian word for provisions, *upa-yāta*, means "by-portion" (see MacKenzie in Henkelman 2010, 711, n. 166); perhaps this originally designated the share of the provinces that was above that which the royal domains could not provide during a stay of the king. A similar word is attested in the Aramaic documents from Bactria (Henkelman 2010, 711, n. 166). The *upayāta*-foodstuffs were not (exclusively) for the "table of the king" but part of a general (tax) duty of provisioning the state administration. With the deliveries came a transport duty by boat and overland. This constituted a related tax, which in Babylonia was called *zebēlu ša upiyāti*, "carrying of the provisions" (mostly by boat), and *kanšu*, a transport duty overland involving donkeys.

The Persepolis Fortification Archive attests to a dense network of royal domains, denser than in other areas of the empire at least during its earlier phase. The royal road had guarded relay stations, partly a heritage from the Neo-Assyrian and Neo-Babylonian predecessors, with storage facilities that had to be filled by the satrapal administration. The same is true for the royal palace, for example, in Babylon, with its own infrastructure that had previously provided for the Neo-Babylonian monarchs and that continued to function in the same manner. However, when the royal court traveled through regions where royal domains were few, the local population had to bear more. Herodotus's statement (*Hist.* 7, 118–120) that (Greek) villages were impoverished for years after the Persian army marched through their territory may be exaggerated, but the delivery of foodstuffs was certainly not only a symbolic ceremonial act but a heavy financial burden. The file of texts pertaining to Cambyses's sojourn in southern Babylonia from the Eanna archive (see Kleber 2008, 84–94) elucidates the delivery of beer, lactating sheep and goats, barley, flour, convenience goods, and sheep taken from the temple's fattening stable, which normally prepared sheep for the offerings. Administrative orders that ordered herders to supply an unspecific number of goats and the general urgent tone of the letters related to that file give reason to doubt whether any specific assessment procedure was involved in the imposition of that tax. Before the reign of Darius, the deliverables were possibly imposed ad hoc, based on the needs of the court. From the time of Darius onward, Babylonian texts often mention *upiyātu* and *zebēlu ša upiyāti*, which may indicate that this tax, or generally a provisioning tax, had become systematic and regular. We should see the introduction of this tax in Babylonia in the context of the completion of a new canal, the Kabar, which connected for the first time the area south of Babylon with Susa. Riverine transport means low transport costs. Only after the canal was functioning did the shipment of large amounts of foodstuffs become economically feasible. According to Herodotus, Babylonia delivered foodstuffs for one-third of the year. We cannot prove this statement through quantifications. However, the introduction of the Persian term and the frequency of deliveries loaded on boats designated for Elam give the impression that the shipment of agricultural produce from the rich alluvial plains to Susa (and perhaps slightly farther) had become a regular feature in Babylonian taxation.

The delivery of foodstuffs was required on more occasions. High-standing Persians and palace personnel were sometimes catered to by private Babylonian citizens—the reason and the context of their sojourn escape us. Occasionally, Carian and Jewish mercenaries were billeted to private Babylonian houses and had to be maintained by these unfortunate households (Waerzeggers 2006; Jursa 2011a, 174).

Taxation in Iranian Texts

According to Herodotus (*Hist.* 3, 97), Persians were exempted from the payment of *phoros*. This may merely reflect Herodotus's idea of a tributary empire. We see that in the Persepolis Fortification Archive people paid *baziš*, “the king's share,” on animals. The animals given as *baziš* are rather few, however, which is surprising in face of the importance of animal husbandry in this area. Pastoralism was very important in certain areas of the Iranian core, and if a tax was raised there, it may have served as the most important tax basis. Alternatively, the *baziš* animals could relate to the “table-of-the-king” tax, a tax that was certainly paid in Iran. More research is needed here.¹ The Persepolis Fortification Archive possibly documents the payment of taxes in the form of labor by other nations in the empire in addition to the labor performed by a deported population that was settled there permanently (Briant 2002, 433f.). Their ethnos was the ordering principle along which the administration of taxation was organized. Workers designated as *kurtaš/garda* were originally workers on royal domains, but later the word was used to refer to any state worker in the archive. While some of the ethnic groups that appear as workers may represent a deported population permanently settled in Iran, others (in particular groups consisting only of men) came nonpermanently to discharge their tax obligation, for example, in building. The palaces of Susa and Persepolis, for example, were built by these taxpayers. The deployment of corvée laborers to the Persis began already in the reign of Cambyses (Henkelman and Kleber 2007).

Taxation in Achaemenid Babylonia

The Achaemenid administration inherited the administrative system and the system of taxation from their Neo-Babylonian predecessors in Babylonia. The same is probably true for the areas that had been dominated by the Neo-Babylonian Empire previously and which fell into Cyrus's hands upon conquest. The backbone of state revenue was land; the alluvial plain of Mesopotamia was extremely fertile. During the “long sixth century” (for the term, see Jursa 2010, 4f.) northern Babylonia had invested in an intensification of agriculture by the planting of date gardens, which could produce more food per hectare than grain (Jursa 2010, 468, 757). Transport was easy and cheap on the many river arms and canals. However, the maintenance of the date gardens and the canal system was labor-intensive, and labor was (together with plough oxen and occasionally water) a sought-after resource. Although in the Neo-Babylonian period the country witnessed a population growth that continued in the Persian era, the demand for manpower remained high. Moreover, the highlands and valleys of Iran were scarcely populated. Consequently, labor and military service were the most important ways to discharge tax duties. The backbone of Neo-Babylonian and Achaemenid taxation was the “land-for-service system.” Its origins go back to the third and second millennia in southern Mesopotamia. At its heart lies the principle that the ruler gave land to individuals who had to render military and various civic services, often in addition to a small tax in kind or later in silver.

In the seventh and early sixth centuries, when state control had recuperated in Babylonia after a “dark age” with much unrest caused by nomadic movement, the crown wanted to strengthen the declined traditional Babylonian cities by facilitating the development of suburban land that had fallen out of use. Land grants to temples and individual benefactors and the sale of land to urban, often priestly families on favorable conditions enhanced the economic base of the cities. The land, called *hanšû* (“fifty”) according to the standard width of the canal fronts of fields of five times fifty cubits, came with tax encumbrances. *Hanšû* land was closely linked to cities and towns; the landholders were the urban population. It was situated in an enlarged agricultural belt around urban centers. The land developments brought the urban elite, who had frequently claimed (and received) various tax exemptions, under royal taxation. *Hanšû* land was in full private ownership—it could be pledged and sold at will. We have land registers for certain areas and, from the reign of Darius onward, general land registries that kept track of ownership. At this time a tax on land sale was introduced, which presupposes a complete registration. The registers were likely used as a means to establish the taxes (or tax-related duties) which every owner or group of owners had to pay/render.

Not necessarily all city dwellers possessed land in the agricultural belt around the city. Urban property could also be the basis of tax assessments, the tax being called “levy of the city-quarter” (*dīku ša bābti*). In the Achaemenid period, when taxation terminology did not distinguish the tax basis anymore, a house could also be called *bīt qašti* (“bow land”), a term that had previously been reserved for military “fiefs” in the countryside (see below, “State Land with Encumbrances”). In the Persian period it simply meant that military service was incumbent on the house. The owners of real estate—but, and this complicates the matter, also professional groups—were organized in units of ten men (*eširtu* [“decury”] or *ziqpu* [“ensign”]) for taxation purposes (Jursa 2009; 2011a, 171). The units of ten often consisted of members of one to three families. Urban and suburban property holdings, profession, and kinship were strongly interrelated; and it is hard to disentangle these to gain clarity about who was taxed where and on what basis. It is likely that a strict disentanglement is in fact impossible but also not necessary because social groups and professional groups possibly flocked together in the same quarters of the city. The position of decurion rotated among the ten men of a tax unit. This *primus inter pares* was responsible for discharging the tax duties of the group vis-à-vis the local administration. An “overseer over fifty” (*rab hanšê*) and a summoner (*dekû*) were responsible for the levy. They operated via the decurions (van Driel 2002, 295), but more research is needed to determine how exactly these officials operated and how their duties related to various higher tiers of the local administration. The idea was that at least one of the ten men had to serve the duty, or they would collectively pay for a substitute, that is, a corvée worker (*urāšu*) for civic labor or a mercenary (*šāb šarri*) in the case of military service. They could either hire such a substitute themselves or pay a sum of money to a fiscal official. This could be a *dekû* (“summoner”), a *rab hanšê*, or a municipal or temple official. The size of the payment presumably depended on the value of the property. Payments from members of the priestly elite were as high as thirty-six shekels per year (per person); in poorer economic strata between two and six shekels were paid in lieu of service. The costs of a substitute consisted of his equipment and his wages. For comparison, the average wage of a hired laborer lay between one and five shekels in the time of the Neo-Babylonian Empire and during the inflation in the reign of Darius between five and ten shekels per month (Jursa 2010, 679). From this time a tax unit of ten men (*ešertu*) paid one mina of silver for the hire of a corvée worker for 6 months, that is, ten shekels per month (Jursa 2010, 652). In addition to the fiscal officials, the recipients of this money from owners of fields and orchards often were *gugallu*. The office of *gugallu* is traditionally translated as “canal inspector,” but he oversaw not only irrigation matters but also matters of taxation (Jursa 2009, 240–247). Sometimes money was paid directly to the urban administration. The preparation and implementation of a civic task (e.g., a royal building project) were the work of municipal, provincial, or temple administrators. With the money (or the people) received they could pay for material and hire workers. Work that was to take place outside of Babylonia was organized in the same way (Jursa 2011a, 171); that is, local Babylonian officials collected the money and outfitted the troop, which was then sent to the destination of their deployment. Although texts sometimes refer to the fact that this was done on order of the satrap of Babylonia, the organization of the tasks was decentralized. We know that Babylonian high officials were summoned to Susa on a regular basis during the reign of Darius, probably for an audit concerning the discharge of their obligations (Waerzeggers 2010).

State Land with Encumbrances

As briefly alluded to above, the state developed rural areas by assigning land to colonists of mostly foreign extraction, not as individuals but as a collective. In return, they bore the obligation to pay taxes, partially in silver, but most importantly to render military and *corvée* service to the crown. In Assyriological literature these state holdings are referred to as “military fiefs” (Stolper 1985, 98f. with references to older literature). There were bow fiefs (*bīt* or *qaqqar qašti*), horse fiefs (*bīt sīsē*), and chariot fiefs (*bīt narkabti*), increasing in size according to the size of the incumbent tax obligation. The holders of bow fiefs were thus responsible to serve as foot soldiers/archers or to furnish archers, while the holders of horse fiefs were part of the cavalry. The most expensive, and therefore largest, fiefs were those that had to outfit a chariot and its team. The land and the service were shared by active soldiers and reserve soldiers. The holders of “fiefs” were often non-Babylonians; most likely the majority consisted of deportees and their descendants. Their status, designated as *šušanu*, was that of a semifree dependent of the crown. They could be ascribed to someone else’s authority by their foremen and were not allowed to leave their fief. The colonists were organized communities called *hadru*, a term that designated the land and the collective of military colonists. In the words of van Driel (2002, 310), “The *hadru* constituted the basic structure, based on the assignment of land, in which the ordinary foot soldier in the country side found his peacetime place.” Each *hadru* was headed by a foreman (*šaknu*) who was responsible for the allocation of land to individual settlers, the colonists’ performance of the tax obligations, and the collection of taxes in kind or silver (Stolper 1985, 70). The “military fief” system had long been viewed as typically Achaemenid, but we now know that it was introduced already in the Neo-Babylonian period. The first attestations come from the reign of Nebuchadnezzar II (Jursa 1998). During the Achaemenid period the system was extended, but also its terminology (e.g., *qaštu* “bow” for military service and the silver compensation) was expanded to include other types of taxable property, such as the suburban land held by private individuals.

Taxes and Services Paid by Temples

Babylonian temples were state institutions and, as such, a structural part of the tax collection mechanisms and institutions that implemented *corvée* labor. Yet, the temples were also large landowners and wielded power over semifree dependents, some of whom were deportees who had been dedicated to the temple by Neo-Babylonian kings. The temples therefore owed taxes and services to the state on the basis of their possessions, but they simultaneously functioned as an administrative arm of the state in taxation matters.

I shall first deal with the temple’s direct tax obligations. Temples paid a small agricultural tax of about 3.33% of the harvest (occasionally other percentages; see Jursa 2011a, 169). This tax had several names, such as “mortar tax” (*kišir esitti*), “life for Bēl” (*balātu ana Bēl*), and most often “provisions of the governor” (*kurummat bēl pīhāti*) “of Bīt-AD” (perhaps *Bīt-abim*, “father-house,” the Babylonian homeland?) or “of Esaggila” (from Nabonidus onward). Esaggila is the name of the Bēl temple in Babylon, the supreme god of the Babylonian pantheon. In particular the latter designation seems to imply a payment from a temple to another temple for religious services and guidance, but in reality this “governor” was a fiscal official responsible for Babylonia (Jursa 2010, 69f; 2011a, 169). The agricultural tax probably ended up in the storehouses of the royal palace in Babylon.

In addition to the agricultural tax, the temples had to supply a standing troop of *corvée* workers, who worked all year long on royal building projects. They were dispatched to construction sites all over the country—to build royal palaces, city walls, military defense structures, and other temples. The size of this troop depended on the size of the temple’s dependent workforce: the larger Eanna temple in Uruk furnished 180 men for *corvée* labor, the smaller Ebabbar temple in Sippar only 50. The civic *corvée* duty was called “labor for the king” (*dullu ša šarri*).

Temple dependents additionally served in the royal army. These soldiers were conscripted by the provincial administration that furnished and commanded army contingents; the temples only had to make men available. Furthermore, sentries were levied through the administrative arm of the temple. They served in small watch posts (*kādānu*) that guarded riverine traffic on the Tigris. These outposts are probably the same as those that lined the royal road (Kleber 2008, 203–214).

Our sources never tell us on which basis the temples were assessed and whether the semifree status of their dependents played a role in taxation or not. The crown was eager to have insight into the temple’s assets and spending, and the kings dispatched courtiers to the temples to keep an eye on the local administrator’s

doings. Cambyses even introduced a royal Aramaic scribe whose task it probably was to inform the crown about the temple's financial state in the script and language of the empire.

As mentioned, the temples also served as local administrative nodes in tax collection and the implementation of royal demands in the realm of civic projects (e.g., construction, maintenance of canals). Priests could discharge their military tax obligations collectively by paying silver in the temple that would then transfer the money to the city governor. The civic corvée labor (*urāšu*) of these free citizens (priests and possibly other free people; see Kleber 2008, 77f.) was organized by the temple. Temple dependents thus served next to free citizens or, more often, hirelings who were paid by the free citizens to carry out the labor duty on their behalf.

The temples were also subject to the provisioning and transport duties related to the “table-of-the-king” tax and possibly to equip road stations regularly with flour. The Urukian Eanna temple had flour ground in a workshop where predominantly female millers worked their fingers to the bone. In addition, they imposed the grinding of flour on local peasants to meet the king's demands (Kleber 2008, 81–83). A flour tax (or grinding duty) does not turn up in our documentation before the Achaemenid period. Presumably, it was part of the provisioning duties imposed by the Persian overlords. As briefly mentioned, we possess an insightful dossier about Cambyses's sojourn in the palace of Abanu in southern Babylonia in the king's second regnal year (Kleber 2008, 85–94). The stay lasted for approximately 7 days. Roughly from the accession year of Cambyses to his fourth regnal year the country was struck by a drought that led to harvest failures (in particular barley; see Kleber 2012) and to the death of a large number of the temple's animals that could not find enough pasture. This situation made the burden to provide for the court extra heavy. An anecdote related in a legal text gives us a unique insight into the resentment of ordinary Babylonians with respect to this burden: a temple shepherd testified at court that a certain Bēlšunu, a temple dependent, had illegally slaughtered a sheep of the temple (in order to eat it). When the shepherd tried to hinder him, they engaged in a skirmish in which Bēlšunu strangled him with his necklace (chain), saying “This way Gubāru and Parnakku put neck-chains on the people” (for the text, see Jursa 2014, 79f.) Gubāru was the satrap of Babylonia, and Parnakku was a royal court official who features in Babylonian texts in connection with the preparation of the royal banquet in Abanu. He may have been the manager-in-chief of the “king's table,” while the satrap had passed on the royal order to the temples in his province. The fact that Bēlšunu refers to Parnakku reveals that his resentful utterance commented on the food delivered to the king while Babylonia's population was starving.

Indirect Taxes

Already during the time of the Neo-Babylonian Empire indirect taxes, such as harbor, bridge, and gate tolls, were raised. A sales tax was due on the transfer of real estate, registered by notaries in a land registry that probably served to assess the taxes charged on the possession of landed property. These taxes were simply continued after the Persian conquest. In the Achaemenid period a sales tax on slaves was added.

Taxes on the transport of goods were raised at city gates (*mūšu* tax) as well as at bridges (*mīksu* tax) and harbors (*kāru* tax). They consisted of a percentage of the transported goods. The few quantifiable data suggest that one-thirtieth of the value of the cargo was charged. These taxes were most often paid in silver, only rarely in kind; and it seems that the officials, who at least in the Hellenistic period were tax farmers, preferred silver payments (Jursa 2010, 646).

A payment for irrigation rights from canals was owed to the proprietor of the land, including temples, private persons, and the crown. It is not certain whether there was a general water tax payable to the royal administration (Jursa 2011a, 174; but cf. Joannès 1990, 185). If so, it may have served the maintenance of the irrigation system.

By at least three different Greek sources, Darius is remembered as the king who introduced taxation or as a reformer in the realm of taxation. In the passage discussed above, Herodotus (*Hist.* 3, 89) claims that Darius imposed a fixed tribute for the first time which earned him the byname “shopkeeper/huckster” (*kapelos*) “for Darius made petty profit out of everything.” According to Polyaeus (*Strat.* 7, 11.3), Darius introduced taxation and, in order to avert the ensuing unpopularity from his own person, had his provincial governors collect a huge amount but kept only half of it. The other half was returned “to the people.” In Plutarch’s writings (*Moralia* 172f.) this fantastic story took a slightly different form, now lacking any negative undertones and turning the king into a generous figure: Darius allegedly asked his satraps whether the tribute was not too high. When they said it was moderate, Darius ordered that they should pay only half as much.

Some historical truth may be reflected in the Greek statements as firsthand evidence from Babylonia corroborates the picture of Darius as reformer of the taxation system. New taxes such as the provisioning of the court in Susa became regular and systematic, and new tax terminology appeared, including Iranian terms like *upayāta* (“provisions”). Furthermore, the differences in terminology that go back to the origin of a tax—and thereby the tax basis—become blurred from his reign onward (for an overview of taxation terminology, see Jursa 2009, 255–263; 2011b, 441f.; Joannès 2006). While previously land in private hands was distinguished from state land (the “military fiefs”), the terminology used for the latter was now extended to the former. Furthermore, urban property also became part of that tax scheme. We cannot quantify anything, and therefore, we have no positive proof; but it is likely that this resulted in an increase in the overall tax burden (Jursa 2009, 266).

Although the phase of stabilization of the imperial structures began in Darius’s reign, the phase of expansion was not yet over. In 518 *b.c.e.* he added India to the empire; in 513 *b.c.e.* he fought against the Scythians before he had to deal with the Ionian revolts in the years 499–493 *b.c.e.* But it was not only war that drove up the expenses: huge distances in the empire needed to be overcome and places of representation built. The investments in infrastructure to enhance spatial integration in the empire—in particular to connect Iran and the western parts, that is, the areas of the former Neo-Babylonian Empire that were separated by the Zagros Mountains—started already in the reign of Cyrus. The Kabar Canal was built as a new major waterway that connected the area south of Babylon with Susa directly for the first time (Tolini 2011, §1.2.; Joannès 2006, 54). Royal domains with palaces were founded to serve the itinerant court as road stations. Later, Darius started expensive building programs in Susa and Persepolis. Labor was coerced from various nations, and laborers had to travel to Iran to discharge their *corvée* obligations (Henkelman and Kleber 2007). In view of the shortage in labor, this may have been a heavy drain of resources to the benefit of the center but to the detriment of Babylonia and other parts of the empire. The northern Babylonian insurrection in Xerxes’s second year (484 *b.c.e.*), a losing game from the outset, should perhaps be seen in the light of this drain of resources and the overall policy of Darius toward the Babylonian elite, which may have suffered a disproportional increase in their share of the tax burden. The suppression of this revolt was most likely violent, resulting in a disempowerment of the priestly elites. Their archives form a large part of our available sources, but these archives end, almost simultaneously, by 484 *b.c.e.* (Waerzeggers 2003–04). It is likely that the archive owners, bearers and supporters of the rebellion, were dispossessed and possibly deported. When our sources reappear after the reign of Xerxes, we see that the traditional pattern of (fiscal) administration had changed. Municipal officials appear rarely, which may indicate that they lost their former influence. Instead, offices with Iranian designations, such as *dātabara* and *ammākaru*, appear more often; but they do not completely replace corresponding Babylonian titles (Stolper 2006, 229f.). Aramaic scribes (*sēpiru*) and bailiffs (*paqdu*) are frequently attested as agents of the crown. More research is needed here, but it seems likely that through the course of time an (imperial) administrative layer was introduced, partially replacing previous power structures, partially simply forming a new administrative level on a higher tier with direct links to the satrapal, and partially including even royal administration.

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- 1 For now, see Briant (2002, 440f.). Currently (2014–2019), a research project, "A Fiscal History of the Achaemenid Empire," financed by the Dutch Organization for Scientific Research, is being conducted under the leadership of the author of this contribution at the VU Amsterdam. The project will tackle issues of taxation and administration that are still unknown.