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PHYSICAL AND VISUAL CHARACTERISTICS OF LATIN BUILDING INSCRIPTIONS: THE CASE OF NORTH AFRICA*

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Introduction

For a long time Latin epigraphy was regarded as an auxiliary science whose principal or even only task was to provide well-edited documents to be used as evidence by classical historians.¹ As epigraphy gradually became an independent discipline, interest in inscriptions themselves increased and many new questions started to be posed. This increasing attention is indicated by the many scholars who have examined lapidary inscriptions as material or visual objects. Di Stefano Manzella, Donati, Panciera and Susini have studied the functioning of stone-

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¹ For the traditional view, see, e.g., P. Harvey, *The Oxford Companion to Classical Literature*, 1937 (reprinted as late as 1989), 164: "§ 6. Utility of Latin inscriptions. Latin inscriptions ... are of great value to the historian as a supplement to the limited literary sources" and A. Gordon – J. Gordon, *Contributions to the Palaeography of Latin Inscriptions*, Berkeley – Los Angeles 1957, 65: "Epigraphists ... concentrate on the deciphering and elucidating of the contents of the pieces studied, and their interest in the writing – and ours too – is limited, in the main, to the contribution it can make to an understanding of the text."

cutters' shops,² Prag, Pensabene and Gordon inscriptional materials,³ Corbier, Derks and Zimmer the placement of inscriptions in the public space,⁴ Buonopane, Gordon, Grasby, Kruschwitz, Mallon, Panciera, Priuli, Sartori, and Sertã the *ordinatio* of inscriptions and their visual outlook,⁵ Petrucci the relationship between

³ J. R. W. Prag, "Epigraphy by numbers: Latin and the epigraphic culture in Sicily", in A. E. Cooley (ed.), *Becoming Roman, Writing Latin. Literacy and Epigraphy in the Roman West*, Portshmouth 2002, 15–31 (analyses all Punic, Greek, and Latin inscriptions found in Sicily, their temporal and geographical distribution, types and materials used); P. Pensabene, *Marmi antichi: problemi d'impiego, di restauro e d'identificazione*, Roma 1985; Id., *Marmi antichi* II: *cave e tecnica di lavorazione, provenienze e distribuzione*, Roma 1998; A. Gordon, *Epigraphica*. 2: *On marble as a criterion for dating Republican Latin Inscriptions*, Berkeley 1936. For marbles in general, cf. J. C. Fant (ed.), *Ancient Marble. Quarrying and Trade*, Oxford 1988; R. Gnoli, *Marmora romana*, Roma 1971 that also discusses – despite its name – other polishable types of stones (e.g. porphyry) as well; cf. N. Herz – M. Waelkens, *Classical Marble: Geochemistry, Technology, Trade*, Dordrecht 1988.

⁴ M. Corbier, *Donner à voir, donner à lire. Mémoire et communication dans la Rome ancienne*, Paris 2006; T. Derks, "The perception of the Roman pantheon by a native élite: the example of votive inscriptions from Lower Germany", in N. Roymans – F. Theuws (eds.), *Images of the Past. Studies on Ancient Societies in Northwestern Europe*, Amsterdam 1991, 235–65; G. Zimmer, *Locus datus decreto decurionum. Zur Statuenaufstellung zweier Forumsanlagen im römischen Afrika. Mit epigraphischen Beiträgen von Gabriele Wesch-Klein*, München 1989.

⁵ A. Buonopane, "Un caso di *ordinatio* graffita in una iscrizione funeraria atestina (SuppIIt, 537)", *Epigraphica* 50 (1988) 226–34; A. Gordon – J. Gordon (above n. 1); R. Grasby, "A comparative study of five Latin inscriptions: measurement and making", *PBSR* 64 (1996) 95–138; Id. "Latin inscriptions: studies in measurement and making", *PBSR* 70 (2002) 151–76; Id. "Processes in the Making of Latin Inscriptions", a poster at the *Thirteenth International Congress of Greek and Roman Epigraphy*, http://ciegl.classics.ox.ac.uk./html/posters.shtml (Grasby has interesting ideas on the methods of carving of the inscriptions based on practical exercises but ignores practically all earlier scholarship; moreover, even if his hypotheses were correct, they can be applied to very few inscriptions); P. Kruschwitz, "Patterns of text layout in Pompeian verse inscriptions", *SPhV* 11 (2008) 225–64; J. Mallon, *Paléographie romaine*, Madrid 1952; S. Panciera, "La genesi dei documenti epigrafici secondo Mallon. A proposito di una nuova iscrizione metrica", *RAL*, ser. VIII, 22 (1967) 100–08, esp. 100–05 (now published with bibliographical addenda as "Dalla minuta all'incisione. Una nuova iscrizione metrica dall'Agro Pontino", in S. Panciera, *Epigrafi, epigrafia, epigrafisti. Scritti vari editi e inediti*

² I. Di Stefano Manzella, "Esercitazioni scrittorie di antichi marmorari", *Epigraphica* 43 (1981) 39–44; A. Donati, *Tecnica e cultura dell'officina epigrafica brundisina*, Faenza 1969; S. Panciera, "La produzione epigrafica di Roma in età repubblicana. Le officine lapidarie", in H. Solin – O. Salomies – U.-M. Liertz (eds.), *Acta Colloquii Epigraphici Latini Helsingiae 3.–6. Sept. 1991 habiti*, Helsinki 1995, 319–42; Id. "La produzione epigrafica di Roma in età repubblicana: le officine lapidarie, II: nascita e sviluppo del sistema abbreviativo", in S. Demougin – J. Scheid (eds.), *Colons et colonies dans le monde romain*, Rome 2012, 359–85; G. Susini, *Il lapicida romano. Introduzione all'epigrafia latina*, Bologna 1966.

epigraphy and palaeography,⁶ and Manacorda and Oliver special characters.⁷

These materialistic or visual approaches have been given impetus by the rapidly increasing digitalization of scientific data that has revolutionized the field of Latin epigraphy during the past two decades.⁸ Several on-line databases have brought practically the whole corpus of Latin inscriptions within reach of everyone who has the access to the Internet.⁹ The ever-growing number of easily accessible digital photographs of inscriptions combined with evolved standards of editing¹⁰ mean that inscriptions can be much more easily analysed as visual

6 A. Petrucci, "Epigrafia e paleografia. Inchiesta sui rapporti fra due discipline", *Scrittura e civiltà* 5 (1981) 265–315 (an interview of R. Favreau, M. Guarducci, J. Mallon, S. Panciera, A. Prosdocimi, G. Scalia, H. Solin, G. Susini).

⁷ D. Manacorda, "Ex ascia", *AC* 24 (1972) 346–52; R. Oliver, "The Claudian Letter **\-**", *AJA* 53 (1949) 249–57.

⁸ For more on this theme, see J. Bodel, "Latin Epigraphy and the IT revolution", in J. Davies – J. Wilkes (eds.), *Epigraphy and the Historical Sciences*, Oxford 2012, 275–96 who also discusses new methods for reading worn stones; in the same congress another, promising method was introduced, see a poster by A. Barmpoutis – E. Bozia – R. Wagman: http://ciegl.classics.ox.ac.uk

⁹ The four most important databases for the present study are *Epigraphik-Datenbank Clauss/ Slaby EDCS Online* (http://www.manfredclauss.de); *Epigraphische Datenbank Heidelberg EDH* (http://www.epigraphische-datenbank-heidelberg.de); *Inscriptions of Roman Tripolitania* (http://irt.kcl.ac.uk/irt2009/) and *Corpus Inscriptionum Latinarum database* (http://cil. bbaw.de/cil_en/index_en.html) (the last mentioned now offers facsimile versions of all earlier editions of *CIL* in PDF-format). For a theoretical discussion, see F. Feraudi-Gruénais, *Latin on Stone: Epigraphic Research and Electronic Archives*, Lanham 2010. For practical applications of these new possibilities, see a poster by A. Felle, "La documentazione epigrafica della catacomba di Domitilla a Roma alla luce dell'*Epigraphic Database Bari*: nuovi elementi di riflessione", http://ciegl.classics.ox.ac.uk

¹⁰ There are two essential improvements: first, most inscriptions are now published with photographs and with detailed descriptions of their outward aspect; secondly, the introductory chapters of many epigraphic corpora discuss some aspects related to the outward appearance of inscriptions. An excellent example of the former is *Uchi Maius 2. Le iscrizioni*, a cura di A. Ibba, Sassari 2006, where a description of an inscription that was presented in a half page

^(1956–2005) con note complementari e indici II, Roma 2006, 1809–15); S. Priuli, "Una lapide sepolcrale di Roma con iscrizione incisa nel recto e minuta dello stesso testo graffita nel verso", *Epigraphica* 46 (1984) 49–63; A. Sartori, "L'impaginazione delle iscrizioni", in *Acta Colloquii Epigraphici Latini Helsingiae* 3.–6. *Sept. 1991 habiti*, Helsinki 1995, 183–200; Id., "L'elo-quenza del monumento, l'appariscenza dell'iscrizione", in M. Mayer i Olivé – G. Baratta – A. Guzmán Almagro (eds.), *Acta XII Congressus Internationalis Epigraphiae Graecae et Latinae. Barcelona,* 3–8 *Septembris 2002*, Barcelona 2007, 1303–08; C. Sertã, "Le tombe *a schola* di *Mamia* e di *Marcus Alleius* a Pompei", *Epigraphica* 58 (1996) 131–39.

and physical objects¹¹ and that such analyses can cover much larger masses of data than was previously possible.¹² Accordingly, the present study has benefited greatly from numerous photographs that are now available in Internet databases; the analysed material in this study has also been recorded in a database of its own. The database format made statistical calculations easy to execute, and it also offers readers the possibility both for easy verification of those calculations and for carrying out further research.¹³

The present article analyses visual and physical aspects of Latin building inscriptions. Although this theme has so far been ignored in the scholarly research, building inscriptions are ideally suited to this kind of investigation. Like honorary inscriptions, they were prestigious public documents and usually carefully composed and skilfully carved.¹⁴

I will focus on material found in Northwest Africa, as this area is one of the richest in Latin building inscriptions and Latin inscriptions in general in the the Roman world.¹⁵ My sample is a collection of 1002 building inscriptions from Roman North Africa the diction of which I analysed in my Ph.D. thesis.¹⁶ For

in *CIL* may take over ten pages. As for the latter, see, for example, M. Khanoussi – L. Maurin (eds.), *Mourir à Dougga. Recueil des inscriptions funéraires*, Bordeaux – Tunis 2002, especially chapter 2, "Le support", pp. 44–60 and chapter 3, "Écriture et mise en page", pp. 60–76.

¹¹ Cf. also an Internet article "Worth a thousand words: A new approach to the development of monumental inscriptions at Ephesus during the early Imperial period" by A. Graham (see http://www2.warwick.ac.uk/fac/arts/classics/staff/graham/rae_article-finalversionult.pdf), 2. The advantages of the databases are not limited to the availability of the texts and photographs, of course; they have immensely facilitated the sorting and comparing of inscriptions. Now the formerly arduous task of identifying an inscription or a fragment of an inscription can be done in minutes; similar inscriptions can be rapidly collected and compared to find parallels and consequently more reliable restorations for fragmented texts.

¹² Cf. the difficulties encountered e.g. by A. Gordon – J. Gordon (above n. 1), 65 and I. Di Stefano Manzella, "Problemi di paleografia epigrafica latina", in *Acta Colloquii Epigraphici Latini Helsingiae 3.–6. Sept. 1991 habiti*, Helsinki 1995, 163; cf. also Graham (above n. 11), 2.

¹³ All the data collected for this paper is published in a searchable Internet database created by me, see https://sites.google.com/site/africanbuildinginscriptionsdb

¹⁴ A. Saastamoinen, *The Phraseology of Latin Building Inscriptions in Roman North Africa*, Helsinki 2010, 15.

¹⁵ African Latin building inscriptions also seem to represent a separate regional tradition, at least as far as Italy is concerned. See, for example, A. Saastamoinen, "On the Local Characteristics of Latin Building Inscriptions in Roman North Africa", *AfrRom* 16 (2006) 1891–906.

¹⁶ Saastamoinen (above n. 14). The descriptions and measurements of the monuments are mostly given according to the publication that I used as a principal source in my thesis. For

this study, I will compare the African material with inscriptions collected and analysed by the Gordons.¹⁷ Their collection comprises all kinds of texts, but does include also a number of building inscriptions from Rome and its environs and has the advantage of furnishing exact details on the archaeological aspects of inscriptions.

In this article, I will discuss several key elements of the physical presentation and appearance of these inscriptions. I will start by discussing the types of supports (architraves, panels, slabs etc.) and their material (various types of rock). Then I will analyse the measurements of supports and their letters, paying particular attention to possible interdependencies between types of supports and the letter sizes of their inscriptions.

I am not going to discuss the various letter forms, special characters or interpuncts. Few epigraphic publications provide photographs or precise descriptions of the letter forms of *all* inscriptions included. Besides, there are numerous palaeographic studies devoted to various character sets and individual letter forms in general and to special characters or forms of interpuncts in particular. I will also pass over the spacing of the letters and their module (the width compared with height) as these measures are hardly ever recorded in epigraphic publications.

This same factor, insufficiently recorded data, has also complicated the analysis in a more general manner. Many analysed inscriptions originally appeared in old epigraphic publications that focused mainly on inscriptions as texts.¹⁸ Consequently, they were published without photographs and their verbal

¹⁷ A. Gordon – J. Gordon (above n. 1).

example, inscription number 317 in the appendix of my thesis (p. 447) was based on *ILAlg*. II 7751 and the description of the monument is based on that same source. Exceptions are, however, the cases where I have found out that data offered by an older publication seem to be more accurate. For example, inscription number 16 in the appendix of my thesis (p. 407) was edited according to *ILPBardo* 2, 7 but the letter sizes are certainly incorrectly recorded there (10 cm throughout): the photograph shows that the first line is clearly taller than the rest. Thus, I have employed the measurements given by *ILAfr*: 353: 15.5–9 cm.

¹⁸ The most important collection is by far *CIL* VIII. I have used it as the principal source for 408 inscriptions (41 per cent of the total), and the majority of those inscriptions have not been republished in collections or databases that would offer more information on their visual or physical aspects. Naturally, I have tried to add missing details by using my own photos; but few of the inscriptions can actually be seen today. They were found in no less than three hundred sites scattered all around northwestern Africa and have frequently been removed to other locations after their discovery. That alone makes the personal inspection of all inscriptions concerned a Herculean task while the subsequent disappearance of many, perhaps most

descriptions are meagre. Although many of those inscriptions are now republished with photographs in Internet databases, not all of them are; moreover, the original insufficient descriptions are only seldom updated with new information.

In the case of older issues of AE, the descriptions of supports are almost always missing and the original publications might be impossible to find or are almost as defective as the AE entries themselves.¹⁹ In *CIL*, the situation is slightly better, but descriptions are never comprehensive. The descriptions in both publications are not only marred by missing information (for example, the letter type, the size of the epigraphic field or the depth of the support are hardly ever recorded) but also by imprecision: different types of rock are seldom distinguished (they are just "lapis" or "pierre"), the types of the support are not characterized (they too are "lapis" or "pierre"), or, if they are, the description can be ambiguous. For example, in *CIL* the word 'epistylium' can denote a frieze, an entire entablature or, occasionally, a lintel.²⁰ Thus, the reader should bear in mind that the information on which this article is based is incomplete and should be cautious when using it as a basis for statistics.

1. The types of supports

The majority of carriers of inscriptions (that is, the supports on which inscriptions were carved) are known and recorded. When the 354 undefined cases (the

of the inscriptions turns it into a completely impossible one. This disappearance is occasionally recorded already in *CIL*. See, for example, the commentary on *CIL* VIII 993: "Ego frustra quaesivi: ex marmore nuper calcem factam esse mihi dixerunt incolae oppidi."

¹⁹ To give just one example: neither *AE* 1899, 216 nor *AE* 1898, 50 describe the monument at all; they are based on *RSAC* 32 (1898) 375 no. 20 which records only the find spot and the type of rock (limestone).

²⁰ The vagueness in *CIL* is sometimes due to the fact that several inscriptions published in it were already lost and their presentation had to be based on very defective descriptions given by early travellers (for example, the text and the description of the monument in *CIL* VIII 501 is based solely on G. T. Temple, *Excursions in the Mediterranean. Algiers and Tunis*, London 1835, 221, 328). This is not the whole truth, however. I have found out that the editors of *CIL* occasionally omitted details concerning the visual appearance of a given inscription even when those details were already recorded in the publication on which they based their description. Thus, an inscription published in *RevAfr* 11 (1867) 315–16 was republished in *CIL* VIII 8375 with the following changes and omissions: the letter size was given only approximately, the type of support was not specified, the type of rock was not specified and the mention of frames was omitted.

support is either not mentioned or characterized vaguely as "stone") are removed, the remaining 648 cases can be divided into 27 different types.²¹ Only ten types are attested seven or more times. These types are represented in Chart 1 below. Among these ten types there are four that are far more common than the others: panels, blocks, entablatures, and lintels.

The most frequently attested type by far is a panel (slab).²² It is recorded 214 times, that is, 33 per cent of recorded supports are panels. Their temporal spread is as follows: the first century BC: one case; the first century AD: eight cases; the second century: 80 cases; the third century: 48 cases; the fourth and fifth centuries: 47 cases (a remarkably large share as compared with the other types of the period); thirty cases are undatable.

The original placement of these panels varied but is known only rarely: for example, one was placed over a gate of a fortress²³ and some others on a stone base of a ponderarium.²⁴

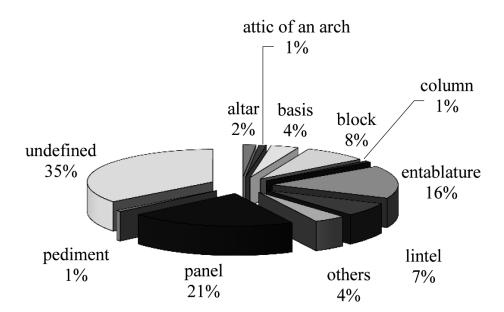


Chart 1: Types of support

²³ AE 1942–43, 81. The letter size is rather small considering the elevated placement: 6.5 cm.

 24 *ILAlg.* II 7938. The letters are much taller than they were in the previous case although the inscription was placed near the ground: 13.5–11.5 cm.

²¹ They are: altar, attic of an arch, basis, bench, block, capital, cippus, column, doorsill, entablature, jamb, keystone, lintel, monument, mosaic floor, panel, part of the edge of a manhole in a cistern, pavement, pediment, pier, pillar, rim of a cistern, rock, semicircular recess, stele, stone counters and stones forming arches.

²² This preference is no African speciality but holds true of Roman building inscriptions in general. See O. Salomies, "Some Observations on Consular Dating in Roman Inscriptions of the Empire", in *Acta colloquii epigraphici Latini Helsingiae 3.–6. Sept. 1991 habiti*, Helsinki 1995, 276.

The block is attested in 82 cases, which makes it the third most common type.²⁵ 13 per cent of recorded supports are blocks and their temporal spread is as follows: the first century BC: five cases (a large number considering that only seven examples survive from this period); the first century AD: 16 cases; the second century: 24 cases; the third century: 13 cases; the fourth and fifth centuries: four cases; 20 cases are undatable.²⁶

As was the case with panels, the exact original placement of blocks is rarely known.²⁷ One exception comes from the circus in Thugga: the inscribed blocks were fixed on an outside wall of a semicircular structure that was employed as the western *meta*.²⁸

In the epigraphic publications, the inscribed elements of entablatures are variously named: architrave, entablement, epistylium, frise, frise architravée, linteau, etc. These terms are not employed systematically. For example, 'architrave' is an ambiguous term in itself; the general meaning of it is the epistyle, i.e. any horizontal element spanning the interval between two columns while the more restricted one refers to the lowest member of an entablature, under the frieze. Although the latter surfaces were seldom carved, there are exceptions.²⁹ The term 'frise' may well describe a stone that either combines architrave and frieze or architrave, frieze and cornice and the exact terms are 'frise architravée' and 'entablement', respectively;³⁰ 'entablement', in its turn, can be used to refer to a mere 'architrave' or 'frise' and so on.³¹ I decided to group under the term 'entablature' all inscribed stones that were placed on the entablature no matter how they were identified in their epigraphic publications. I tried, however, to separate 'entablature' from 'lintel', that is, the upper horizontal part of a door or window frame.³²

²⁷ This is, of course, partly due to my decision to discuss architrave blocks etc. separately.

²⁸ *CIL* VIII 26549.

²⁵ I have only counted blocks that do not form part of a larger architectonic element (e.g. architrave). Thus, for instance, AE 1997, 1663a, the text of which is carved on four opisthographic entablature blocks is analysed as an entablature.

²⁶ If one compares this set of statistics with that of panels, one gets the impression that after a strong start the blocks declined in popularity, while panels gradually became more common.

²⁹ See, for example, *AE* 1997, 1673.

³⁰ See, for example, the descriptions in AE 2005, 1689 and in ILAlg. II 7929–7930.

³¹ See, for instance, the description in *DouggaFrag* 27 = M. Khanoussi – L. Maurin (eds), *Dougga, fragments d'histoire. Choix d'inscriptions latines éditées, traduites et commentées (Ier–IVe siècles)*, Bordeaux – Tunis 2000.

³² This was complicated, because complete entablatures, all parts of entablatures and also all

If three uncertain cases are taken into account, 164 cases can be classified as entablatures. Their share of recorded supports is 25 per cent, which makes them the second most common type. Their temporal spread runs as follows: the first century BC: no cases; the first century AD: three cases; the second century: 66 cases; the third century: 62 cases; the fourth and fifth centuries: 20 cases; 13 cases cannot be dated.

I have classified 67 supports as lintels. Their temporal spread is surprisingly even, if the unrepresented first century BC is not taken into account: the first century AD: 14 cases; the second century: 18 cases; the third century: 12 cases; the fourth and fifth centuries: 10 cases; 13 cases cannot be dated.

Thus, these four types – panels, blocks, entablatures and lintels – form the bulk of the building inscriptions as their combined share shows: 81 per cent. Not all building inscriptions were carved on the building itself, however, and there is a small but interesting group of free-standing decorative monuments: altars, bases, cippi and stelae. Their mutual shares are surprising: it is the base that is the most common type by far (37 cases).³³ If the number of altars is less than half of that (17 cases),³⁴ the remaining types are restricted to scattered attestations: five stelae and just two cippi. This dominance of bases over the other types is difficult

³³ The temporal spread of bases is: the first century BC: no cases; the first century AD: one case; the second century: 11 cases; the third century: 14 cases; the fourth and fifth centuries: seven cases; four are undatable. The recorded materials are: limestone (seven cases) and marble (three cases). The smallest base has measurements (w x h x d) 56.5 x 62 x 23.5 cm (*IRT* 358) and the largest 119 x 119 x 146 cm (*IRT* 467). The smallest letters measure 2 cm (*CIL* VIII 1548 and *ILAlg.* II 10323A) and the largest 14–5 cm (*CIL* VIII 23964).

³⁴ With one first century exception and six undatable cases altars are datable either to the second (three cases) or to the third century (seven cases). Surprisingly enough, the only recorded type of rock is limestone (six cases). Neither the sizes of altars nor their letters vary much: the smallest altar (*ILAlg.* II 6436) measures 38 x 63 x 32 cm while largest one (*AE* 1973, 646) measures 46 x 189 x 50 cm; the smallest letters (*AE* 1992, 1769) measure 3.5–1 cm and the largest (*AE* 1968, 595) 8–5 cm.

lintels are called "epistylia" in *CIL*. For example, in *CIL* VIII 26512 the whole description of the monument runs: "epistylium altum m. 0.12, longum m. 0.94, litteris cm. $4\frac{1}{2}$. Thuggae rep. *à l'est du Capitole*, ibi fere ubi n. 26482 seq." Due to the small size of the monument, I have classified it as a lintel. Another example is *CIL* VIII 23876. In *CIL*, it is described as "epistylium", but which one is it, a large lintel or a small architrave? Perhaps the latter, because the text is quite long and detailed and starts with the *pro salute* formula. The inscriptions on lintels are typically shortened versions of the principal building inscription and they focus on the personality of the builder. See, for example, *ILAfr*. 553, which was carved on the lintel over the gate of the middle cella in the temple of Tellus, the building project of which was recorded in detail in *ILAfr*. 530. For more on secondary inscriptions, see Saastamoinen (above n. 14), 68–69.

to explain, especially when one remembers that altars could be erected to commemorate the construction or repair of a secular building.³⁵

As building inscriptions were relatively rarely carved on these kinds of monuments, it would be very interesting to know how they were placed in relation to the constructed building. Sadly, but hardly unexpectedly, their exact original location is seldom known.³⁶ In addition to these, there a few free-standing monuments from Lepcis Magna that are borderline cases as building inscriptions, as their building projects are small in scale: two benches and several stone counters.³⁷

Entablatures and lintels were by far the most common architectural elements on which building inscriptions were carved, but one can find other types as well. Most importantly, there are at least ten cases where the building inscription was carved on the attic of an honorary arch (more usually, however, building inscriptions in arches were carved on their entablatures³⁸). These ten cases form an ill-documented group concerning which not much can be said – for instance, the type of rock is recorded only once – except that five of them are datable to the second century, three to the third, and two to the fourth century.³⁹

The other architectural elements are quite varied and mostly rare: capital (one case), column (nine cases),⁴⁰ doorsill (one case), jamb (one case), keystone (one case), manhole in a cistern (one case), unidentified monument (one case),

³⁵ See, for example *IAM* 2, 824 (baths). This was noted already by Salomies (above n. 34), 276.

³⁶ There are two interesting exceptions, however: *IRT* 318 was carved on an altar erected in the orchaestra in the theatre at Lepcis Magna and *ILAlg*. II 7914 on a cippus in the apse of a basilica in Cuicul where it still stands. *CIL* VIII 18328 is a base found in the forum at Lambaesis, possibly *in situ*.

³⁷ Stone counters: *IRT* 590a–d; *IRT* 590e–f; *IRT* 590g; benches: *IRT* 599a; *IRT* 599b.

³⁸ *CIL* VIII 210a; *CIL* VIII 306; *CIL* VIII 801; *CIL* VIII 1798; *CIL* VIII 2698; *CIL* VIII 4598; *CIL* VIII 11798; *CIL* VIII 11929; *CIL* VIII 15516b; *CIL* VIII 26262; *CIL* VIII 27775a–c; *IAM* 2, 390; *IAM* 2, 391; *ILAfr*: 558; *ILAlg*. I 3037; *ILAlg*. I 3038; *ILAlg*. I 3039; *ILPBardo* 227; *IRT* 232a. In addition to the previous 19 cases, there are numerous uncertain ones that are not listed here.

³⁹ See *CIL* VIII 17842; *CIL* VIII 17843; *CIL* VIII 11319; *CIL* VIII 18510; *CIL* VIII 18498; *ILAfr*: 525; *ILAlg*. II 7818; *ILAlg*. II 674; *CIL* VIII 11326; *AE* 1981, 878.

⁴⁰ Columns form a small group of monuments that either date from the first century AD (two cases) or the second century (three cases), or are undatable (four cases). The recorded materials are: limestone (two cases) and marble (one case). The only recorded measurements of a completely preserved column (*ILAlg.* I 2136) are 43 x 150 cm; the smallest letters measure 1.5 cm (*ILPBardo* 411) and the largest 7.5 cm (*IRT* 605).

pediment (seven cases), pier of arch (three cases), pillar (five cases), stones forming arches (one case), rim of cistern (one case), semicircular recess (so-called *schola*, five cases). All these types are somewhat exceptional unlike the remaining small group of inscriptions that employ standard surfaces: mosaic floor (one case), pavement (three cases), and the face of a rock (four cases).

2. The material

In the majority of cases, epigraphic publications do not specify the material on which a given building inscription is carved. There are no less than 704 cases (70 per cent) where the material is either not mentioned at all or it is vaguely stated to be "stone". Among the recorded types of rock, limestone is by far the most common one: 188 cases (19 per cent). Marble holds the second place with 97 attestations (ten per cent) but sandstone is attested only sporadically, just eight instances or one per cent of the cases.⁴¹ All the other materials are very infrequently attested: alabaster twice, plaster and mosaic cubes each just once.⁴² The situation is summarized in Chart 2 below. The statistics on the provenance of different materials are quite striking. Compared to the overall distribution shown in Chart 2, Proconsularis is hugely overrepresented in the case of limestone and marble; Mauretania Tingitana is greatly overrepresented in the case of marble; Mauretania Caesariensis is underrepresented in the case of the marble and limestone; Numidia's shares are closer to the expected values but still clearly underrepresented.⁴³

⁴¹ *AE* 1955, 140; *AE* 1966, 593; *AE* 1985, 976; *AE* 1994, 1887; *CIL* VIII 12274; *ILPBardo* 21; *IRT* 319; *Libyca* 1953, 240. It might be more than a coincidence that so many of these texts originate from Mauretania Caesariensis: *AE* 1955, 140; *AE* 1966, 593; *AE* 1985, 976; *Libyca* 1953, 240.

⁴² Alabaster: *AE* 1991, 1620; *AE* 1995, 1641; plaster: *LibAnt* 1969–70, 141; mosaic cubes: *ILAlg.* II 7959.

⁴³ From Proconsularis originate 58.5 per cent of all building inscriptions, but 79 per cent of the inscriptions carved on marble and 71 per cent of the inscriptions carved on limestone; from Mauretania Tingitana come just 1.1 per cent of all building inscriptions, but five per cent of the inscriptions carved on marble and one per cent of the inscriptions carved on limestone; from Mauretania Caesariensis originate 9.4 per cent of all building inscriptions, but just two per cent of the inscriptions carved on marble and three per cent of the inscriptions carved on limestone; for Numidia the respective percentages are 30.4; 14; 25. For the numbers of inscriptions found in each province, see Saastamoinen (above n. 14), 42–43.

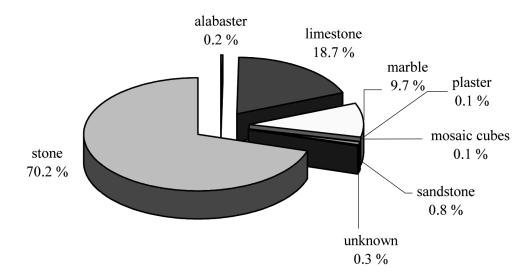


Chart 2: Material

These statistics are as striking as they are distorted. They result, of course, from defective information. Proconsularis and Mauretania Tingitana are over-represented simply because most of their inscriptions have been republished in modern epigraphic corpora (e.g. *IAM* 2) where the material is usually recorded; almost all of the inscriptions from Mauretania Caesariensis have only appeared in very old publications where such details are omitted; Numidia is partly covered by modern publications and is thus better represented.

The statistics on the temporal spread of these materials are more reliable, because the epigraphic corpora used as sources, both old and new, are not confined to a certain period. It must be noted, however, that the first centuries BC and AD are much better documented (57 and 80 per cent of the cases are covered) than the later periods, especially the third century AD (only 16 per cent of the known cases are either marble or limestone).⁴⁴ The reason is again the same: almost all building inscriptions before the second century AD originate from Africa Proconsularis while most of the building inscriptions found in Mauretania Caesariensis date from the third century AD. The number of examples is so high, however, that it seems likely that these statistics that are represented in the accompanying table (see Table 1 below) should reflect the historical situation that once existed. Thus, we can see that the limestone clearly dominated during the first century BC and AD, but then marble became more common and its relative share increased to 40

⁴⁴ The temporal spread of all 820 datable building inscriptions is as follows: 1st century BC, 7 inscriptions or 0.9 per cent; 1st century AD, 59 inscriptions or 7 per cent; 2nd century AD, 302 inscriptions or 37 per cent; 3rd century AD, 287 inscriptions or 35 per cent; 4th and 5th centuries AD, 165 inscriptions or 20 per cent. The remaining 182 cannot be dated within a century. See Saastamoinen (above n. 14), 30.

per cent in the second century AD. The number of examples of both marble and limestone collapses in the third century, but the relative share of marble declines much less sharply and even increases during the fourth and fifth centuries.

The panel is the only major type of support in which marble is the most frequently employed type of rock.⁴⁵ In the other three major types, blocks,⁴⁶ entablatures,⁴⁷ and lintels,⁴⁸ it is limestone that dominates. The reason for this is most probably that because marble was more expensive than limestone, it was used more often in panels where the volume of stone was smallest.

Time	Marble		Limestone		
Time	Number	Percentage	Number	Percentage	
1 st cent. BC	1	25	3	75	
1 st cent. AD	5	11	42	89	
2 nd cent. AD	42	40	63	60	
3 rd cent. AD	15	32	32	68	
4–5 th cent. AD	15	37	26	63	

Table 1: Temporal spread of marble and limestone

3. The measurements of supports and letters

Older epigraphic publications often leave out the exact measurements of supports, especially depths or any dimension whose original extent cannot be established due to the fragmented state of the stone. The width is recorded in 520 cases, the height in 637 cases, but the depth only in 270 cases. The number of

⁴⁵ The most commonly recorded material in panels is marble (68 cases), followed by limestone (57 cases), sandstone (five cases), alabaster (two cases), and plaster (one case). There are 81 unspecified cases.

⁴⁶ The most commonly recorded material in blocks is by far limestone (40 cases), marble is a distant second (only three cases) and sandstone holds third place (two cases). There are 38 unspecified cases.

⁴⁷ The most frequently recorded material in entablatures is limestone (23 cases); marble is the only other recorded type of rock (eight cases). The number of unspecified types of rock is very high, however, 133 cases, and it seems risky draw any conclusions on the material typically used in entablatures.

⁴⁸ In the case of lintels, almost the only recorded type of rock (35 cases are unspecified) is limestone (30 cases); marble is attested just twice and sandstone never.

cases where all these measurements are recorded is lower, 196; the number of completely preserved supports⁴⁹ in which all these measurements are recorded is even lower, just 74, and still lower is the number of cases that can be dated within a century, 60. That number is unfortunately too limited to allow a chronological analysis on the average development of the dimensions of supports, viz. the question of whether building inscriptions become more or less monumental with time. Nonetheless, those 74 completely preserved and three-dimensionally measured supports merit an analysis as physical objects. They form a very motley group – from panels to pillars, from altars to attics – but their measurements can still give us an idea of their limits as three-dimensional objects.⁵⁰ Here we will discuss only the four most important types: panels, blocks, entablatures, and lintels.

There are 25 completely preserved panels; their sizes and their letter dimensions differ widely. The smallest completely preserved panel measures 54 x 39 x 6.6 cm⁵¹ while the largest one has a surface over fifteen times larger with measurements of 456 x 69 x 25 cm.⁵² The largest ensemble of completely preserved and joining panels is somewhat larger still, 570 x 113 x 15 cm.⁵³ The tallest letters are 25–16 cm⁵⁴ while the shortest ones are 3.3 cm high.⁵⁵

The seventeen completely preserved blocks have much greater differences in size than the panels did. The smallest completely preserved block measures 13 x 10.5 x 6 cm⁵⁶ while the largest, slightly damaged one has a surface area almost

⁵⁴ *IRT* 308.

⁴⁹ By 'completely preserved' I mean supports which are not so damaged that the original dimensions cannot be established.

⁵⁰ The cases are listed in Appendix 1.

⁵¹ AE 1991, 1620. Even smaller is AE 1953, 153 (41 x 22 cm) but its depth is unrecorded.

⁵² *IRT* 308.

⁵³ IRT 347.

⁵⁵ AE 1985, 976. Even smaller letters are found in *ILPBardo* 408 (2–0.25 cm) but its depth is unrecorded. The letter sizes in completely preserved and measured panels are: AE 1985, 976:
3.3 cm; *ILAlg*. II 6225: 4–3 cm; *BCTH* 1925, 287: 4.5–2.5 cm; *IAM* 2, 404: 4.8–4 cm; AE 1982, 961: 5–3.5 cm; *ILPBardo* 21: 5 cm; *IRT* 895: 5.5–3.5 cm; *ILAlg*. I 2131: 5.5 cm; *ILAlg*. II 7670: 6–4 cm; AE 1967, 565: 6–5 cm; AE 1991, 1620: 6 cm; AfrRom 11, 1369: 6.5–5.5 cm; *CIL* VIII 17906: 6.5 cm; *AE* 1942–43, 81: 6.5 cm; *IRT* 914: 7.5–6.5 cm; *IRT* 913: 7.5 cm; AE 1985, 873: 8–5 cm; *ILAlg*. II 7796–7797: 9–5.5 cm; AE 1955, 134: 9–7.5 cm; AE 1968, 647: 11–5 cm; *ILAlg*. II 531: 12–5 cm; *IRT* 347: 22–14 cm; *IRT* 308: 25–16 cm. There are two cases in which letter size is not indicated: AE 1997, 1640; AE 1934, 40.

⁵⁶ *CIL* VIII 24106.

180 times (!) larger with measurements $258 \times 95 \times 28 \text{ cm.}^{57}$ The largest completely preserved ensemble of joining blocks is far larger still, 645 x 128 x 270 cm.⁵⁸ By contrast, the letter sizes have the same range as the lettering of panels did: the smallest letters are carved on that tiny block mentioned above and they measure only 0.9–0.7 cm⁵⁹ while the largest letters are 20–18 cm high.⁶⁰

As one would expect, fully preserved entablatures are rare. There are just three completely preserved and precisely measured entablatures, and the differences in sizes are smaller than they were in panels and blocks. The smallest completely preserved entablature measures 200 x 52 x 29 cm⁶¹ while the largest one has a surface only five times larger, with measurements 956 x 52 x 57 cm.⁶² The letter sizes have a quite limited range: the heights of the smallest letters are 5.5 cm⁶³ and the tallest measure between 13–8 cm.⁶⁴

The nine completely preserved and measured supports that I have classified as lintels vary less in size than blocks and panels did. The smallest completely preserved lintel measures 90 x 58 x 23 cm⁶⁵ while the largest fully preserved and accurately measured one has a surface nearly 10 times larger, with dimensions 464 x 103 x 54 cm.⁶⁶ In a similar manner, the sizes of letters vary less than in

⁵⁷ *IRT* 357.

 58 *IRT* 521 (seven blocks forming the inscribed part of the podium at the theatre at Lepcis Magna).

⁵⁹ *CIL* VIII 24106.

⁶⁰ *IRT* 269. Even taller (22.5–15 cm) are the letters in *IRT* 427 (from the Severan basilica at Lepcis Magna), but the inscription is fragmentary. The letter sizes in completely preserved and measured blocks are: *CIL* VIII 24106: 0.9–0.7 cm; *ILPBardo* 22: 3.3 cm; *AE* 1968, 586: 4–3 cm; *AE* 2000, 1624: 4.5–4 cm; *IRT* 314: 4.5–4 cm; *ILAlg*. II 3576: 5–3 cm; *ILAlg*. II 7573: 5–4.5 cm; *AE* 1994, 1887: 5.5–3 cm; *AE* 1976, 697: 5.6–5.2 cm; *IRT* 916: 6–5 cm; *AE* 1975, 870: 7–6 cm; *AE* 1976, 698: 7.5–4.5 cm; *ILAlg*. II 3574: 7.5–6.5 cm; *IRT* 357: 10–5 cm; *IRT* 521: 13 cm; *IRT* 346: 16–5 cm; *IRT* 269: 20–18 cm.

⁶¹ CIL VIII 26400 (an architrave block).

 62 *IRT* 273 (blocks of frieze). Much wider is *CIL* VIII 8809 (1022 x 85 cm) but its depth is not measured.

⁶³ *ILAlg.* II 7649 (the letter size is almost the same in *CIL* VIII 26400 (7.5–6 cm), which is another completely preserved and measured architrave). Smaller letters (3–2.5) are found in *CIL* VIII 23876 and in *AE* 1993, 1715 but their depths are not recorded.

 64 *IRT* 273. Much taller letters are to be found in the fragmentary *CIL* VIII 26607. They measure between 35–17.5 cm and are the largest in any building in Roman Africa.

⁶⁵ AE 1974, 690.

⁶⁶ IRT 323. Even wider (600 and 750 cm, respectively) are CIL VIII 15514 and AE 1974, 723

blocks and panels: the smallest letters measure $4-3 \text{ cm}^{67}$ while the largest ones are carved on the huge lintel just mentioned, and are no higher than $15.7-12 \text{ cm}^{.68}$

In order to contextualize these measurements, we can compare them with the recorded maximum and minimum measurements of all building inscriptions⁶⁹ and then with individual maximum and minimum measurements of those four main types.⁷⁰ The maximum width, 2942 cm, was made up by joining marble blocks of a massive entablature in the theatre at Lepcis Magna;⁷¹ the maximum width of a monolith – 1022 cm – was recorded in the architrave found in Lemellef.⁷² The minimum width of a fully preserved support was recorded in a shaft of column and was just 12.2 cm.⁷³

The maximum height, 420 cm, was measured in the wall of the basilica Severiana at Lepcis Magna. This inscription was also remarkably wide, 592 cm, and had, as a consequence, the largest recorded surface, no less than 248,640 cm² or almost 25 square meters.⁷⁴ The maximum height of a monolith was 236

but their other measurements are not recorded.

68 *IRT* 323. The letter sizes in completely preserved and measured lintels are: *AE* 1997, 1642: 4–2.6 cm; *AE* 1974, 690: 4–3 cm; *AE* 1968, 599: 4–3.5 cm; *AE* 1975, 873: 5 cm; *AE* 1968, 594: 7 cm; *AE* 1968, 587: 7 cm; *IRT* 322: 9–6.5 cm; *CIL* VIII 26602: 12.5 cm; *IRT* 323: 15.7–12 cm.

⁶⁹ By 'minimum' I mean the smallest *completely preserved* maximum dimension. For example, *ILPBardo* 411 is a column, the lower part of which is broken, but its diameter can be measured in its original extent. The maximum value of that diameter is 12.2 cm which is the shortest completely preserved minimum width among the African building inscriptions.

⁷⁰ In other words, all blocks, panels, entablatures and lintels are counted, and the measurements concern all dimensions taken separately; with those completely preserved and precisely measured supports we were only looking at their overall volumes, not individual measurements.

⁷¹ *IRT* 534. There is another, even longer (3570 cm) inscription in this very same theatre: *IRT* 347 was carved on the parapet of the orchaestra. The parapet is, however, interrupted by three passages and thus the inscription does not form a measurable whole. The largest completely preserved width is 1300 cm: three connected blocks of the frieze of the capitolium at Thugga (*CIL* VIII 15513).

⁷² *CIL* VIII 8809. Cf. *AE* 1974, 723 (750 cm) which was recorded in the huge lintel above the northern gate of the *praetorium* at Lambaesis, and *CIL* VIII 15514 (600 cm), a lintel placed above the door of the cella in the capitolium. This inscription is also completely preserved.

⁷³ *ILPBardo* 411. Cf. *CIL* VIII 24106, a completely preserved tiny marble block that measured 13 x 10.5 x 6 cm.

 74 IRT 427.

⁶⁷ AE 1974, 690. Even smaller letters (3 cm) are recorded in *ILPBardo* 319, but its depth is not measured.

cm and appeared in a great limestone stele from Lepcis Magna.⁷⁵ The minimum height was 10.5 cm, recorded in the above-mentioned tiny marble block.⁷⁶ With these measurements this block covers the smallest completely preserved surface area, only 136.5 cm² – it is smaller than a page in an average modern pocketbook – and the largest recorded surface is over 1800 times larger!

The maximum depth, 270 cm, was made up by joining limestone blocks of a huge podium;⁷⁷ the maximum depth of a monolith, 146 cm, was measured in a huge marble base from Lepcis Magna.⁷⁸ Incidentally, it is quite striking how many of the most massive inscriptions originate from Lepcis Magna, undoubt-edly reflecting the wealth and importance of that city. The minimum depth was 1.8 cm and it was found in a small marble panel at Volubilis.⁷⁹

The maximum height of letters was 35–30 cm, found on a pavement;⁸⁰ the minimum height, 0.9–0.7 cm, was used on that tiny block that had the smallest surface.⁸¹ The following table (Table 2) compares these extreme values with the ones from all panels, blocks, entablatures, and lintels.⁸²

The two most striking features in the table below are the huge variation in the sizes of supports and the *lack* of variation in the sizes of letters. As one would expect, the tallest letters are to be found in entablatures, but it is interesting to note that there are letters almost as tall in panels; even the minimum height of letters – 2.12 cm – is not much higher in entablatures than it is in other types of support.⁸³

⁷⁷ *IRT* 521. This is also the greatest measured completely preserved depth.

⁷⁸ *IRT* 467. The thickest (100 cm) architectural element was a monumental architrave from Cuicul: *ILAlg*. II 7649.

⁷⁹ *IAM* 2, 404. Surprisingly enough, on this small panel an imperial inscription was carved.

⁸⁰ The tallest letters were found on the pavement of the forum of Hippo (*AE* 1949, 76) where heights varied between 35-30 cm (cf. an architrave, *CIL* VIII 26607, where the variation is between 35-17.5 cm) but the average height of the letters (34 cm) was the greatest in *AE* 1980, 956, which was carved on panels.

⁸¹ *CIL* VIII 24106. This is also the smallest recorded completely preserved letter size in African building inscriptions.

⁸² The references are listed in Appendix 2.

⁸³ It would be very interesting to compare average letter heights between various types but that is impossible as the older epigraphic publications typically record only the maximum and minimum heights of letters rather than the height of each individual line.

 $[\]overline{^{75}}$ IRT 338. The number of the lines of the inscription is exceptional, too: 24.

⁷⁶ *CIL* VIII 24106.

Measurements	All supports	Panels	Blocks	Entablatures	Lintels
maximum width	2942 (entablature)	535	844	2942	600
maximum width, monolith	1022 (entablature)	456	258	1022	600
minimum width	12.2 (column)	24	13	155	35
maximum height	420 (blocks)	183	420	120	103
maximum height, monolith	236 (stele)	183	122	120	103
minimum height	10.5 (block)	22	10.5	18	12
maximum depth	270 (blocks)	55	270	100	96
maximum depth, monolith	146 (base)	52	67	100	82
minimum depth	1.8 (panel)	1.8	6	20	10
maximum height of letters	35–30 (pavement)	34	22.5–15	35-17.5	15.7–12
minimum height of letters	0.9–0.7 (panel)	2-0.25	0.9–0.7	2.12	1.5–1

Table 2: The measurements of types of support and letters

In fact, one can find some exceptional cases where the letters carved on an entablature are *smaller* than those carved on a base.⁸⁴ It is obvious, then, that the carvers of building inscriptions did not use the oversized letters to ensure or at very least to improve the readability of those inscriptions that were set up high over the ground.⁸⁵ It is very difficult to estimate, however, how necessary such tall letters

⁸⁴ For example, the letter height is 7 cm in *CIL* VIII 2736, a statue base and only 5.3 cm in *AE* 1982, 931, which is a block of an entablature.

⁸⁵ This is interesting, because it might weaken the common claim that Roman stone-cutters put much emphasis on the readability. See, e.g., Corbier (above n. 4), 42–45 who examines this question thoroughly; esp. 42: "l'écriture exposée romaine se caractérise d'ordinaire par sa lisibilité". She also discusses (ibid. 43–44; 62–64) references to attempts to ensure readability of the text found in administrative sources. For example, *AE* 1967, 533 (a limestone panel whose very fragmentary inscription seems to record a letter, found in Cyrenaica) enjoins the receiver of the letter to carve the text in question in clear letters (*claris litteris*) and to place it in a forum. See also ibid. 47 for an interesting summary of Ulp. *dig.* 14,3,11,3, which describes how private persons should publish their announcements to make them legally binding (i.e. so that the persons concerned cannot plead ignorance): the announcement must be composed in Latin or in Greek in clear letters that can be read from street level and it must be conspicuously placed in a place that is frequently visited. Cf. also ibid. 62–64, analysing how the emperor Caligula ordered a certain law to be placed (*proposuit quidem legem sed et minutissimis litteris et angustissimo loco uti ne cui describere liceret*; Suet. *Cal.* 41,1). But cf. now Graham (above n. 11),1–2, who claims that physical appearance and visibility were more important than the

would have been. It must be remembered that freshly carved letters must have been easier to read than the ones we see today, after several centuries of wear and tear. Besides, the letters might have been painted with minium or red-lead, which greatly improves readability.⁸⁶

Even if too few completely preserved building inscriptions are both threedimensionally measured and datable with reasonable precision to allow their chronological analysis, something about monumentality can still be said by basing the analysis on cases where the width and height are recorded. There are 191 completely preserved inscriptions whose widths and heights are both recorded, and 148 of them can be dated within a century. Their statistics are presented in the chart below (Chart 3). The finer details of this development cannot established due to the limited number of dated examples, and it might well be that the first centuries BC and AD are both somewhat misrepresented, but during the period extending from the second to the fifth century the diminution of the sizes of supports is so steady that it does seem to reflect reality. This is a very interesting development, because we know that the text of the building inscriptions did not shorten but on the contrary lengthened during this time.⁸⁷ It is noteworthy too, that this contraction of the inscriptional surface is due to the shortened average length. By contrast, the average height does not vary much and even slightly increases during the fourth and fifth centuries. The reason for this is that during this period the number of panels increased at the expense of the entablatures.⁸⁸ The panels were, on average, taller than entablatures, which in their turn were on average much wider than panels.⁸⁹

Again, the length of the texts of inscriptions increased with time but the sizes of supports did not. Although there were several means of fitting the text to the

text of the inscription and its readability.

⁸⁷ See Saastamoinen (above n. 14), 87–88. The statistics of the total word count presented in Chart 10 in page 87 are as follows: the first century BC: 20; the first century AD: 34; the second century: 38; the third century: 45; the fourth and fifth centuries: 38.

⁸⁸ See section 1 above.

⁸⁹ If we base our calculations on those 74 completely preserved and three-dimensionally measured supports, the measures of which are listed in Appendix 1 below, we obtain the following results: the average height of panels, 70 cm; that of entablatures, 41 cm; the average length of panels, 157 cm, and of entablatures, 452 cm.

⁸⁶ See A. Gordon – J. Gordon (above n. 1), 73 who note that the extent of this practise is impossible to determine. On the use of minium, see Plin. *nat.* 33,40,122. Cf. Grasby (above n. 5 (2)), 172 where one observes the striking difference between carved (Fig. 21.VIII) and carved and painted letters (Fig. 21.IX).

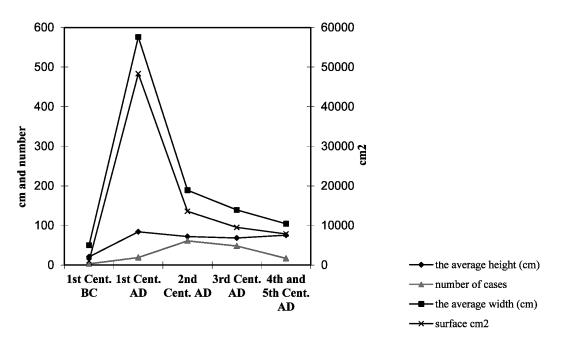


Chart 3: The temporal variation in the size of supports

available space – one could use more and shorter abbreviations, employ more and longer ligaturae or space letters more densely, or employ undersized or taller letters (such as T longa)⁹⁰ – one would still expect that lengthened inscriptions were carved with smaller letters.⁹¹ Letter size, for a change, is a phenomenon that can be reliably analysed, as it is the most frequently recorded measurement in epigraphic publications. Letter size is mentioned in 715 cases and most of these – 593 – can be dated within a century.

Chart 4 below shows that our supposition is, *grossomodo*, correct. If the anomalous first century BC is not taken into account, letters sizes grow slowly but steadily smaller. This development can be compared with general average letter sizes during this period as a whole: the maximum height: 8.4 cm; and the minimum height 6.9 cm.⁹²

⁹⁰ Cf. A. Gordon – J. Gordon (above n. 1), 150 on such devices.

⁹¹ Cf. A. Gordon – J. Gordon (above n. 1), 90: "the man who wants to say much but has only a limited space in which to do it ... must sacrifice either text or letter size or perhaps both".

⁹² If we base the statistics of letter sizes on those 148 inscriptions in which the surface was completely preserved (133 of these also include letters that are measured) the results are similar (but the decrease is even more pronounced): the first century BC (three cases): the maximum average letter size is 2.8 cm and the minimum average is 2.7 cm; the first century AD (19 cases): the maximum average letter size is 12.9 cm and the minimum average is 9.7 cm; the second century (53 cases): the maximum average letter size is 7.5 cm and the minimum average is 6.2 cm; the third century (45 cases): the maximum average letter size is 6.3 cm and the minimum average is 5 cm; the fourth and fifth centuries (13 cases): the maximum average letter

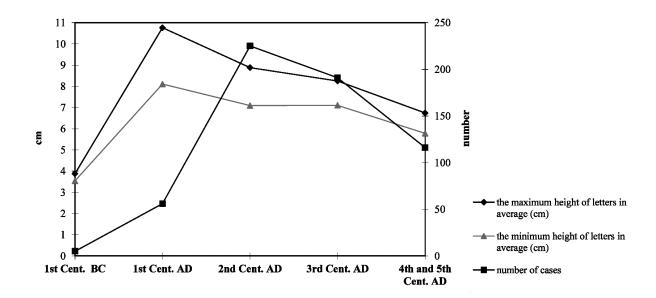


Chart 4: Variation in letter size

Conclusions

In this article, I have described some aspects of Latin building inscriptions understood as material objects. I have confined myself to the prose building inscriptions found in Northwest Africa. Although the number of photographed inscriptions has recently rapidly grown, a large portion of published building inscriptions still remains without accompanying photographs or careful descriptions of the supports. Thus, the picture presented here is based on *available recorded* facts and could well be modified if we had all information at our disposal.

The immediate context of the inscription, that is, the support on which it is carved, is known and recorded in majority of cases (648). They can be divided into 27 different types, but only ten of these are attested seven times or more. The most frequently attested type is by far a panel (214 cases, 33 per cent), followed by entablature (164 cases, 25 per cent), block (82 cases, 13 per cent), and lintel (67 cases, 10 per cent). Some building inscriptions were not carved on the building itself. The most common alternatives were bases (37 cases) and altars (17 cases).

The two recorded major materials are limestone (188 cases) and marble (97 cases). Panels were the only format in which marble was the most common material. There seem to have been temporal fluctuations in the proportions of the two major materials. Limestone clearly dominated during the first century

BC and AD, but during the second century AD marble significantly increased its share and never returned to its former insignificance.

It seems that during the period extending from the second to the fifth century the average surface areas of building inscriptions diminished steadily while the text of the building inscriptions lengthened.

The 74 fully preserved supports that have been measured in all three dimensions form a motley group – from panels to pillars, from altars to attics. The most striking measurable feature in them is the lack of variation in the letter sizes between the various types of support. The tallest letters are to be found in entablatures, but their difference from the ones appearing on panels is slight; even the minimum letter height is not much higher in entablatures than in other types of supports. In other words, letter sizes were not adjusted according to their placement to ensure or at least to improve the readability of those inscriptions that were set up high over the ground. The letter size is mentioned in 715 cases and most of these – 593 – can be dated. If the anomalous first century BC is not taken into account, letters grow slowly but steadily smaller in size. This phenomenon results from the above-mentioned development: inscriptional surface areas were diminishing while inscriptions themselves were becoming longer.

Helsinki

Appendix 1: Completely preserved and measured supports

Altars (3): *ILAlg*. II 6436: 38 x 63 x 32 cm; *AE* 1992, 1815: 48 x 81.5 x 36.5 cm; *AE* 1992, 1769: 56 x 100 x 56 cm.

Bases (8): *CIL* VIII 18328: 48 x 118 x 53 cm; *AE* 1991, 1641: 51.5 x 95 x 49.5 cm; *AE* 1991, 1643: 52 x 120 x 42 cm; *AntAfr* 1968, 219: 55 x 131 x 18 cm; *IRT* 358: 56.5 x 62 x 23.5 cm; *ILAlg.* II 671: 74 x 96 x 26 cm; *CIL* VIII 26474: 77 x 55 x 128 cm; *IRT* 467: 119 x 119 x 146 cm.

Blocks (17): *CIL* VIII 24106: 13 x 10.5 x 6 cm; *AE* 1975, 870: 49 x 80 x 23 cm; *ILPBardo* 22: 55 x 37 x 20 cm; *AE* 2000, 1624: 65 x 24.5 x 44.5 cm; *ILAlg*. II 3576: 65 x 39 x 55 cm; *ILAlg*. II 7573: 84 x 47 x 21 cm; *IRT* 314: 93 x 44 x 30 cm; *AE* 1976, 698: 103 x 41 x 14.5 cm; *ILAlg*. II 3574: 104 x 103 x 49 cm; *AE* 1976, 697: 110.7 x 65.5 x 44 cm; *IRT* 916: 120 x 71 x 40 cm; *AE* 1968, 586: 138 x 26 x 30 cm; *AE* 1994, 1887: 168 x 47 x 57 cm; *IRT* 357: 258 x 95 x 28 cm; *IRT* 269: 165 x 70 x 60 cm; *IRT* 346: 530 x 51 x 52 cm; *IRT* 521: 645 x 128 x 270 cm.

Column (1): *ILAlg*. I 2136: 43 x 150 x 43 cm.

Entablatures (3): *ILAlg.* II 7649 (architrave): 200 x 19 x 100 cm; *CIL* VIII 26400 (architrave): 200 x 52 x 29 cm; *IRT* 273 (frieze): 956 x 52 x 57 cm.

Lintels (9): *AE* 1997, 1642: 60 x 92 x 26 cm; *AE* 1974, 690: 90 x 58 x 23 cm; *AE* 1968, 594: 115 x 30 x 10 cm; *AE* 1968, 587: 122 x 35 x 20 cm; *AE* 1968, 599: 125 x 30 x 15 cm; *CIL* VIII 26602: 289 x 69 x 82 cm; *IRT* 322: 317 x 97 x 30 cm; *AE* 1975, 873: 320 x 26 x 21 cm; *IRT* 323: 464 x 103 x 54 cm.

Panels (25): *AE* 1997, 1640: 49 x 56.5 x 6.5 cm; *AE* 1991, 1620: 54 x 39 x 6.6 cm; *IAM* 2, 404: 54.5 x 44 x 1.8 cm; *AE* 1967, 565: 69 x 117 x 20 cm; *ILPBardo* 21: 74 x 42 x 8 cm; *ILAlg.* I 2131: 74 x 44 x 7 cm; *AE* 1985, 976: 74.5 x 45 x 10 cm; *CIL* VIII 17906: 89 x 70 x 12 cm; *AE* 1982, 961: 90 x 44 x 15 cm; *IRT* 913: 93 x 71 x 16 cm; *ILAlg.* II 7670: 100 x 62 x 26 cm; *ILAlg.* II 6225: 102 x 74 x 25 cm; *IRT* 895: 104 x 57 x 19 cm; *BCTH* 1925, 287: 110 x 57 x 8 cm; *AfrRom* 11, 1369: 128 x 65 x 19 cm; *AE* 1934, 40: 130 x 93 x 20 cm; *ILAlg.* II 531: 154 x 105 x 38 cm; *IRT* 914: 157 x 57 x 15 cm; *AE* 1985, 873: 165 x 76 x 32 cm; *AE* 1942–43, 81: 195 x 77 x 19 cm; *ILAlg.* II 7796–7797: 210 x 85 x 7 cm; *AE* 1968, 647: 325 x 108 x 20 cm; *IRT* 308: 456 x 69 x 25 cm; *IRT* 347: 570 x 113 x 15 cm; *AE* 1955, 134 (three identical inscriptions on panels, the largest one measures 305 x 75 x 21 cm).

Pillar (1): AE 1939, 36: 23 x 65 x 21 cm.

Steles (3): *IRT* 919: 45 x 188 x 14 cm; *IRT* 338: 85.5 x 236 x 30 cm; *AE* 1963, 124: 205 x 52 x 26 cm.

Undefined monuments (4): *I.ALTAVA* 67: 85 x 50 x 20 cm; *AE* 1966, 593: 94 x 66 x 21 cm; *AE* 1955, 137: 145 x 63 x 22 cm; *CIL* VIII 12332: 164 x 21 x 28 cm.

Appendix 2: Measurements of panels, blocks, entablatures, and lintels

Panels: the maximum width: 535 cm (*ILAlg.* II 7751; cf. *IRT* 347 discussed above); the maximum width, monolith: 456 cm (*IRT* 308); the minimum width: 24 cm (*AE* 1999, 1825); the maximum height: 183 cm (*CIL* VIII 2369, a fragmentary panel); the minimum height: 22 cm (*AE* 1953, 153); the maximum depth: 55

cm (*CIL* VIII 20835); the maximum depth, monolith: 52 cm (*ILAlg.* II 487); the minimum depth: 1.8 cm (*IAM* 2, 404); the maximum height of letters: 34 cm (*AE* 1980, 956); the minimum height of letters: 2–0.25 cm (*ILPBardo* 408).

Blocks: the maximum width: 844 cm (*IRT* 324b); the maximum width, monolith: 258 cm (*IRT* 357); the minimum width: 13 cm (*CIL* VIII 24106); the maximum height: 420 cm (*IRT* 427); the maximum height, monolith: 122 cm (*AE* 1973, 613); the minimum height: 10.5 cm (*CIL* VIII 24106); the maximum depth: 270 cm (*IRT* 521); the maximum depth of a monolith is remarkably limited especially when compared with that of entablatures, mere 67 cm (*ILAlg.* II 675); the minimum depth: 6 cm (*CIL* VIII 24106); the maximum height of letters: 22.5–15 cm (*IRT* 427); the minimum height of letters: 0.9–0.7 cm (*CIL* VIII 24106).

Entablatures: the maximum width: 2942 cm (*IRT* 534); the maximum width, monolith: 1022 cm (*CIL* VIII 8809); the minimum width: 155 cm (*CIL* VIII 23876); the maximum height: 120 cm (*CIL* VIII 17852, a monolith (the height is 200 cm in both *IAM* 2, 390 and *IAM* 2, 391 but both are special cases: panels that are fixed over the cornice of an honorary arch); the minimum height: 18 cm (*CIL* VIII 23876; there are also three examples of the height of 15 cm but they might be fragmentary, see *CIL* VIII 9908; *CIL* VIII 23282; *CIL* VIII 23283); the maximum depth: 100 cm (*ILAlg.* II 7649, a monolith); the minimum depth: 20 cm (*ILAlg.* II 7949–7950, three connected fragments of a frieze); the maximum height of letters: 35–17.5 cm (*CIL* VIII 26607; cf. *IRT* 428 where the letter height is uniformly 27 cm); the minimum height of letters: 2.12 cm (*CIL* VIII 11932).

Lintels: the maximum width: 600 cm (*CIL* VIII 15514, a monolith); the minimum width: 35 cm (*ILAfr*: 196); the maximum height: 103 cm (*IRT* 323, a monolith); the minimum height: 12 cm (*CIL* VIII 26512); the maximum depth: 96 cm (*CIL* VIII 26475); the maximum depth, monolith: 82 cm (*CIL* VIII 26602); the minimum depth: 10 cm (*AE* 1968, 594); the maximum height of letters: 15.7–12 cm (*IRT* 323); the minimum height of letters: 1.5–1 cm (*ILPBardo* 206).