



Greek architectural inscriptions as documents

Citation

Scranton, Robert L. 1960. Greek architectural inscriptions as documents. Harvard Library Bulletin XIV (2), Spring 1960: 159-182.

Permanent link

<https://nrs.harvard.edu/URN-3:HUL.INSTREPOS:37363803>

Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)

Greek Architectural Inscriptions as Documents

A GLIMPSE into the archives of classical antiquity is afforded us by the inscriptions on stone that have been preserved, representing a great variety of documents of individuals and of state and religious authorities. Laws, decrees, royal letters, administrative regulations, treaties, and other instruments of government; accounts of responsible government officials; comparable documents of religious authorities; mortgages, boundaries, dowries, and the like, from the world of private intercourse; records of the gifts of individuals to the gods or state, or of honors bestowed upon individuals by the state or other organizations — copies of all such instruments were often displayed to public view and left for posterity. One misses, perhaps, the historical documents published by the Egyptians, Assyrians, or Persians — the records glorifying the name of a monarch; there are, to be sure, among the honorary decrees voted by a community for an individual, the recitals of distinguished careers or achievement, and a man put his name on the monument he erected to preserve a place in memory, but the difference in the character of this kind of document in the several cultures, and the different proportions of such claims to fame in the several bodies of texts, are themselves significant of the character of the respective cultures.

The practice in Greece of inscribing the text of such documents on stone — the earliest examples of which date from the middle of the sixth century B.C. — was based on the attitude that all business is everybody's business. Everyone wanted to know, to be able to refer and appeal to the text of laws, to satisfy himself of the completeness of the accounting of administrators. The practice of erecting the inscriptions conspicuously in public places, in front of the administrative offices, in the market place, in sanctuaries, and around temples, theoretically at least made them easily available to the citizenry — a system of roughly classified reference, according to which the documents would

be readily at hand to people in the public areas where they assembled formally or informally to follow affairs of general interest.

The inscriptions represent only the final stage in the process of publication. The preliminary text would have been written off on papyrus or wax tablets for use while under consideration; a version written on wooden boards covered with white plaster might be displayed in a designated place for public view at this stage. The approved and ratified document would be written on paper or tablets and filed in the archives as the official record. A copy of this would be engraved on stone (or occasionally sheets of bronze) for public reference and as safeguard against the loss of the copy on slighter material.

The stele to receive the inscription would be a slab of fine stone of a size adapted to the text — many would fall within the range of four to six feet of height, two to three feet of breadth, though many would be smaller and some even much larger. The inscribing was done by masons whose technique often reached the level of art, so that the documents are often of genuine aesthetic quality, although of course the work is sometimes casual and even careless. The size and form of the lettering varied in time and place. There was never a systematic separation of words; sometimes the arrangement of words followed the outline of the subject matter, sometimes the stele was evenly covered with a rigid rank-and-file checkerboard of letters. At Epidaurus toward the end of the fourth century B.C., the masons who carved the texts were paid at the rate of a drachma per 120 letters; at Delos about 280–274 B.C., a drachma per 300 letters; at Lebadeia in the second century B.C., a drachma per 400 letters, including the painting after the carving.¹ Although there are many elusive factors in such a calculation, it may be suggested that at the end of the fourth century a standard 'day's wage' was two drachmae a day; from this it might be hazarded that a mason could do about three hundred letters a day (the somewhat less precise lettering of later periods may have been done more rapidly), but the masons at Delos were doing texts of 25,000 to 38,000 letters — a long and nerve-wracking job!

An illustration of the character of the ancient archives, and the role

¹ Epidaurus — *IG (Inscriptiones Graecae)*, IV², i: 108, line 168. Delos — *IG*, XI, ii: 159, obv, line 66; 161, obv, line 119; 199, left side, line 72. Lebadeia — *IG*, VII: 3073, line 10.

Hereafter in the present paper all dates are to be regarded as B.C. unless specified otherwise.

of inscriptions in modern study of classical culture, is provided, from the third quarter of the fifth century, by the texts relating in some way or other to the practice of architecture. Many of these, as we shall see, are specific descriptions of ancient buildings, and several have long been well known and frequently studied in exhaustive modern publications. Many more, however, are concerned with architecture less explicitly, and the whole 'corpus' has never really been viewed in its totality and its interrelations. A beginning toward such a study was made by Lacey D. Caskey, formerly of the Boston Museum of Fine Arts, while he was a student at the American School of Classical Studies in Athens in the early years of this century, when he was working on a particular text and saw the need of a lexicon of technical terms drawn from every possible source. This lexicon he began, and his studies bore fruit in the publication of the inscriptions relating to the Erechtheum in Athens. In this work he was associated with Leicester B. Holland, who felt the importance of the study from the point of view of an historian of architecture; subsequently Philip H. Davis began to collaborate with Holland in prosecuting the work, making several trips to Greece to make squeezes of the stones, and beginning the close analysis of several problems. The notes and other material assembled by these men were transmitted by degrees to Fred W. Householder, Jr, of Indiana University and to the writer of this article: the collection has now grown to a body of several hundred texts, with their translations.

Our present concern with these inscriptions is in their character as ancient documents: the architectural aspect is simply a kind of subject matter, a classification rubric, which, however, brings before us a considerable variety of documents from most parts of the Greek world through most of the extent of its literate era. The problem of classification immediately encounters familiar difficulties, but for our purposes it may prove a convenient method of approach to follow the 'natural' course of events reflected in the content of the documents. That is to say, we may first consider those relating to matters prior to any process of building; next those initiating the process; next those relevant to the process itself; and then the various kinds of accounts kept of the work. Beyond this are dedications of completed work, as well as numerous documents honoring the builder, but of these two categories we shall select only a few unusual examples.

I. DOCUMENTS CONCERNING MATTERS PRIOR TO BUILDING

Matters prior to the process of construction would include today such things as building codes, labor regulations, and the like. There is, for example, one inscription from Tegea in the Peloponnesos,² dating perhaps from the fourth century, which seems to be a collection of laws or regulations governing the terms under which contracts might be let. It is not clear whether these were prepared with reference to a particular building project, or whether they were issued at one time or through a period of years and then collected in one publication. The sections include provisions for interruption of work by war or for other reasons, establishment of responsibilities of guarantors of the contractors, and various other matters. Appeal in some cases is to the officials letting the contract, in some to a body of Three Hundred, in some to the courts; and specific fines and indemnities are named for several situations. Only a small portion of the entire document is preserved, and it is impossible to determine its character as a whole, but it does seem to provide evidence of a definite body of law governing contracts.

The only comparable documents are apparently from early Christian times. One, from Chalkis,³ in Euboea, dated to the end of the fourth century after Christ, is an edict of a Roman proconsul apparently defining the jurisdiction of certain public officials each charged with the administration of some public construction project. A better comparison with the laws of Tegea comes from Sardis, and has been dated about A.D. 459.⁴ It is a publication of an oath by the builders and artisans of Sardis, before the imperial commissioner of the city, defining their own responsibilities under various conditions that might prevent the fulfillment of a contract under its original terms. In general, the purpose is to give assurance that in some way or other the job would be finished without loss to the agent letting the contract, or fines would be paid. There is, perhaps, a possibility that these regulations were actually formulated, and were exacted of the artisans, by the state, but the tenor of the document suggests that they were arrived

² IG, V, ii: 6.

³ IG, XII, ix: 907.

⁴ *Sardis: VII, Greek and Latin Inscriptions*, by W. H. Buckler and D. M. Robinson, i (Leiden, 1932), pp. 40-43 (no. 18).

at, at least in part, on the initiative of the members of the building trade: it is an example, in a way, of collective bargaining.

Finally, from the sixth century in Alexandria in Egypt⁵ comes an edict of an imperial officer, the intent of which is to regulate and alleviate the working conditions of labor. An interesting provision is that convicts shall not be used in competition with labor, as long as there is a supply of free labor; otherwise, the document is concerned with minimum compensation — for example, double rations for 'overtime.'

As to building codes, there is only one ancient document that could be so called: a section of an extensive set of police regulations, thought to have been published in Pergamum originally about the second century B.C., and then, for some reason, republished in the second century after Christ.⁶ The section relating to building gives careful definition of rights and responsibilities in the details of construction of private dwellings on adjoining sites. The chief concern seems to be with possible damage to one property from construction on another, and with rights of entry and access. Appeal, or jurisdiction, lies with the police. Basically, however, the document is not concerned with building, but rather with proprietary rights, and hence seems a little out of place among our other documents.

Governmental control over building is also attested, though again tangentially, in the Athenian decree (about 423) relative to the *pelargikon*, which provides that no altar be built or stone quarried within that area.⁷ Whatever the reason for the prohibition, the principle we would now recognize as 'zoning' is involved, however particularized the application may be. So too, the inscription of perhaps the fourth century on the city wall at Nisyros, 'The space five feet from the wall is public,'⁸ implies a prohibition against building too close to the fortifications.

II. ACTS OF INITIATION

The documents thus far considered are erratic expressions of a need that was never fully felt or developed. It is not until we encounter material relating to the immediate facts of construction that we have a

⁵ SEG (*Supplementum Epigraphicum Graecum*), VIII, i: 355.

⁶ SEG, XIII: 521, lines 102-168.

⁷ IG, I²: 76, lines 55-58.

⁸ IG, XII, iii: 86.

substantial number of documents with anything approaching an internal rationale of their own. First of these would be acts of initiation. Of the simplest form, where a single decree or resolution provides for the initiation of a particular work, there are several instances from Athens in the latter half of the fifth century and in the fourth: decrees initiating repairs to the fortifications of the Acropolis;⁹ for a water conduit;¹⁰ for miscellaneous repairs and construction in the market at the Piraeus;¹¹ for a bridge on the road to Eleusis;¹² for the construction of statues, the Propylaea, and general repairs on the Acropolis;¹³ for the Erechtheum;¹⁴ for the temple, and for a door in the temple or precinct, of Athena Nike;¹⁵ for a door structure, perhaps in the Eleusinion.¹⁶ Somewhat unusual is a decree of the Augustan period¹⁷ that seems to provide for the reconstruction of a number of sanctuaries that do not seem to have been specified in the initiating decree, but were listed in a summary report of what was done, appended to the decree itself.

There must have been a great many such instruments in Athens, but they have been lost. There must, also, have been many elsewhere, though even fewer are preserved. There are fragments of an act of the Amphictyonic Board at Delphi (380/79) providing for repairs and improvements on roads and drains;¹⁸ and at Megalopolis, fragments of a Hellenistic decree to repair the fortifications.¹⁹ Of uncertain date are texts from Mylasa, for certain incidental structures in and around a temple,²⁰ Skepsis, for the construction of a theatre and other public works,²¹ and Megara, for fortifications.²²

Each of these decrees has its individual peculiarities, but they are homogeneous in being relatively simple documents with a fairly defi-

⁹ IG, I²: 44.

¹⁰ IG, I²: 54.

¹¹ IG, II-III², i, 1: 380.

¹² IG, I²: 81.

¹³ IG, I²: 92; *Hesperia*, XVI (1947), p. 283.

¹⁴ IG, I²: 111.

¹⁵ IG, I²: 24, 88.

¹⁶ SEG, X: 44; *Hesperia*, XIV (1945), pp. 87-92 (no. 6).

¹⁷ IG, II-III², i, 2: 1035.

¹⁸ IG, II-III², i, 2: 1126.

¹⁹ IG, V, ii: 434.

²⁰ *Journal of Hellenic Studies*, XVI (1896), p. 231 (no. 33).

²¹ *Jahreshefte des Oesterreichischen Archäologischen Institutes in Wien*, III (1900), pp. 54-57 (no. XVI).

²² IG, VII: 17.

nite and restricted purpose. They differ, for example, from the kind of document that includes provision for some construction simply as one item among many other points of perhaps even larger concern, as for example the long decree of about 420 regulating the Eleusinian cult,²³ which includes as a minor detail instruction to build storage chambers for grain to be collected; or an honorary decree of the early second century from Megalopolis²⁴ that prescribes, among other honors to Philopocmon, a memorial and an altar. Another, more strikingly different, document comes from Anaphe of the late second century.²⁵ It would seem to have been a sort of dedicatory statement (although the beginning is lost), but the preserved portion includes what is explicitly described as a copy of the decree that granted a private citizen, Timotheos, permission to build a temple of Aphrodite in the sanctuary of Apollo; a copy of the question that Timotheos had put to an oracle to ascertain whether he should ask the city for permission to build his temple in the sanctuary of Apollo or in the sanctuary of Asklepios; and the god's answer to his question. Less complicated, but also rather indirect, is a late third-century decree from Rhamnous²⁶ that, although it begins with a description of repairs needed in the sanctuary, goes on to authorize the body to make and receive contributions for these repairs without explicit instruction that the repairs be made. Sharing in some of the characteristics of each of these last is an honorary decree from Athens of the mid-first century,²⁷ in which it is explained that a certain Diokles offered to carry out certain repairs in the sanctuary of Asklepios; the council thereupon resolved to permit him to make this contribution to the city, and went on to authorize him to inscribe certain honorary texts on the door and the temple. There is a somewhat similar decree, possibly of the fourth century, from Oropos.²⁸

The most informative acts, however, are a few much more complex documents that include not only the actual authorization and initiation of a project, but other details of the job. The best example is the decree of 307/6 regarding the fortifications of Athens, the Peiraeus,

²³ *IG*, I²: 76, lines 10-12.

²⁴ *IG*, V, ii: 432.

²⁵ Dittenberger, *Sylloge Inscriptionum Graecarum* (ed. 3), III: 977; *IG*, XII, iii: 248.

²⁶ *IG*, II-III², i, 2: 1322.

²⁷ *IG*, II-III², i, 2: 1046.

²⁸ *IG*, VII: 412.

and the Long Walls.²⁹ After the very brief statement of the resolution to carry out the repairs, there follows a passage, much mutilated, about the terms of letting contracts; then a formal description of the work to be done, concluding with a calendar according to which the various stages of the operation were to be finished and some special provisions and qualifications for terms of the contract (including, for example, exemption from military service for the contractors while engaged in the work). At the end of the stone has been added a list of subdivisions of the work, with names of the contractors undertaking each section, and the guarantors, and a sum of money — apparently the contracted price. Thus this one stone bears on it both the instrument of initiation, including the specifications, and (as an addendum) the agreed contracts. Another stone bears a decree of 337/6 providing for the repair of the fortifications of the Peiraeus and the Long Walls.³⁰ The decree itself contains regulations for the letting of the contracts in various aspects, and also provides that the architect bring in specifications. At the end — not included in the decree, as in the previous example, but added as an appendix — is a detailed description not for the whole work but only for a single tower, or section, of the total work. Just why this particular set of specifications was published with the main decree, and not the other specifications, is not at all clear.

III. SPECIFICATIONS AND CONTRACTS

A. Primarily Specifications

In addition to specifications embodied in or appended to the decrees that initiate or authorize construction, other examples of such detailed descriptions of work to be done are preserved in other ways. Before describing these, however, it is perhaps worth while to survey briefly the problems ahead. Following the 'natural' basis of classification we originally posited, we might anticipate, first, some kind of description of the work to be done, in such detail that it could be followed by the contractor as sufficient instruction for completing the work; second, a document offered as a basis for bids by hopeful contractors; and third, a final contract. Today the first function would probably be filled primarily by blueprints of working drawings, and by 'specifica-

²⁹ IG, II-III², i, 1: 463; *Hesperia*, IX (1940), pp. 66-72.

³⁰ IG, II-III², i, 1: 244.

tions' defining minimum standards of materials and the like required by the agent letting the contract. In antiquity there is little trace of 'specifications' in this modern sense in any of the preserved documents; in general the maintenance of standards was evidently secured by constant supervision by the architect during the course of the work and by final inspection before payment. Moreover, there is ground for argument that detailed drawings of any extent were not used in classical times.⁸¹ In any case, the 'specifications' of the inscriptions (*syngraphai*) were actually verbal descriptions that explained the structure to the workmen in a way that would normally be done today by drawings.

Such a *syngraphe* would, of course, be the essential document on the basis of which contractors would bid for the work. But in antiquity there were no large contracting companies, or individuals capable of operating on a large scale, who could undertake a contract for a job of any great size. A contractor was a man who worked alone or at the most with half a dozen assistants — free or slave. If the job were of any size, then, it would be necessary to break it up into small lots within the technical and physical capacities of such a contractor. The inscriptions sometimes refer to something called *anagrapheis*; it seems a possible hypothesis, though there are alternatives,⁸² that these were the particular directions for an individual job, as distinguished from the *syngraphe* — the over-all directions for the whole work.

Thus, in offering a project for bids, a contract would be formulated including the *syngraphe* for the whole project, if it were a small one, or the *anagrapheus*, if it were a part of a larger project — and including also the other elements to be agreed upon, such as the price, date of delivery, penalties for non-fulfillment, and the like. Normally, perhaps, the job would be awarded to the contractor who first agreed to the terms of the contract as offered, so that the 'contract offered' would be converted to a second phase — a 'contract agreed' — simply by adding signatures, though sometimes, it is conceivable, the contractor would succeed in getting more favorable terms than originally offered and still another version of the document would have to be

⁸¹ J. A. Bundgaard, *Mnesicles* (Copenhagen, 1957), in general, and especially pp. 93-99, 111-116, 122-133, 216-219 (note 217); and P. H. Davis, *Some Eleusinian Building Inscriptions of the Fourth Century before Christ* (Geneva, N. Y., 1931), especially pp. 10-20.

⁸² Bundgaard, *Mnesicles*, pp. 113-114.

drawn up, in somewhat different form. The contract was designated by a variety of terms. Many of these are general words composed of roots having to do with letting out or accepting jobs; one of the most common, however, is *misthosis*, whose root refers primarily to the wage or payment for the service. But, since the terms of price, date, penalties, and the like are themselves 'specifications' of part of the contractual obligation and since 'specifications' in the sense of the description of the job to be done were also included in the contract, it would seem that the word *syngraphe* was sometimes used to refer to the contract in its entirety as well as to the simple description of the work.

The point of all this is to show that the distinctions between *syngraphe*, *anagrapheus*, and the two phases of the *misthosis* were never rigid from the point of view of either terminology or form; and that today, when we have to deal with fragments of the original documents, it is often impossible to determine how the original was conceived.

Against this background may be understood more clearly the difficulty of classifying what are, from the architectural point of view, the most important of all the architectural inscriptions — those containing systematic detailed descriptions of some building. In the inscription noted above pertaining to the fortifications of Athens, the Long Walls, and the Peiraeus,³³ the *syngraphai* are embodied in a decree, but the transition between the description of the work and the detailing of the time schedule and other contractual obligations is unfortunately obscured in two almost illegible lines. At another extreme is a text from Oropos³⁴ of the late fifth century. At the beginning is a decree providing for the publication of, first, the '*syngraphai* according to which the contract was let,' and, second, the '*misthotes* [contractor] and the guarantor and the amount for which the contract was let.' After the decree follows a text introduced by the word *syngraphai* — composed in a kind of bureaucratic jargon construed on the principle of apposition: 'specifications: to build — to lay the stones — fitting them' — a construction requiring that the subject, the contractor, be understood in the accusative case. Then at the end, after the description is finished, comes the word *misthotes* and the names of the contractor and guarantor in the nominative — i. e., without grammatical relation to the preceding text. Finally is given the contracted price — 900 drachmae — and the statement 'of this they have 325.' Thus we seem to have the

³³ IG, II-III², i, 1: 463; *Hesperia*, IX (1940), pp. 66-72.

³⁴ *Ἀρχαιολογικὴ Ἐφημερίς*, 1923, pp. 36-42 (no. 123).

two elements prescribed in the decree — the *syngraphai*, and also the name of the contractor, together with the record of the down payment on the bill. Nevertheless, the original contract *might* have been framed in just this pattern.

There is, in fact, only one document that can be taken unreservedly as a set of specifications for building and nothing else: the famous document of 347/6 concerning the arsenal of Philo in the Peiraeus.³⁵ This begins with a clear formula 'Gods. *Syngraphai* of the stone arsenal for hanging-gear of Euthydemus son of Demetrios of Melite, [and] of Philo son of Exekestides of Eleusis.' Then comes the detailed description: 'To build an arsenal for hanging-gear in Zea, beginning etc. etc. etc.'; then, changing construction, 'cutting [the foundation] he shall . . .' running for 97 lines; and ending, 'all this the contractors shall work out according to the *syngraphai* and measurements and the model that the architect provides, and they shall deliver it in the time in which each of the jobs shall be contracted for.' This is clearly a set of specifications, and nothing else — though an extraordinary document indeed, because of the completeness of the detail in which it describes the entire building to be erected.

The *syngraphai* for the tower, appended to the decree about the walls of the Peiraeus,³⁶ are similar; and there are also a number of fragments that might have been simply specifications, though lacking the beginning or end we are unable to be sure. Such would be the fourth-century documents describing the construction of a tripod base in Athens,³⁷ a drain at Oropos,³⁸ the temple at Delphi,³⁹ a gate at Eleusis,⁴⁰ three buildings in Mytilene,⁴¹ and later documents at Thasos,⁴² and, possibly, at Delos.⁴³

A few documents seem to have been originally formulated as *syngraphai* but subsequently turned into contracts by additions at the end. A good example is from the fourth century at Oropos,⁴⁴ constructed

³⁵ IG, II-III², ii, 1: 1668.

³⁶ IG, II-III², i, 1: 244.

³⁷ IG, II-III², ii, 1: 1665.

³⁸ 'Αρχαιολογικὴ Ἐφημερίς, 1923, pp. 43-46 (no. 124).

³⁹ *Delphes (Fouilles de Delphes)*, III, v: 88.

⁴⁰ 'Ελευσινιακά, A', pp. 189-208.

⁴¹ IG, XII, ii: 10, 11, 14.

⁴² IG, XII, viii: 266.

⁴³ ID (*Inscriptions de Délos*): 505, 507 bis.

⁴⁴ IG, VII: 4255. The two dashes within brackets indicate two spaces left vacant in the inscription for the filling in of the rate.

almost exactly like the specifications for the arsenal of Philo, although the last provision — 'He shall deliver it finished within twenty days from when he receives the money [first payment?]' — does in fact give the actual period of time agreed; but it then goes on: '[This] was contracted at [—] the four-foot [length]. Contractor, Phrynos, resident of Alopeke; guarantor, Telesias son of Telles of Euonyma.' Similar perhaps, though quite fragmentary, is a fourth-century document from Eleusis⁴⁵ that seems to read throughout like a set of specifications but after a narrow gap closes with a list of names — presumably contractors and guarantors.

What seems to be a clear example of the kind of document to which we have given hypothetically the name *anagrapheus* comes from Eleusis of the mid-fourth century.⁴⁶ This begins with the names of the *epistatai* — the administrators in general charge of the work — and the architect in direct charge and then goes on for some 200 lines to list seriatim a number of jobs, of which one example will be self-explanatory: 'to cut blocks of the soft Aeginetan stone, smooth; four feet long, three feet wide, three half-feet thick; and hew them true on all sides; with work-surface; and to bring them to Eleusis sound and unbroken — number, 44.' Obviously these are work-lots separated out from each other so that an individual contractor could sign for one, or perhaps for more than one in turn; and each job had some role to play in the working out of the over-all *syngraphai* for the whole structure envisaged. They give the impression of being offers for bids, though there is no allusion to other terms of the contract — price, time, or the like. But perhaps such terms were standard and generally known or were published elsewhere.

B. Primarily Contracts

A clear example of a complete contract offered may be seen among the documents from Lebadéia,⁴⁷ in the second century. The first section, concerning a balustrade to be carved, includes full prescription of the responsibilities between the *naopoioi* — building administrators — and the contractors as to the completion of the work, as well as specifications of the work to be done; but as the names of the con-

⁴⁵ IG, II-III², ii, 1: 1671.

⁴⁶ IG, II-III², ii, 1: 1666.

⁴⁷ IG, VII: 3073-3076; BCH (*Bulletin de Correspondance Hellénique*), XX (1896), pp. 318-335; *Classica et Mediaevalia*, VIII (1946), pp. 1-43.

tractors do not appear on the stone, and there is no room for them to have appeared, it is clear that it was drawn up and published as an offer, not as something already agreed upon between two parties. The remaining documents in this series, with one exception, do not include working obligations on the preserved stones, and might readily be taken simply as *syngraphai*, or perhaps rather *anagrapheis*, were it not for the fact that one of them follows immediately after the contract for the inscription on the balustrade, as though a series of offers were drawn up and published as a group before being signed. The one exception,⁴⁸ though quite fragmentary, does conclude with some names — including guarantors, and hence probably contractors — and must have been published as the contract agreed.

There are a few clear examples of contracts agreed. Thus a document from Eleusis of about 287/6⁴⁹ begins: 'The following was contracted [date]'; then follows a brief set of specifications (an *anagrapheus*?) for foundations of a building together with the names of a contractor and a guarantor and contract price; an *anagrapheus* for some roofing (with a different date) and more names. There are, to be sure, no allusions whatsoever to contractual responsibilities. Another, from Cyzicus in the early fourth century,⁵⁰ states simply that at a given date a certain Teukros contracted to build a tower for 440 drachmae; the guarantor is also named. An inscription from Athens of the fourth century⁵¹ is so fragmentary as to reveal little, but seems to close with the phrase 'specified and contracted [for]' in a certain date, and the names of contractors and guarantors; this would seem to be a signed and sealed document. The contract for a building in Delos published in Athens perhaps in the third quarter of the fourth century seems to be among the best examples of a complete contract.⁵² Of several third-century documents from Delos itself, three⁵³ seem to preserve elements of the most important aspects of contracts; two⁵⁴ bear what read like specifications on one side and the signatures to a con-

⁴⁸ *Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung*, XXII (1897), pp. 179-182.

⁴⁹ *IG*, II-III², ii, 1: 1682.

⁵⁰ Michel, *Recueil d'inscriptions grecques*, no. 596.

⁵¹ *IG*, II-III², ii, 1: 1684.

⁵² *IG*, II-III², ii, 1: 1678.

⁵³ *ID*: 502, 507, 508.

⁵⁴ *ID*: 500, 504.

tract on the other; and two ⁵⁵ have been already mentioned as specifications, though the contractual agreement may have been lost in damage to the stones.

Several texts from Eleusis from the latter part of the fourth century ⁵⁶ seem to be contracts signed on the basis of *anagrapheis* included in the documents. The preserved fragments refer to foundations, steps, stonework of various kinds, the empolia for columns, the transportation of column capitals; other elements of the building were undoubtedly contracted for in other documents. An interesting group is the list of separate contracts for the various divisions of the Athenian fortifications.⁵⁷

Finally, mention might be made of a document of the third century concerning the Asklepieion in Athens,⁵⁸ which is extremely fragmentary and may be primarily a *syngraphe*, and there might also be recalled the *syngraphai* converted to contracts at Oropos.⁵⁹

Thus the group of documents that, from our point of view, ought to fall simply and logically into a few clear-cut groups — specifications and contracts, with certain functional subdivisions — actually turn out to be bewilderingly confused. For this a number of reasons could be suggested, among them the probability that not every version of a document in its several stages including *syngraphai*, *anagrapheis*, contracts offered, and contracts accepted, was published as such. It is, perhaps, the more remarkable fact that documents like the specifications for the Arsenal of Philo were ever published on stone at all.

IV. FINANCING AND ACCOUNTS

A. *Financing*

In reviewing the next documents that will come before us we need to bear in mind the general concept of a set of accounts: it attempts to show what an authority received into its responsibility, and what happened to the things received. Some of the receipts would be a balance bequeathed by the previous authority, or from the previous account-

⁵⁵ *ID*: 505, 507 bis.

⁵⁶ *IG*, II-III², ii, 1: 1671, 1670, 1681, 1667, 1675, 1679, 1680.

⁵⁷ *IG*, II-III², i, 1: 463; *Hesperia*, IX (1940), pp. 66-72, lines 119 ff.

⁵⁸ *IG*, II-III², ii, 1: 1685.

⁵⁹ See notes 34 and 44, above.

ing period; some would be current income. In some instances the authority in charge of a building operation was in general charge of all or many affairs of a sanctuary or community, so that the accounting would include also the other possessions and business; sometimes commissions might be established simply to supervise a particular operation, and have no continuing possessions or income beyond cash turned over by some higher authority for the particular purpose. Once again, however, the theoretical and practical distinctions are ill defined: a body responsible for all the affairs of a sanctuary might, during a particular period, be wholly occupied in a building project so that its accounts would reflect during that period no other business; and unless we have the entire document preserved we cannot know what business might have appeared in the lost portions.

Before considering the typical accounts, however, it is appropriate to notice a few special documents concerned with the financing of some project. Ordinarily the decree authorizing or initiating a project would contain an article providing funds — to be paid from the treasury of Athena or some particular tax or otherwise. However, a decree from Oropos,⁶⁰ possibly of the fourth century, is concerned exclusively with authority for the polemarchs — administrators for military matters — to borrow money 'at the lowest possible interest' for work on the fortifications; a date for repaying the money is indicated, and also a special provision that people who lend a talent (or more) at (no more than?) ten per cent shall receive special honors, and have their names inscribed. Another document, from Cnidus in the third century,⁶¹ begins 'Kallikles to the treasurers: let the supervisors pay the contractors,' and then goes on to provide for refunding the loan from which the money for the stoa in question came, stating that those who gave more than 500 drachmae without interest are to have their names inscribed (in descending order according to the amount) and that the money is to be repaid them from a second mortgage on the income assigned to the construction of the council-house and from other incomes and taxes and the income from the stoa itself. The decree from Skepsis already noted,⁶² initiating various public works, is especially explicit in detailing the sources of funds for the project.

⁶⁰ *IG*, VII: 4263.

⁶¹ *BCH*, IV (1880), pp. 341 ff.

⁶² See note 21, above.

B. *Simple Accounts*1. *Receipts Only*

Among documents that might be taken as accounts are some concerned exclusively with donations. Thus the Amphictyonic Council at Delphi from about 370 published annually a list of donations received for the rebuilding of the temple;⁶³ from Megalopolis, about 130, comes a very fragmentary text containing the list of 'benefactors' appointed for the construction and repair of the fortifications during a number of years.⁶⁴ Since these documents amount to a list of receipts over a period of time they have the character of accounts (although nothing is said of what was done with the money), but otherwise they would be hard to distinguish from a number of other documents listing donors to some project or projects that seem to be intended primarily to honor the donors. Thus a long document from Troezen of the late third century⁶⁵ consists of a list of resolutions by various local groups voting to contribute to the general defense (no sums are named). From Paros of the second century is a list of donors to a spring,⁶⁶ and from the second century after Christ come lists of donors to the colonnade of a shrine in Lebadcia,⁶⁷ a statue in Cyrene,⁶⁸ and a widely varied series of public works in Smyrna.⁶⁹ Somewhat unusual is a document of uncertain date from Tralles⁷⁰ listing donors of columns and the like — not money — for some building.

2. *Expenditures Only*

In other documents only disbursements are recorded. Of these, the clearest example is the series from the fortifications of the Peiraeus of the first decade of the fourth century,⁷¹ each stone recording the payments for work done on some particular contract. Two texts from Teos of the third or second century⁷² seem to have been similar. A

⁶³ *Delphes*, III, v: 3.

⁶⁴ *IG*, V, ii: 442.

⁶⁵ *IG*, IV: 757.

⁶⁶ *IG*, XII, v, 1: 186.

⁶⁷ *IG*, VII: 3077.

⁶⁸ *SEG*, IX: 176.

⁶⁹ *Corpus Inscriptionum Graecarum*, II: 3148.

⁷⁰ *BCH*, XVIII (1894), p. 8.

⁷¹ *IG*, II-III², ii, 1: 1656-1664.

⁷² *SEG*, II: 582-583.

long but much mutilated stone from the Peiraeus just after the middle of the fourth century having to do with a temple of Zeus⁷³ has parts of the heading — names of the board and so forth — preserved, and then proceeds to the listing of expenses, without indication of receipts. A document from Delphi of about 258⁷⁴ lists a number of jobs done in the gymnasium by individuals named for a price specified; not only are no receipts indicated, but it is not even specified that the money was paid, although this is surely to be assumed. Another, much more extensive, document from Delphi⁷⁵ presents the accounts of the *hieromnaimones* — members of a general supervisory board — during several years around 340; disbursements of a few sums each year are indicated, but no receipts, nor is there any place for receipts. Probably in this category is the unusually large and important group of documents from the greater sanctuary of Apollo Didymaeus near Miletus. There are more than twenty fragments of accounts, some quite lengthy, covering a period from the late third century to the early first,⁷⁶ of work done on the reconstruction of the temple of Apollo. None of the fragments, as preserved, indicates any receipts. Among other peculiarities, in some of the earlier ones the expenditures are given in large summary categories — as for the setting of stones — at the beginning; then follows in detail the listing of the number, kind, and location of stones set by each foreman or by the slaves of the sanctuary. In the later documents the amount paid for each operation is listed with the notice of the job, as is done commonly elsewhere, and at the end is a totaling of the expenditures under large categories.

C. Complex Accounts

1. General

From the over-all view, however, these accounts listing only receipts and those listing only expenditures are probably to be considered as excerpts from a complete accounting, and to get a clear impression of the kinds of documents preserved it will be well for us to return to the first-suggested basis of classification. One might best begin with a

⁷³ *IG*, II-III², ii, 1: 1669.

⁷⁴ *BCH*, XXIII (1899), pp. 564-569.

⁷⁵ *Delphes*, III, v: 21-22.

⁷⁶ *Didyma*: II, *Die Inschriften*, by Albert Rehm, ed. Richard Harder (Berlin, 1958), nos. 20-47.

survey of one or two examples of the kind of account drawn up by an authority of broad responsibilities to whom a construction project was simply one among many other activities. Such an authority would be the *hieropoioi* — administrators of the sanctuary — of Delos during the period approximately 300–150.⁷⁷ The accounts of the board for 250 are published, like most of the others, on a single stele inscribed on front and back and both sides.⁷⁸ On the front, running to some 200 lines, are the receipts and expenditures of cash: receipts from various subdivisions of the sanctuary, and from the former *hieropoioi*, taxes, sales of property, rents of farm lands and buildings; then expenses of the month for supplies for the various rites and ceremonies, and payments and supplies for upkeep and construction; then a list of loans and leases of property (with detailed itemization of the building and other structures on the properties leased); then down payments and interest on the leases made. On the back of the stele is an inventory of the objects handed over by the former board — the vases and other dedications and the like that had been stored in the sanctuary in the past — according to where they were stored; then a list of such objects received in the current administration; then a list of other property including lumber and building material. The accounts of the *hieropoioi* for 179 are essentially the same but in much greater detail.⁷⁹ First are listed the deposit boxes belonging 'to Apollo' handed on by the previous board, with the box (actually a vase?) identified by its label and with a note of the amount in each box; then a listing of the boxes, with amounts, added by the current board; then a listing of withdrawals from the various boxes each month for various purposes. A similar account is given of money preserved in the same way in a 'public' account. After this comes a record of income from rents from various individuals, taxes, sales of materials, interests, repayments of loans, and so forth; then comes a running monthly account of expenditures for materials for the rites, upkeep, construction, and so forth. After this come more records of income and receipts, for the separation of which the rationale is not very clear. Again, on the other side of the stele, is an inventory of objects in various parts of the sanctuary.

Somewhat similar to these are the accounts of a board of officials ap-

⁷⁷ IG, XI, ii: 135–289; ID: 290–498.

⁷⁸ IG, XI, ii: 287.

⁷⁹ ID: 442.

pointed from Athens who administered the sanctuary at Delos in the second century,⁸⁰ and the accounts of the *epistatai* of Eleusis through the latter part of the fifth century down to the end of the fourth.⁸¹ It is possible that another group of accounts from Eleusis⁸² belongs to such a general report of the fourth century, though they may have been published by a board with responsibilities limited to construction. Finally another fourth-century document from Troezen,⁸³ containing many architectural items, but also other matters, may be regarded as general accounting.

2. Excerpted

There are also some notable examples of accounts in which the transactions seem to have been almost exclusively concerned with architecture, though the boards presenting the accounts must have had many other responsibilities, so that we can hardly regard the documents in question as other than excerpts or special reports. Most notable would be the series from Delphi of the fourth century: we have already mentioned the annual publication by the Council at Delphi⁸⁴ listing contributions for the year; another series published by the Council,⁸⁵ and reports of the *hieromnaimones*, already mentioned,⁸⁶ and of the Treasurers,⁸⁷ seem to note chiefly sums paid for architectural purposes either directly or, more generally, to another board—the *naopoioi*—that seemed to have the direct responsibility for construction and whose accounts might therefore be classified with others below. For the renovation in the gymnasium in the third century, however, there are detailed accounts⁸⁸ of expenditures for the particular jobs, by a body not actually specified but which one might infer to be the *hieromnaimones* themselves.

It is possible that the accounts from Miletus⁸⁹ already mentioned

⁸⁰ *ID*: 1400–1496.

⁸¹ *IG*, I²: 313, 314, 336, 318; *SEG*, III: 35, X: 211; *Hesperia*, XII (1943), pp. 34–37; *IG*, II–III², II, 1: 1540, 1544, 1672, 1673, 1674, 1548, 1549, 1550, 1551, 1552, and other small fragments.

⁸² *IG*, II–III², II, 1: 1676, 1677.

⁸³ *IG*, IV: 823.

⁸⁴ *Delphes*, III, v: 3.

⁸⁵ *Delphes*, III, v: 19–20.

⁸⁶ *Delphes*, III, v: 21–22.

⁸⁷ *Delphes*, III, v: 47–77.

⁸⁸ *BCH*, XXIII (1899), pp. 560–583.

⁸⁹ See note 76, above.

were also really excerpts of the general accounts of the general governing board: they deal exclusively with architecture, but no board or responsible agent is named in most of them; they are the accounts of the 'jobs done by the slaves of the god' during the year. The agent might be assumed to be the priestly authority, though in the last an individual 'chosen by the people to supervise the construction' is given as the author of the accounting.

3. Building Commissions

Finally there are the accounts of authorities established for the particular purpose of carrying out a construction project. Such, probably, would be the *naopoioi* at Delphi.⁹⁰ They received money from the city of Delphi and from the *bierommamones* and treasurers, and spent it chiefly for construction though also for upkeep and minor rites. Their accounts list, first, receipts for the two semiannual periods of a given year; then expenses for the two semiannual periods. There are also, from Delos of the second half of the fourth century, fragments of accounts that were possibly issued by a board of *naopoioi*⁹¹ and one document issued by the secretary of this board.⁹²

From Athens in the second half of the fifth century come several examples of reports by special boards: those for the Parthenon⁹³ and the Propylaea,⁹⁴ and for the statues of Athena Parthenos,⁹⁵ Athena Promachos,⁹⁶ and Athena and Hephaistos in the Hephaisteion.⁹⁷ These were issued by *epistatai* designated for the particular job, and were published, or at least arranged, by receipts and expenditures for each year. The accounts for the two statues in the Hephaisteion were obviously not actually published annually: the receipts for the first six years appear first, for each year; then the expenditures for each of the same six years. Of unusual interest are the accounts for the Erechtheum for the end of the fifth century and the beginning of the fourth.⁹⁸ One

⁹⁰ *Delphes*, III, v: 23-45.

⁹¹ *BCH*, XXXV (1911), pp. 11-14 (no. 2).

⁹² *BCH*, VIII (1884), pp. 305-312 (no. 13); René Vallois, *L'Architecture Hellénique et Hellénistique à Délos* (Paris, 1944), pp. 414-422.

⁹³ *IG*, I²: 339-353.

⁹⁴ *IG*, I²: 363-367.

⁹⁵ *IG*, I²: 354-362.

⁹⁶ *IG*, I²: 338; *Hesperia*, V (1936), pp. 362-380 (no. 4), XII (1943), pp. 12-17 (no. 2).

⁹⁷ *IG*, I²: 370-371.

⁹⁸ J. M. Paton, ed., *The Erechtheum* (Cambridge, Mass., 1927), pp. 277-422 (nos.

peculiarity lies in the fact that the first document (409/8) is really an inventory of what was handed over to the board by the preceding board: a stone-by-stone description of the building in its state at the time, and of partially finished or unfinished material on hand. The explanation of this treatment is not completely sure — whether there had been a period of inactivity in the work, or whether a new system of accounting had been introduced.⁹⁹ In any case, the accounts for the succeeding years were published with the ordinary detailing of receipt and expense, the items organized by the month within each year. The inventory and the regular accounts of 409/8 were published on steles, the later accounts on the marble facing of a terrace wall. A tiny fraction of the late fifth-century accounts of the temple of Athena Nike¹⁰⁰ is also preserved, but can hardly be classified.

From the fourth century in the region of Athens, too, come some other documents that belong in this category, though they have already been mentioned in another context: some fragments from Eleusis;¹⁰¹ the expenses, without receipts, of a board overseeing the construction of the temple of Zeus in the Peiraeus;¹⁰² and the rather unusual accounts of the supervisors of the fortifications in the Peiraeus, whose payments to individual contractors were recorded on individual stones located at the point where the work was done.¹⁰³ (Recall also the similar series from Teos, of the third or second century.)¹⁰⁴

The last important group comes from Epidaurus in the fourth and early third centuries. All of these, perhaps — certainly some — are the reports of special authorities designated for particular projects. Thus there are the accounts for the Aphrodision,¹⁰⁵ the temple of Asklepios,¹⁰⁶ the Tholos,¹⁰⁷ a building called the Epidoteion,¹⁰⁸ a 'bar-

II-XXIX); *IG*, I²: 372-374, 967, II-III², ii, 1: 1654, 1655; *American Journal of Archaeology*, XXXVIII (1934), pp. 69-70; *Hesperia*, II (1933), pp. 377-391 (no. 9), VII (1938), pp. 268-269 (no. 3), IV (1935), pp. 161-162 (no. 19), IX (1940), pp. 102-104 (no. 19).

⁹⁹ Bundgaard, *Mnesicles*, pp. 249-250.

¹⁰⁰ *IG*, I²: 89.

¹⁰¹ *IG*, II-III², ii, 1: 1676, 1677.

¹⁰² *IG*, II-III², ii, 1: 1669.

¹⁰³ *IG*, II-III², ii, 1: 1656-1664.

¹⁰⁴ *SEG*, II: 582-583.

¹⁰⁵ *IG*, IV², i: 107; 106 to line 35, left side.

¹⁰⁶ *IG*, IV², i: 102.

¹⁰⁷ *IG*, IV², i: 103.

¹⁰⁸ *IG*, IV², i: 108.

racks' on the hill called Kyon,¹⁰⁹ some baths,¹¹⁰ a retaining wall,¹¹¹ and some buildings that cannot now be identified.¹¹² These, too, in general, are annual reports with the items grouped by the month, with receipts, expenditures, and balance. A striking feature is the amount of space occupied by the continuously repeated phrase 'a tenth having been withheld, the balance was —,' reflecting the system of reserved payment for work to be done. In the early years of work on the temple of Asklepios the contractor and agreed price are indicated, but not the fact of payment; thereafter the formulae are more normal.

To complete this review of accounts of special commissions we might mention an undated fragment from Tegea,¹¹³ and several lists of receipts, most of them already mentioned in other connections: of the third century, from Troezen;¹¹⁴ of the second century, from Megalopolis¹¹⁵ and Paros;¹¹⁶ and a number of the second century after Christ, from Lebadeia,¹¹⁷ Cyrene,¹¹⁸ and Smyrna.¹¹⁹ There are also some fragments that can hardly be classified from Argos,¹²⁰ Corcyra,¹²¹ Nemea,¹²² and Hermione.¹²³

V. MISCELLANEOUS

Of the many dedications and honorary inscriptions that are associated with or informative about the practice of architecture in classical antiquity it would be impossible to give any satisfactory account in brief compass, and they are not really significant to the study of architecture as such except in so far as many of them yield, individually, some odd bit of information. They are, of course, important in general in illustrating the pride that donors took in the buildings for which they

¹⁰⁹ IG, IV², i: 109.

¹¹⁰ IG, IV², i: 116.

¹¹¹ IG, IV², i: 108 from line 159; 106 from line 35, left side.

¹¹² IG, IV², i: 104, 105, 110-115, 117-119.

¹¹³ IG, V, ii: 33.

¹¹⁴ IG, IV: 757.

¹¹⁵ IG, V, ii: 442.

¹¹⁶ IG, XII, v, 1: 186.

¹¹⁷ IG, VII: 3077.

¹¹⁸ SEG, IX: 176.

¹¹⁹ *Corpus Inscriptionum Graecarum*, II: 3148.

¹²⁰ IG, IV: 533-535.

¹²¹ IG, IX, i: 691.

¹²² IG, IV: 481.

¹²³ IG, IV: 742.

were responsible, and the recognition the community was willing to accord them. A notable example of this is the decree, perhaps of the third century, in honor of a certain Protogenes in recognition by the people of Olbia for his benefactions;¹²⁴ it is preserved to a length of almost 200 lines, of which about half are concerned with his work on the city fortifications. A rare and appealing type of document is represented by a text of the third century after Christ from Chalkis¹²⁵ containing what amounts to the minutes of the meeting where honors were being voted to an individual for his benefactions; the motion, the shout of approval, the call for a show of hands — in both council and assembly — are all solemnly reported.

There are, finally, a few miscellaneous documents of widely varied content which are pertinent in one way or another. There are preserved records of lawsuits: one from Corcyra¹²⁶ of the second century publishing a court decision in the liability of a badly located roof spout on the city ship sheds; and a long text from Delos¹²⁷ of about 200 in which a priest of Sarapis gives an account of the dream that led him to build a temple to his divinity, of how he built it, of the lawsuit that was brought against him, and of his successful outcome. The story is actually told twice — first as a narrative, and then as a kind of hymn to the god. There is a lease of 306/5 of a sanctuary called the Egreteion in Athens¹²⁸ to a man, with careful prescription of his rights to effect certain repairs; and two other documents, of the fourth and early third centuries respectively, seem to lease, or empower the lease, of land, including permission to construct drains.¹²⁹ A fragment from Miletus¹³⁰ records the question put in the second century after Christ to an oracle by a contractor or group of workmen as to whether they should accept a contract. Then, there is the famous treaty of the mid-fourth century made between Athens and several communities on Cos defining the terms of trade in *miltos* — red lead — an important material in architectural practice.¹³¹ Finally, mention might be made of a document of a kind all too rare, from the point of view of the modern

¹²⁴ Dittenberger, *Sylloge Inscriptionum Graecarum* (ed. 3), I: 495.

¹²⁵ IG, XII, ix: 906.

¹²⁶ IG, IX, i: 692.

¹²⁷ IG, XI, iv: 1299.

¹²⁸ IG, II-III², ii, 2: 2499.

¹²⁹ IG, II-III², ii, 2: 2491, 2502.

¹³⁰ *Archäologischer Anzeiger*, 1904, p. 8.

¹³¹ IG, II-III², i, 2: 1128.

historian — the fourth-century chronicle of the sanctuary of Asklepios in Athens,¹³² in which are also recorded, under the appropriate dates, various repairs or constructions in the sanctuary.

No doubt the general terms of this outline will give the impression that the documents are more complete and hence more informative than is actually the case; too often the crucial information, for any investigation, is lost by accident to the stone or the brevity of the communication. But even so, it is evident that the material constitutes a significant library of documents for the history of architecture and the practices of building and public administration in antiquity. The problems of cataloguing this library are often baffling and irritating, and these in turn lead to problems for the interpretation of the content of the documents, as well as for the understanding of the ancient clerk and bookkeeper, and of 'the classical mind.' But all of this is simply to describe the challenge and the potential for study and interest that are involved in these fragments from the archives of antiquity.

ROBERT L. SCRANTON

¹³² *IG*, II-III^a, ii, 3: 4960.

List of Contributors

ROBERT SCRANTON, Professor of Classics, Emory University

JEAN PARRISH, Ithaca, New York

WILLIAM A. JACKSON, Professor of Bibliography, Harvard University, and Librarian of the Houghton Library of the Harvard College Library

FRITZ REDLICH, Cambridge, Massachusetts

PHILIP HOFER, Lecturer on the Fine Arts, Harvard University, Curator of Printing and Graphic Arts in the Harvard College Library, and Secretary of the William Hayes Fogg Art Museum

JOSEPH E. FIELDS, Joliet, Illinois

CARL R. WOODRING, Professor of English, University of Wisconsin

PAUL H. WALTON, Canada Council Fellow in England

ANDREW HILEN, Professor of English, University of Washington