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PLINY AND THE USES OF THE AERARIUM SATURNI AS AN ADMINISTRATIVE SPACE

KAIUS TUORI*

Introduction

Like many of his peers, Pliny the Younger would reminisce about his youth and the different experiences he had during his career. In one of his letters, he would describe his tenure as *praefectus aerarii* (*epist.* 1,10), which he held in AD 98 under Nerva. While he described his duties as dull, the account is one of the very few first-hand testimonies on the work of a Roman official during the Principate, not as an idealized or general theme, but as a practical part of the administration at work.

The purpose of this article is to explore Pliny's narrative on the *aerarium*, commonly known as the treasury of Rome, and what it tells of the functions of the *aerarium*. Through comparisons with other depictions of the workings of the *aerarium*, such as that by Cicero, the aim is to present a tentative reconstruction of the operation of this central piece in the Roman administrative system. With the help of this reconstruction, the article will then re-evaluate the different alternatives that have been presented regarding the location and operation of the *aerarium*.

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¹ See Corbier 1974, 131–143 on Pliny and his career.

The *aerarium* or as it was later called, the *aerarium Saturni*, handled public money, stored contracts and the texts of the laws that had been passed, preserved the lists of taxes and debts to the state, and so on. In short, it was both the archive and the "cash box" of the Roman state. It has been located in numerous ancient sources in the Temple of Saturn.²

Earlier research on the *aerarium* has focused on two main aspects, namely the officials who ran the *aerarium*, mainly on the prosopographical study of their careers,³ and the role of the aerarium in the system of public record holding in Rome. In this second aspect, there has been a concerted effort to re-evaluate not only the public records but also the buildings involved, which has led to numerous debates regarding the identification of the *tabularium* in particular. Thus, while Corbier has contended that the location of the *aerarium* would have been in the temple itself and its podium, Mazzei and Coarelli have argued that the archival functions would have been in several locations.⁴ In recent scholarship, it has been observed that the archaeological, epigraphical and literary evidence regarding the *tabularium*, *aerarium* and other public buildings of the area is immensely complicated, and all conclusions are more or less provisional. One of the difficulties is that Roman authors use terms like *aerarium*, *tabularium* and

² See, for example, Fest. Gloss. s.v. 'Aerarium'; Lucan. 3,115 Saturnia templa; App. B Civ. 1,31,1: ἐξανίστατο ἐς τὸν τοῦ Κρόνου νεών, οὖ τοῖς ταμίαις ἐχρῆν ὀμνύναι, καὶ ὅμνυε σὺν τοῖς φίλοις πρῶτος; Sol. 1,12 Saturni aerarium; Macr. Sat. 1,8,3 Aedem vero Saturni aerarium Romani esse voluerunt; Serv. Georg. 2,502 significat autem templum Saturni, in quo et aerarium fuerat et reponebantur acta, quae susceptis liberis faciebant parentes; Serv. Aen. 8,319 ideo autem in aede ipsius Saturni aerarium, quod ibi potissimum pecunia servaretur, eo quod illi maxime credatur and 8,322 nam ideo et acceptae a populo leges in aerario claudebantur, quoniam aerarium Saturno dicatum erat, ut hodieque aerarium Saturni dicitur; Asc. Mil. 36; Plut. Vit. Popl. 12 : ταμιεῖον μὲν ἀπέδειξε τὸν τοῦ Κρόνου ναόν, ῷ μέχρι νῦν χρώμενοι διατελοῦσι, ταμίας δὲ τῷ δήμῳ δύο τῶν νέων ἔδωκεν ἀποδεῖζαι·; Plut. Tī. Gracch. 10,6 τῷ δὲ τοῦ Κρόνου ναῷ σφραγίδας ἰδίας ἐπέβαλεν, ὅπως οἱ ταμίαι μηδὲν ἐξ αὐτοῦ λαμβάνοιεν μηδ' εἰσφέροιεν, καὶ τοῖς ἀπειθήσασι τῶν στρατηγῶν ζημίαν ἐπεκήρυξεν, ὥστε πάντας ὑποδείσαντας ἀφεῖναι τὴν ἐκάστῳ προσήκουσαν οἰκονομίαν. On the literature, see Mommsen 1871–1888, 2.1, 545–546; Millar 1964, 33–40; Corbier 1974, 671–692; Culham 1989, 100–115 at 103, 112–114.

³ Corbier 1974 being the most extensive.

⁴ On discussions about these locations, see Corbier 1974, 632; Mazzei 2009, 288–294; Coarelli 2010.

atrium libertatis almost interchangeably about places where public documents were deposited.⁵

Through a reading of Pliny's account, this article seeks to explore a different alternative in that it first attempts to assess what we know of the *aerarium* and then estimates the space, both in terms of quality and quantity, that would be needed to perform the functions that Pliny's eyewitness account assigns to it. The method utilized is that of making estimates or approximations of the quantities of units, such as writing tablets used for certain purposes based on the sources available, and then extrapolating the volume of space needed to store them.

The issue of locating and reconstructing the *aerarium* is linked to a larger *lacuna* in the literature. The spaces where routine administration was performed in the Roman world have been to a large degree neglected when compared with the attention given to people in the administration. For the nineteenth century pioneers of the study of Roman administration, the issue was not one of great interest. This is evident in classic works on Roman administration, such as those by Mommsen or Hirschfeld. Mommsen only briefly referred to the built surroundings when discussing the censors and quaestors, namely the *villa publica* and the *aerarium*. Hirschfeld is more inclined to refer to minor officials and their stations. A similar tendency is evident in more recent works, in which issues of space are largely absent. However, perhaps as a result of the general spatial turn in the humanities, there has, in recent years, been a surge in studies on the issues of official space, such as the spaces of justice in the Roman world.

Even then, there has been very little in the way of concentrated investigation about the spaces where Roman administrative duties were carried out.⁹ Many have brushed the issue aside as futile, with blanket statements such as "No ancient office building and no ancient desk will ever be discovered".¹⁰ Yet,

⁵ For example, Liv. 43,16,13; Liv. 45,1; Serv. *vita Verg.* 2,502. On the sources on the *aerarium* and the *tabularium*, see Weiss 1932, 1963–1966; Purcell 1993, 2010; Mazzei 2009. On the various *tabularia*, see Balty 1991, 151–161.

⁶ Mommsen 1871–1888, 2.2, 359, 545, put some effort into discussing vehicles such as carriages and seats such as chairs or stools (Mommsen 1871–1888, 1, 393–408; Hirschfeld 1905, 5, 41.

⁷ See, for instance, Kolb 2006; Ausbüttel 1998; Robinson 1992.

⁸ Bablitz 2007; de Angelis 2010; Färber 2014.

⁹ Of the recent studies, mention may be made to Färber 2012; Castorio 2006; Gros 2001.

¹⁰ Purcell 1988, 150–181, at 175.

within the study of some administrative agencies such as the *cura aquarum*, scholars have made tentative attempts to locate the spaces where their offices might have been.¹¹

Behind the issue of the spaces of administration there are important questions about the role of public administration in Roman society and thus the problem of where to draw the line between public and private spheres. In the advances made in the study of the public sphere in the Roman house (*domus*), ¹² a new model for understanding Roman administrative space has emerged in which public venues for meetings between magistrates and citizens were complemented by the use of *domus* as a locus for the meetings of magistrates as well as the drafting of documents. These studies have noted the importance of the "blurred" nature of the private aristocratic house in public life and how the model of the private household spread throughout the imperial administration. ¹³ The separated public administrative space emerges as the exception, used in cases where the administrative activities themselves prompt the use of public space. The *aerarium* is a good example of such a space, where the nature of the activities, such as storing money and public records, would not be feasible in a private dwelling.

Roman officials were not tied to a specific location in their activities and official acts could, at least in theory, take place wherever the magistrate was at the time. For instance, the *Institutes* of Gaius mentions that manumissions were such routine events that they were performed even on the way from one place to another, for example when a praetor or a proconsul was on the way from the baths or the theatre (Gaius *inst.* 1,7,20). The second aspect that is intriguing about the Roman model of administration is the lack of sources about a dedicated space for the administration of the city or the empire. What this meant was that outside the few spaces where there is some evidence that magistrates or representatives of the state met with the people, such as the tribunals of the

¹¹ Bruun 1991, 195–196; Bruun 2007, 9–11.

¹² Tuori and Nissin 2015; Bowes 2010; Winterling 2009; Zaccaria Ruggiu 2005; Carucci 2008; Ellis 2000; Grahame 2000; Hales 2003; Riggsby 1997; Grahame 1997; Treggiari 1998; Laurence and Wallace-Hadrill 1997; Wallace-Hadrill 1994.

¹³ Even in earlier literature, the significance of private houses in the public life of the aristocracy has been noted (for example, Millar 1992, 15), but their role as a site for administrative activity has been neglected. Eich 2005 has argued for a new understanding of private households as the emerging model for Roman imperial administration.

praetors in the Forum or the *sportulae* for the grain distribution, we have little idea where the administrative apparatus of the Roman state worked. Exploring the *aerarium* in practice opens up new possibilities to assess the locations of administrative activity.

Pliny in the aerarium

Writing about his time as *praefectus aerarii*, Pliny mentions, albeit rhetorically, that his duties, the work done on public contracts, documents from debts, the *commentarii* of officials, the accounts of the state as well as the financial affairs of the state, were exceedingly dull:

Nam distringor officio, ut maximo sic molestissimo: sedeo pro tribunali, subnoto libellos, conficio tabulas, scribo plurimas sed illitteratissimas litteras. Soleo non numquam (nam id ipsum quando contingit!) de his occupationibus apud Euphraten queri. Ille me consolatur, affirmat etiam esse hanc philosophiae et quidem pulcherrimam partem, agere negotium publicum, cognoscere judicare, promere et exercere justitiam, quaeque ipsi doceant in usu habere. (Plin. epist. 1,10.)

My time is taken up with official duties, important but none the less tiresome. I sit on the bench, sign petitions, make up accounts, and write innumerable—quite unliterary—letters. Whenever I have the chance I complain about these duties to Euphrates, who consoles me by saying that anyone who holds public office, presides at trials and passes judgement, expounds and administers justice, and thereby puts into practice what the philosopher only teaches, has a part in the philosophic life and indeed the noblest part of all.¹⁴

The nature of Pliny's work required two types of environment. He needed a space in which to interact with the public and one in which he could concentrate

¹⁴ Tr. by Radice 1969.

on working with documents away from the public gaze. In the text, Pliny divides his duties into four activities, 1) sitting on the tribunal, 2) signing *libelli*, 3) preparing documents or tablets and 4) writing official letters. These activities may be divided into two categories, the first is being available for consultation and receiving cases, the second is devoted to running the administration through the process of writing, both approving documents, producing them and engaging in correspondence.

In the first category, the account is both clear and presents a number of issues: first, where was Pliny's seat or office located? He uses the phrase *sedeo pro tribunali*, but would this mean that it was inside a building and what building would this be? The second issue is naturally what he means by *pro tribunali*? In common usage, Roman tribunals were raised platforms under the open sky, where magistrates would execute their duties in public, such as in the case of the praetors and the judges, who would conduct legal proceedings from their tribunals. Whether this would be the case here is questionable. Of course, Pliny was a *praefectus aerarii*, which was a fairly new position as emperors added a new layer of supervision, partially replacing but in practice demoting the quaestors from running the *aerarium*. Pliny himself had earlier served as quaestor in AD 89. Later, *praefecti aerarii* had jurisdiction in fiscal matters, especially regarding the interest of the state, and the fact that Pliny talks of his tribunal may well refer to these duties (Plin. *paneg*. 36; *Dig*. 49,14,13).

The second category, approving documents, producing them and writing official correspondence may be considered distinct from the first, because it would demand seclusion from the public. Dictating, writing, reading and listening to documents being read out were all activities that necessarily were conducted in a place where sensitive information could not be overheard or seen and where there would be a suitable place for both Pliny himself, and for assistants, scribes and other officials, not to mention slaves, to sit and work. In short, an office in the modern sense.

What were these documents that Pliny writes about? The *libellus* mentioned by Pliny is an interesting category. In the legal context, the word *libellus* refers to a petition, usually one made by a petitioner and delivered in person to the emperor. The term *libellus* could also refer to a petition to officials, not simply the emperor. In any case, in the legal world *libellus* had a technical meaning

¹⁵ On the tribunals as administrative spaces, see Coriat 2015.

that suggested that they were appeals that were outside the normal procedure. During the later Principate, they were handled by a secretary *a libellis*, who was often a lawyer and later the term became synonymous with a legal appeal. ¹⁶ In the case of Pliny, who was knowledgeable in law, it is possible that the *libelli* were in fact petitions, for instance, from taxpayers to the *aerarium*.

The *tabula* was another term with multiple meanings, from writing tablets in general to a specific legal significance. In the most general meaning, *tabulae* were simply writing tablets that were ubiquitous in ancient Rome, either as boards painted white, covered with wax or metal sheets. As a technical term, *tabula publica* referred to official documents, from laws, *senatusconsulta*, edicts and protocols of elections, and in the more narrow sense the *commentarii* of magistrates, treaties and other official documents. *Tabula privata* was the opposite, being a general term for contracts and other private documents. The preparing and authenticating of *tabulae* were highly symbolic acts, and some have even claimed that these acts contained ritual meanings that contributed to the validity of contents. ¹⁷

Litterae in this case referred most likely to letters and missives used to coordinate activities and interact with the people. In the text, Pliny makes a clear distinction, one present also in ancient epistolography, between literary letters or letters as an art form, and letters as a form of official communication. Pliny himself was naturally well known for his open letters, i.e. a private letter intended for public consumption, even distinguishing between a real and a literary letter, ¹⁸ but here he makes it very clear that this was merely a bureaucratic format.

In all of these cases, it is apparent that Pliny's use of precise concepts for different categories of official documents demonstrates his grasp of administrative minutiae and the numerous tasks of the *aerarium* beyond mere archival storage.

¹⁶ Schiemann 2018; Honoré 1994. For example, Cod. *Iust.* 4.62.1, 8.37.1. See *Dig.* 1,4,1,1 on the subscription as the imperial response to a *libellus*. In some cases, such as Suet. *Claud.* 15 or *Ner.* 15 it is difficult to say whether the term *libellus* means simply a writing tablet or a specific petition. The context is legal but the meaning is not specific.

¹⁷ See Meyer 2004, 24–43 and Sachers 1932 for discussion and ample references to literature.

¹⁸ Plin. *epist*. 9,28; Sherwin-White 1966.

The location and function of the aerarium

Considering the tasks of the *aerarium*, it was not surprising that a separate and secure location would have been needed. Large quantities of money and gold could not be stored in private homes for security reasons, likewise the accounts of public debts could have been the target of rioting mobs.¹⁹

During the Republic, the administration of public finances was the task of quaestors (*Dig.* 1,2,2,22), of which some were appointed as guardians of the *aerarium*. Augustus appointed praetors for the administration of the *aerarium*, but during the reign of Nero, senatorial *praefecti aerarii*, men who had formerly been praetors, took up the oversight duty in an arrangement that continued until the early reign of Trajan. However, the administrative arrangements with quaestors, praetors and prefects alternating continued for much of the Principate (Tac. *ann.* 13,28–29).²⁰

From the earliest references in ancient sources onwards, the location of the *aerarium* is placed at the Temple of Saturn in the Forum. Festus, an Augustan source, writes that the aerarium of the Roman people is located in the temple of Saturn, *in aede Saturni*. According to Plutarch, Publicola made the Temple of Saturn the location of the *aerarium*, because he thought it necessary to store public funds somewhere else than in his own or somebody else's home. He also ensured that the people appointed the first quaestors. ²²

Beyond these general statements, how is it then possible to locate an important and possibly sizable administrative space such as the *aerarium*? The sources relating to administrative space may be divided into two categories, archaeological and literary. With the first, the question is whether an administrative space could be recognizable through its location or architectural properties? Even hypothetically, would a room where Roman magistrates and their staff worked have distinctive characteristics?

Where archaeological remains are concerned, examining the theory regarding the lack of offices or desks is perhaps also a question of where to search.

¹⁹ On the destruction of tax records, see Meyer 2004, 110

²⁰ Corbier 1974, 18–19.

²¹ Fest. Gloss. s.v. 'Aerarium'.

²² Plut. Vit. Popl. 12. On attempts to locate the aerarium and tabularium in different periods, see Mazzei 2009, 282–330.

There were no desks among the carbonized furniture or in the wall paintings in the cities around Vesuvius. As furniture has not been largely preserved outside the area of the Vesuvian eruption,²³ identifying potential locations for offices must rely on conjecture on the uses of space in preserved structures. But with epigraphic sources, can we assume that the inscriptions mentioning a *cura* or a *statio* indicate a place where the administration worked? The second category is equally complicated. Even Latin is of little help, because there is no real equivalent to the word "office". The term *officium* related more to the magistracies themselves (or rather to their duties) than to any physical space (but see *in praetoris officio*, in Plin. *epist.* 1,5,11, or *Dig.* 4,5,6 *officia publica*). The term *secretarium* or other concepts related to office space (*cancelli, scrinium, burel-lum*) could indicate a place for secretarial staff, but these words tended to be used mostly in later sources, not those of our period.²⁴

Even Vitruvius, our sole source about Roman architecture, has very little on offices, though he includes *aerarium* among the buildings that each city should have. His administrative buildings are the forum, the basilica, the treasury/*aerarium* and the *curia*. In the depiction of the treasury and the *curia*, the onus is on their usage as a place for storing money or as a meeting-place, respectively, not a place where office work would have taken place.²⁵ Instead of approaching the issue through finding an ancient counterpart to a modern office, one should begin with the question of what do the Romans tell us about where they worked.

Though the writing (or dictation) of letters and documents is a prominent activity, one that is mentioned frequently, it is not regularly connected to a particular place. A good example is the story given by Pliny (*epist.* 5,5) about his friend writing in his bed (*in lectulo suo*) as usual (*ita solebat*). What is even more frustrating is the tendency of the technical writing on administration, for example the works of Frontinus, to completely sidestep the places where administration worked.

²³ Mols 1999 does not record a single table suitable for use as an office desk, only small decorative tables. However, see Wallace-Hadrill 1994 on the difficulties of deducing things from the poorly preserved extant furniture.

²⁴ Secretarium comes up first in Lact. mort. pers. 15,5; Cod. Theod. 1,16,7 and Cod. Iust. 3,24,3 and 9,2,16,1.

²⁵ Vitr. 5,1–2.



Figure 1: Altar of Scribes, funerary altar dating to AD 25–50. Museo Nazionale Romano, Terme di Diocleziano, inv. 475113. Picture by the author.

A very crucial issue in examining the locations of administrative activities such as the aerarium is tracing the way in which scribes worked. Roman officials would normally dictate their letters and other texts to scribes. The actions taken by scribes were very varied and depended on the working relationship with the principal. Of the principals, some would write themselves, some would dictate letters word by word, some would merely draft out a general message and tone, leaving the secretary to select the actual wording of the text. While authors like Caesar and Pliny could compose and dictate letters while travelling, more serious writing would take place at home. ²⁶ Dictation, signing letters and reading correspondence was constantly being carried out.²⁷ The concentration of official work at home is evident in the way Pliny would note that his uncle would meet Vespasian before dawn for a salutatio and to conduct business, after which he would return home for his literary work (Plin. epist. 3,5). Where the actual drafting of letters would take place is another matter. Cicero's brother Quintus would rely on his trusted secretary Statius to prepare his letters in advance and he would then sign them. The wording used by Cicero implies that they were brought to his house already written, suggesting that the letter writers

²⁶ Plut. Vit. Caes. 17,3–4; Plin. epist. 3,5, 9,10. On the functions of secretaries in writing, see Richards 1991, 14–127.

²⁷ Plut. Vit. Caes. 63,4: Caesar would sign letters even at dinner table.

would have worked on them elsewhere (Cic. *ad Q. fr.* 1,2,8). Cicero writes to his own secretary, the freedman Tiro, that his services have been invaluable both in private and public affairs, in his provincial duties as well as in the city, both in the forum and in public affairs (Cic. *fam.* 16,4).²⁸ Would this mean that Pliny could have worked at home, dictating the official letters to his trusted scribes?

Another source for the arrangement of office spaces and desks are funerary reliefs. ²⁹ They are fairly rare, but two prominent examples should be mentioned: the so-called Altar of Scribes (*Ara degli Scribi, Fig.* 1) and a funerary relief of a banker. The first, dating from the reign of Tiberius, portrays a scene where a seated magistrate, perhaps a curule aedile, is surrounded by scribes. In the centre is a small, low table and on it five *tabulae* that provide the focus of attention. ³⁰ The second is a much coarser relief, showing what appears to be a banker at his

desk. In this depiction, the desk is a large, sturdy table of roughly the same height as a modern desk.31 In the Altar of Scribes, the scene is clearly from a secluded setting and the arrangement of furniture could easily be from a domestic environment. In contrast, the banker behind his desk (Fig. 2) is portrayed as ready to receive clients. There is one further funerary relief of a magistrate, but it shows him seated on a sella curulis, beside a round contain-



Figure 2: Figure of a banker, freedman A. Fonteius Aphrodisius, detail of a Late Republican funerary relief. Museo Nazionale Romano, Terme di Diocleziano, inv. 939. Picture by the author.

²⁸ On Cicero's views, see Treggiari 1998.

²⁹ See Houston 2014 for more references to images.

³⁰ Museo Nazionale Romano, Terme di Diocleziano, inv. 475113. See Zevi 2012 for details.

³¹ Museo Nazionale Romano, Terme di Diocleziano, inv. 939.



Figure 3: Funerary monument with a sella curulis. Museo Nazionale Romano, Palazzo Massimo alle Terme, inv. 124483. Picture by the author.

er of documents (Fig. 3).³² What is missing from these examples is the context or the location where these activities took place, whether it was a room or an open space, though from the pillars and the rooflike structure it may be possible to infer that the location would have been either indoors or in a courtyard.

What is clear is that Roman administration relied on writing and thus required space not only for the physical task of writing and drafting documents through dictation, but also for reading, reviewing and discussing the documents, not to mention storing them. What they present is an understanding of the physical settings that surrounded a scribe or magistrate, but do not give a specific location. A comparison of sorts may be drawn from the libraries of the Roman world, which were also spaces where reading, writing and the storage and retrieval of information were crucial, to argue for the basic need of space to store data.³³ As is apparent from Pliny's account, the *aerarium* was not only a place to store information, it would also have needed to be a place to draft and copy documents and letters and a place where their contents could be discussed.

In conclusion, preparing and handling documents as well as other literary activities could take place basically anywhere, even at the home of the magistrate. The only limitations were cumbersome and sensitive documents such as

³² Museo Nazionale Romano, Palazzo Massimo alle Terme, inv. 124483.

³³ On libraries, see Houston 2014.

those stored in the *aerarium*. The *aerarium*, as the custodian of financial and legal information, would have needed some kind of secure locations where legal matters could be handled and documents prepared. However, it is clear from both the lack of information about particular office spaces and the iconographic evidence about scribes, that the act of writing did not itself require a specialized location or much in terms of space. Before we come to the volume of this documentation, I shall first attempt to estimate the number of officials working within the *aerarium*.

Who worked at the aerarium?

The main officials of the *aerarium* during Pliny's tenure were the *praefecti* and the quaestors. In addition to Pliny and other magistrates serving in short-term positions, there were specialized staff working in the *aerarium*, but it is likely that there were also the standard functionaries, scribes and messengers that were typical of Roman administration. From inscriptions we know that clerks such as the *tabularii* were permanently employed there.³⁴ Because the *aerarium* was not the only repository of public funds, often being overshadowed by the nominally private imperial *fiscus*, there were also other places where clerks handling money operated. For example, the jurist Ulpian refers to the *arcarii Caesariani* (cashiers of the imperial treasury), who had their *statio* at the Forum of Trajan.³⁵

What about the staff of the magistrates? The functionaries who supported the administration were both free men and slaves. We know especially from epigraphic sources that the clerical staff that aided magistrates included scribes (*scribae*), messengers (*viatores*), criers (*praecones*) and others.³⁶ They were organized in *decuriae*, from which they were assigned to individual magistrates by lot. These *decuriae* were attached to a collegium of magistrates, for example the praetors, quaestors, or aediles. Far from being lowly clerks, the members of the *decuriae* of *apparitores* had a secure position as office holders. Having a good

³⁴ CIL VI 1930: tabularius viatorum quaestoriurum ab aerario.

³⁵ Frg. Vat. 134: arcarii Caesariani, qui in foro Traiani habent stationes.

³⁶ The most famous scribe was of course Gnaeus Flavius, the scribe of the aediles (and a future curule aedile) who revealed in 304 BC the secrets of *ius civile*. Cic. *Mur.* 11,25; Liv. 9,46,5; *Dig.* 1,2,2,7.

scribe was naturally important and thus it was customary that in addition to the official salary paid by the *aerarium*, the magistrate would reward clerks at the end of the year.³⁷ However, we have no information about how many of these *apparitores* were at any given time at the *aerarium*.

In the life of Cato the younger, as we are told, Plutarch mentions how as quaestor Cato had trouble to get the old and experienced clerks of the *aerarium* under control. Unlike previous quaestors, Cato would take the trouble to learn the finer details of the *aerarium*, the laws governing it and the way it worked. According to Plutarch, the clerks and assistants had become used to having inexperienced young men as their superiors, whom they could control as they wished. Cato would prevent them from ingratiating themselves through their offices and would even bring to trial the most stubborn of them.³⁸ The lowest rung of administrative personnel, public slaves, *servi publici*, were attached to different offices and magistracies. They were employed not only in manual work but also in the technical administrative tasks.³⁹

Based on this information, we can conclude that in the *aerarium* there were a number of magistrates and officials of different ranks, from the *praefecti* to public slaves. Pliny as *praefectus* mentions how he sat on his podium, indicating that it was most likely placed outside the building as was typical of Roman magistrates when meeting the people. Beyond that, the magistrates, officials and scribes would have needed a place to sit and work. However, their number was relatively small and thus a few rooms may have sufficed to provide suitable spaces for the work of drafting documents, receiving correspondence and so forth. High-ranking magistrates like Pliny may have used their private residences for some of their work, such as that which required concentration, while scribes may have had a common office either in the *aerarium* or its vicinity. 40

³⁷ Despite this, we know that some scribes were attached to particular persons for a certain length of time and for different offices. Jones 1949, 155–159; Cohen 1984, 35–49. Purcell 1983 argues that the positions for *apparitores* were an important route for social advancement, but the evidence for this is fairly limited.

³⁸ Plut. Vit. Cat. Min. 16; Plut. Quaest. Rom. 42.

³⁹ Cohen 1984, 30–32. The issue of *servi publici* is the focus of a new project by Federico Santangelo and Franco Luciani. See Luciani 2017.

⁴⁰ Where messengers and heralds waited for commissions or slaves worked is not known, but a separate space is not likely.

What was stored in the aerarium?

The storage function of the *aerarium* is fairly well attested in the literary sources. In his account, Pliny mentions work on the accounts of the state and the correspondence and litigation relating to them. Cicero mentions how the *aerarium* kept copies of the laws and was supposed to provide them on demand, but the scribes were often reluctant to comply with requests. What we know of the functions of the *aerarium* comes from similar accounts referring to a single usage.⁴¹

Taken together, the list of items mentioned in the literary sources as being preserved at the *aerarium Saturni* are (1) the standards of the legions (Liv. 3,69; 4,22), (2) texts of laws on bronze tablets (e.g. Suet. *Iul.* 28; Cic. *leg.* 3,20,46–48; Serv. *Aen.* 8,322) and (3) *senatusconsulta* (Joseph *AJ* 14,10,10; Plut. *Vit. Cat. Min.* 17; Cic. *leg.* 3,4; Tac. *ann.* 3,51), (4) fiscal documentation such as public contracts, documents from debts and the accounts of the state (Plin. *epist.* 1,10; Plut. *Vit. Cat. Min.* 17; Serv. *Georg.* 2,502; Plut. *Quaest. Rom.* 42), (5) the *commentarii* of officials, containing protocols of elections and the lists of *iudices* (Cic. *Verr.* 2.1.57; Cic. *Phil.* 5,5,15), and (6) the moneys of the state (Lucan. 3,154; App. *B Civ.* 1,31,1; Plin. *Nat.* 33,56; Plut. *Vit. Caes.* 35; Plut. *Quaest. Rom.* 42.).

To store these, the *aerarium* needed to have a considerable amount of room. The storage of information in Rome required a lot of space, scrolls taking up a large amount of room compared with flat storage such as books. Bronze and wooden tablets would demand even more space for storage per the amount of data. However, the Roman administrative apparatus was considerable and its preference for written documentation and extensive correspondence was a feature that even provincials would recognize. As Pliny's testimony shows, documents, copies, reports and other written material was drafted, approved, checked, inspected, archived and copied again and again. For the writing practices of the administration we are left with three main sources, namely references in literature, epigraphic copies of rescripts or other documents, and preserved documents either on papyri or tablets. Imperial rescripts, for example, are found in epigraphic sources, papyri and literature.⁴²

⁴¹ Plin. *epist.* 1,10; Cic. *leg.* 3,20,46–48; Millar 1964, 33–40; Corbier 1974, 671–692; Culham 1989, 103, 112–114. Some accounts mention an *aerarium sanctum* (Caes. *Gall.* 1,14; Cic. *Att.* 7.21), but whether this referred to a separate section of the *aerarium* is unclear.

⁴² On the rescripts as documents, see Wilcken 1920; Nörr 1981; Williams 1980; Williams 1986;

We may now embark on a small intellectual exercise and try to estimate the amount of space required for storing these items based on what is known of their numbers and volume in other sources. In order to make this estimate, I will first make an approximation of the number of items that were stored and then extrapolate from this information the possible amount of storage space that would have been needed.

(1) The standards of the legions

Storage of the standards of the legions in the aerarium had most likely both a ritual and a practical significance, considering how much attention was given to them both in rituals and on the battlefields. During the Principate, the number of legions fluctuated (during Pliny's time there were an estimated 30 legions) as new legions were formed and old disbanded, but whether the standards of the disbanded legions were still stored at the aerarium is not known. While some of the standards were lost in battle and the standards of legions stationed in the provinces were with the legions, the standards of disbanded legions were probably stored at the aerarium. The structure of the standards varied somewhat, but mostly they were long poles topped with a gilded symbol (typically an eagle) and a flag. Considering that they were prized objects, we may assume that the storage arrangement was adequate. We can thus for simplicity's sake assume that each standard was given roughly half a cubic metre of space. While it is impossible to say exactly how many standards were in storage at a given time, we can assume that somewhere between 20–30 standards were in storage, meaning that in total a maximum size of c. 15 cubic metres is a reasonable estimate. 43 We can thus make a conservative estimate of c. 10 cubic metres.

(2) Texts of laws on bronze tablets

The storage of laws is a complicated issue. It has often been assumed that there were two places where the texts of laws were stored, the *tabularium* and the *aerarium*, and that laws were published by posting them in public places. Little is known, however, of the actual arrangements. Suetonius mentions (*Iul.* 28) the *lege iam in aes incisa et in aerarium condita*. The fire on the Capitolium in AD

Honoré 1994, 35-37; Hauken 1998, 263, 300-306. On the provincial experience, see Ando 2000, 87-90.

⁴³ Töpfer 2011.

69 is claimed to have destroyed over 3,000 bronze tablets that contained old documents, laws, *senatusconsulta*, state treaties and so forth.⁴⁴ But the questions still remain: how many laws would there have been in the *aerarium* and how much space would be necessary to store them?

We may start with the single law and the amount of space needed. The text volume of a single law (comitial legislation, plebiscites) varied considerably, from the extreme terseness of the Twelve Tables to the very long laws of the late Republic. While many laws may have been long, ranging from two to five tablets, the vast majority were rather short. On average, we may begin with the assumption that one law took one tablet. While the size of bronze tablets varied considerably, from the rather extensive size of the *Lex de Imperio Vespasiani* (164 x 113 cm) to the smaller laws, for the sake of simplicity we could estimate that the size of one tablet could be one square metre. The thickness of the bronze tablets varied equally, from 0.3–0.5 cm. If we assume that the plates did not remain completely flat and that wooden pegs were used to separate individual plates, we can assume that one tablet could take roughly 3–4 cm of space. This would mean that one cubic metre could, for our purposes, correspond to roughly c. 25–30 laws.

How many laws were there? On the whole, there is a lively discussion on the volume of Roman legislation and whether one may assume from the references in the literature that each reference to a law in literature corresponds to a single law or a piece of comitial legislation. Rotondi, in his famous *Leges Publicae Populi Romani* interprets each reference thus, while revisionists like Sandberg have come up with much lower estimates. Then there is the added issue of whether all laws were treated similarly, thus was comitial legislation and plebiscites equally stored? In any case, making an estimate is quite difficult. The estimates of the number of known laws from the earliest times to the time of Pliny runs from the low number of over two hundred given by Sandberg to

⁴⁴ CIL I 591, 592; Tac. hist. 3,71–72; Suet. Vesp. 8; Polyb. 3,26,1. Beard 1998, 75–101, at 76–77.

⁴⁵ This is a very rough estimate based on the epigraphically attested laws in Crawford 1996. A more accurate estimate, based on, for instance, the average number of signs in a law or the letter sizes used, is not possible, due to the very poor preservation of the material.

⁴⁶ See Meyer 2004, 26, 97–101 on the inscribing and posting of laws. It is unclear whether all laws posted were inscribed in bronze, whether the *aerarium* actually stored the bronze tablets or wooden copies, how long the laws remained posted and whether the same physical examples that were posted were later deposited in the *aerarium*.

almost eight hundred given by Rotondi.⁴⁷ If we assume that most laws were stored and that older laws were not repurposed for the bronze, an estimate of one thousand laws would mean one thousand tablets. With the estimate of c. 25 laws per cubic metre, we end up with a conservative estimate of c. 40 cubic metres of storage space.

(3) Senatusconsulta

Estimating the total number of *senatusconsulta* is confronted with the same challenges as the number of laws. Talbert's list of known *senatusconsulta* has 234 entries, of which a few are from a period after Pliny's tenure. Whether the *senatusconsulta* were stored in bronze tablets or wooden tablets is not known. The process of making a *senatusconsultum* involved a group of senators writing down the opinion of the Senate and committing it to the *aerarium*. However, because the *senatusconsulta* were intended for the day to day administration (even though they did later have the force of law) and did not have to undergo the same cumbersome process as the comitial legislation or even plebiscites, nor did it have the same exalted status, we may with some confidence assume that it was not considered essential to have them inscribed in bronze. 49

A wooden tablet could be fairly small, from a 15x10 cm size for a tablet used in private correspondence to the 50x30 cm or larger depicted in the *Plutei Traiani* (*Fig.* 4). The space taken by one tablet was made larger by its frame, which was often 2–3 cm thick. From the known tablets, we may begin with the assumption that the *senatusconsulta* could on average be 2.5 cm thick and 50x30 cm size, making one cubic metre fit roughly c. 240 tablets. If we make a similar assumption that one session of the senate would fit into one tablet, the bigger problem comes from the number of tablets in general. If we take a minimalist approach and begin with a similar number of tablets of *senatusconsulta* as there would have been laws, roughly a thousand, this would only correspond to c. four cubic metres of space.

⁴⁷ Rotondi 1966; Sandberg 2001. Again, the difficulties in making estimates are considerable. Even Rotondi's numbers would amount to an average of a couple of laws per annum.

⁴⁸ Talbert 1984, 435–458. The project "Palingenesie der römischen Senatsbeschlüsse (509 v.Chr. – 284 n.Chr.)", led by Pierangelo Buongiorno, attempts to trace all attested *senatusconsulta*.

⁴⁹ See Meyer 2004, 110–112 on the debates of the process of inscribing *senatusconsulta*.



Figure 4: Plutei Traiani, second century AD. Curia. Source: Wikimedia Commons, credit Cassius Ahenobarbus.

(4) Fiscal documentation such as public contracts, documents from debts and the accounts of the state

This is a very heterogeneous group of documents, comprising both the records of the money paid out as salaries and other public expenditures as well as records of money coming in through taxes and other means. The favoured medium on which official acts were recorded was wooden tablets. The only alternative may have been papyrus, but the sources speak specifically of *tabulae*. From the *Anaglypha Traiani* or *Plutei Traiani* (*Fig.* 4), we see how the tax records that were burned were wooden tablets. This relief is highly significant as it even shows the Temple of Saturn in the background of the scene. The unfortunate side effect of the use of wooden tablets is that they are fairly cumbersome and one would need a great deal of space to store them. As described in *Pauli Sententiae* (5,25,6), the custom of forging *tabulae* prompted a *senatusconsultum* demanding that to be valid, *tabulae* were sealed with a duplicate of the content inside and an elaborate system of strings and seals to ensure that the contents were not tampered with.

Making an estimate of the number of public records is very much an exercise in hypotheticals. If this category was as extensive as to include a list of the tax debts or taxes in general, the numbers would be very large. If, on the contrary, we are talking merely of public contracts in force and the list of current tax debts, we may be dealing with a much smaller number. For the taxes, the

⁵⁰ Also mentioned in SHA *Hadr*. 7,6. The Plutei Traiani is a very particular, even unique source, see Torelli 1999.

tributum capitis (poll tax) or tributum soli (land tax) were based on the census, whereas the vectigalia such as that of inheritance, manumissions or sales were based on singular events, as were the customs collected for instance in ports. Because much of the collection of taxes was outsourced either to publicani or later to procurators, knowing how much of the documentation was located in the aerarium is almost impossible to estimate. Many questions remain. Would there have been a full copy of the census documents in the aerarium? Would there be a record of each and every taxed inheritance, manumission or sale or simply a record of each tax collector? How would the taxes from the cities and provinces be recorded?⁵¹

If we take a minimalist approach that there would have been a record of the salaries that were paid, the contracts and the transactions involved, and the general records from the tax collectors, both in Rome and in the Senatorial provinces, from the ports and other customs offices, and assume that these were not archived for more than a few years, we can infer a number of documents in the few thousands, corresponding to four cubic metres per thousand documents. If, on the other hand, we take a maximalist approach and estimate that there would have been complete tax records from Rome itself, the number becomes considerably larger. Taking a figure such as the number of people included in the annona, set by Augustus at 200,000 (Dio Cass. 55,10), gives us a starting point. Making an estimate that each person was given just one line in a tablet, with roughly 50 lines in our standard tablet of 50x30 cm, having a record of 200,000 people would correspond to c. 4,000 tablets, which in turn would correspond to c. 16.7 cubic metres of volume. On top of this, there would of course be the records of incoming taxes and customs outside Rome as well as the records of the moneys paid out by the treasury. This very rough estimate would lead us to a figure between 8 and 25 cubic metres of storage space needed for the public records. We can thus make a conservative estimate of c. 8 cubic metres of storage space.

(5) The commentarii of officials, the protocols of elections and lists of iudices What individual magistrates would have from their year of office was commentarii, the listing of the official acts that they had taken. In the case of consuls,

⁵¹ There is a very large literature on taxes and tax collectors, see Brunt 1990; Brunt 1981/1990; Günther 2008.

they would also contain the protocols of the meetings of the assemblies. Whether the lists of the judges were deposited separately or as part of a magistrate's account is not known. The *commentarii* had their origins in private household records, and their meaning was not (like the *acta*) to act as an official record of decisions, but rather to serve as records of the activities that the magistrate had taken. Initially, they were kept by officials in their own homes, in the *tablinum* of the house, but by the end of the Republic the *commentarii* of high officials such as consuls were deposited in public archives.⁵²

While we know next to nothing about Roman archival systems, we may take some lead from the libraries and their methods of storing books. Rectangular or cylindrical boxes were used to store rolls, as were different systems of shelves and cabinets. In larger libraries, shelving units were built into the walls. As rolls were fragile, it was important to have a place where damaged manuscripts could be repaired.⁵³

Again, the estimates that can be made are tentative. A single Republican magistrate was typically in office for one year (the exception being censors). During that year, the number of decisions that should be recorded may have varied considerably depending on the flow of business that they encountered, and the near constant legal decisions made by the praetors to the financial administration. If we begin with a conservative estimate, then the *aerarium* preserved only the *commentarii* of magistrates above a certain level, for instance those with *imperium*, i.e. mainly the consuls and the praetors, the curule aediles having lost much of their significance through the reforms of Augustus. With two consuls, a maximum of 16 praetors with one or two additional praetors periodically, two curule aediles, we are left with on average 20 yearly magistrates whose records were held in the *aerarium*. If we assume that each of them left, for example, one of the larger boxes that stored the rolls or alternatively a *codex* of *tabulae*, a rough estimate may be made of the space needed. A capsule for rolls or a codex can be estimated to take up a space between 50x50x50 cm for a

⁵² Cic. Verr. 2.1.57; Cic. Sull. 42; Liv 6,1,2: privata monumenta. On the commentarii, see von Premerstein 1900, 733–756; Culham 1989, 104; Posner 1972, 165; Meyer 2004, 32–33. On scribes as guardians of the public trust, see Cic. Verr. 2,3,183 eorum hominum fidei tabulae publicae periculaque magistratuum committuntur. About entering the names of judges, see Cic. Phil. 5.15: iudices legisset, horum nomina ad aerarium detulisset.

⁵³ Houston 2014, 180–202. On the archives in the ancient world, see the Trismegistos database: https://www.trismegistos.org/arch/index.php

capsule, or roughly 50x30x20 cm for a codex, meaning that between 8–30 can be stored in one cubic metre. If we again pick an average, say, c. 20 per cubic metres, we come to the conclusion that there would have come one cubic metre of material each year. Of course, the number of magistrates varied during the Republic and the Principate and we do not know whose records were stored and to what extent. However, even with the last one hundred years, the amount of storage space would have been extensive, to the tune of one hundred cubic metres. If we scale down the space given to each magistrate to just two pages (or four if double sided), the storage volume would still be c. 25 cubic metres. We can thus take c. 25 cubic metres as our conservative estimate.

(6) The moneys of the state

In the estimates of space regarding money and other valuables, it must be remembered that the aerarium was only one of the places used for storing the money that was collected through taxation and other modes of collection, including booty. The imperial fiscus and the aerarium militare were the other sizable storage facilities for cash and valuables. But how much space would the gold of the Roman state take? Gold is naturally very dense, meaning the volume it took up was very small compared to the value, as was silver, but copper and bronze coinage would also have taken up considerable space. We do not know how much money there was at a given time, as there was probably a natural fluctuation with incoming and outgoing funds. As a rough guide to what one might find in the aerarium, we may take the amount mentioned by Pliny as taken by Caesar during the civil war: fifteen thousand bars of gold, thirty thousand bars of silver, and thirty million sesterces of coined money (Plin. Nat. 33,56; Plut. Vit. Caes. 35). Based on comparative information and later sources, one estimate gives the weight of the gold and silver bars at roughly one hundred grams.⁵⁴ This would translate as 1,500 kg of gold, 3,000 kg of silver and, with the weight of a sestertius at 2.5 g, 75,000 kg of silver in coins. The amounts are roughly within the range given by ancient authors about booty being brought to Rome.⁵⁵ A cubic metre of pure gold weighs 19.2 tons, meaning that even with low purity, the

⁵⁴ Frank 1932, 360–363.

⁵⁵ For instance, Livy (41,28) reports that Appius Claudius brought to the *aerarium* 5000 pounds of gold and 10,000 pounds of silver as booty from his victory over Celtimberi (*decem milia pondo argenti, quinque milia auri in aerarium tulit*).

volume of the gold is negligibly small for our scale even if we would factor in that half of the volume would be taken by the air between the gold bars. However, the density of pure silver is 10.5 tonnes per cubic metre. The 78 tonnes of silver would have taken, if we assume the same one third to half of the total space taken up by air between coins and bars, an estimated 10–14 cubic metres. Although one should be particularly careful about the numbers given by ancient historians, even with one half of this estimate the volume taken by the moneys is considerable. We can thus take c. 10 cubic metres as our conservative estimate.

If we now make a conservative estimate of the total amount of space necessary for the numbers we have extrapolated from the written sources, it becomes apparent that the volume needed was considerable but not impossible.

Total volume of stored materials, conservative estimates:

Standards	10
Laws	40
SCs	4
Documents	8
Commentarii	25
Money	10
Total	c. 97 cubic metres

This sum by no means purports to be an exact figure, but rather an intellectual tool to estimate what may have been the case. For the study of administrative space, its value is in the concretization of the possible consequences of alternatives, i.e. what we imagine that the Roman administration would have deemed necessary to conserve and archive in order to function properly.

The aerarium and the archaeological record

According to the written sources, the location of the *aerarium Saturni* was in the Temple of Saturn in the Forum. The sources on the *aedes Saturni* place it in the forum, next to the archaic *fanum* (Varro, in Macr. *Sat.* 1,8,1; Dion. Hal. 6,1,4). Augustus notes that the Basilica Iulia stood between the temples of Castor and Saturn (*R. Gest. div. Aug.* 20,13). In his Panegyrics, Pliny himself talks of the

aerarium and refers to the temple (Plin. *paneg*. 36). The temple itself housed the covered statue of the deity (Macr. *Sat.* 3,6,17). The area around the temple was called the *area Saturni* (CIL I² 810).

The dimensions of the temple changed somewhat during the different construction phases, but I shall focus on the site during the time of Pliny's tenure there. The temple itself went through two extensive reconstructions, the first completed by Munatius Plancus in 42 BC, the second taking place in the late antique period, between the years 360 and 380. The podium was fairly high, some 11 metres on the side of the *vicus Iugarius*, and had dimensions of 24 to 33 metres. On the side of the stairway leading to the temple itself, there was an arched passageway leading to the basement. Because the North-Eastern side of the temple was flanked by the *clivus Capitolinus*, the ground level was higher on that side. Parts of the podium and the facade of the temple survive. ⁵⁶

The fairly large podium, consisting of a basement of sorts to the temple would be the most obvious suggestion regarding the location of the archives, if they had been located in the temple itself.⁵⁷ The basement had another purpose regarding documents, as its outer walls served as surfaces upon which tabulae were hung (CIL I² 587). Pensabene, who has written the authoritative study on the temple, argues that most of the functions of the aerarium would have been located outside the temple, because there were no suitable places inside, neither inside the podium nor within the temple itself, which would have been occupied by the cult statue. His suggestion, based more on common sense than tangible evidence, for the location of offices is the site of the portico of the Dei Consentes built during Domitian's time, located across from the vicus Capitolinus.⁵⁸ Coarelli has interpreted the dual system of the tabularium and the aerarium as a functional whole, where the archives would have been located together or in close proximity. The tabularium would have housed the majority of the state archives. He also supports the notion regarding the offices being located in the portico of the Dei Consentes. 59 Mazzei, in her study of the aerarium and the tabularium notes that due to the confusion regarding the terminology it is possible that different authors have actually meant different things and places rather

⁵⁶ Coarelli 1999.

⁵⁷ Corbier 1974, 632.

⁵⁸ Pensabene 1984, 62–63, 80.

⁵⁹ Pensabene 1984, 23–24, *Tav.* 1; Coarelli 1999; Coarelli 2010, 121–123.

than a singular *aerarium*. While she recognizes that some of the functions of the *aerarium* took place within the temple, one should instead think of it as a larger conception that would have been located in multiple locations in the area.⁶⁰

The location of the archive within the temple itself has thus been considered problematic, primarily due to the restrictions of space. 61 Both Coarelli and Pensabene estimate that the space required by the aerarium was too large to fit into the Temple of Saturn as known from the archaeological sources. Coarelli maintains that while the temple was still the main seat of the aerarium, adjoining administrative buildings were simply not mentioned in the sources.⁶² Do we know how much space would the aerarium have needed? From our rough estimate of the cubic metres taken up by the archival material, we may here produce another rough estimate, namely the space needed to actually store the material. The space needed by the archival material is not simply the volume that the items being stored in the space takes up, there would need to have been shelving and, in case of heavier items being stacked on the floor, space to move between the shelves to retrieve and move items in storage. In modern warehouses, the division between shelving and empty space is roughly 50/50. In automated warehouses or libraries with moving shelves, the percentage can be higher. In a Roman archive, the roughly 50/50 rate is also supported by the fact that to place an item (such as a bronze tablet) on an open shelf or to retrieve it, one needs at least as much empty space as the width of the object.

If we begin a mental calculation based on the height at which a shelf can easily be operated, for instance 3 metres, in order to have 97 cubic metres of shelves of one metre's depth, there would need to be c. 32.3 running metres of shelves. Calculating with an equal amount of shelf and empty space, this would mean roughly c. 65 square metres of space. Of course, this estimate is contingent upon the fact that materials would accumulate at a roughly even pace and that the material itself was not destroyed or removed.

However, it is true that the preservation of the podium and thus the base of the temple does not allow a precise estimate of how much usable space it

⁶⁰ Mazzei 2009, 288–294, 321–335, 351–352.

⁶¹ On the very convoluted discussion about both the reliability of the inscription identifying it as the *tabularium* and whether the substructures themselves are a substructure of something completely different, see Coarelli 2010; Mazzei 2009.

⁶² Coarelli 2000, 224.

would have contained. Excavations have shown that inside the outer walls there were columns that supported the temple structures above, but between them the space was mostly empty. At the back of the temple, where the *clivus Capitolinus* rises up along the side of the temple, some parts appear to be unexcavated rock. If we deduct this area, we are still left with an area of roughly 18 to 18 metres within the podium that could be utilized for storage purposes. ⁶³ If we again calculate the space available, this would amount to c. 324 square metres. If we estimate that roughly half of that space would be free area, not taken by columns and then divide by half again to make room for passageways between shelving, we would be left with 81 square metres. Provided that the space was actually usable (due to the poor preservation of the podium, this remains an open question), this would mean that by my estimate the necessary amount of space would indeed be available for the storage of archives.

This very crude calculation does not account for the offices or working places of the persons working in the *aerarium*. Even if we allow that part of the work of drafting documents would have taken place in the private homes of higher magistrates, we would still have to presume that for instance one or two rooms with sufficient lighting would be needed in addition to the storage facilities. Whether these were located at the site of the enigmatic portico of the *Dei Consentes* or within the temple itself remains an open question.

Conclusions: The aerarium and administrative space

Within the study of Roman administration, there are two crucial and intermingled issues, namely the nature and location of the administration. Modern administrative structures are based almost universally on the principle that dedicated magistrates and officials operate within specialized offices set aside or even constructed for that purpose. The nature of administration as a central organ of the state means that much of its work is about gathering and storing information. However, for any premodern administrative structure, one must be very critical of underlying assumptions regarding the role and extent of the administration. It has been claimed that the very nature of Roman administration

⁶³ Pensabene 1984, 23-24, Tav. 1.

was that it did not have a long-term memory, but instead provided very ad hoc responses to issues that arose.⁶⁴

In this article, I have sought to explore the issue of administrative space through a single example, the *aerarium*, where we have both a fairly well-known location of an administrative post as well as a contemporary account of the tasks undertaken by the office. In his account, Pliny describes the aerarium as the veritable centre of the Roman administrative system, which handled both the administrative memory and took care of public finances. While in many cases it is safe to assume the use of nominally domestic spaces such as the aristocratic domus for the purposes of public administration, there are some instances, such as the aerarium, where the circumstances themselves prevent it. Problems arising from combining private houses and official administrative business are evident in cases where large-scale operations, such as handling the annona as well as handling money, are concerned. A procurator monetae would probably not have run a minting operation or stored the coins in his private home, simply for reasons of security. Similarly, the a rationibus who handled the official accounts and taxation would have operated in a specialized location. 65 These sources confirm the tendency noticeable in the work of censors and quaestors: when public funds were managed, the Romans preferred that it took place in a public venue, not a private house.

Thus the *aerarium* was a very public venue, due to the trust placed in the public archives, the legislation stored within them, as well as the safekeeping of the public moneys. The account of Pliny, however rhetorical, on the functioning of the *aerarium* clearly shows his intimate knowledge of its operations and the items that were stored there. As a consequence, it forms a reliable starting point for the estimation process. Even though in many categories the reliability of the information we have about the volume is dubious, the use of functional analysis allows for the estimation of the space that would be needed in order to achieve the aims that were stated. In terms of office space, we have established that the *aerarium* may have been able to carry out its extensive functions with relatively little space.

⁶⁴ On this, see König 2007.

⁶⁵ CIL VI 8446: princeps tabulariorum in statione XX hereditatium. Another inscription mentions Ulpius Placidus, an imperial freedman, who was a tabularius of a rationibus: CIL VI 8581: Ulpius Placidus Aug. lib. tabularius a rationibus mensae Galliarum.

By using conservative estimates that allow one to take into account material loss and incompleteness, we are able to make an informed extrapolation of what the storage volume of the *aerarium* may have been and thus whether it could be located in the premises where the written sources unanimously place it. The estimate thus produced does not fully confirm the hypothesis that the Temple of Saturn was the sole storage location of the *aerarium*, but it does demonstrate that, based on our current knowledge of the data, it is not impossible to achieve the kinds of functions indicated in the written sources in the Temple of Saturn.

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