Unfertigkeit in antiker Architektur, 2022, S. 39–48

Therese Emanuelsson-Paulson

Polygonal Columns

Unfinished Construction or Inexpensive Fashion in Hellenistic Times?

It has been suggested that polygonal columns were part of the so-called Pergamene architecture, a local style of Greek architecture which emerged in the Attalid realm of Pergamon, and that the style later spread out to the towns which were connected to or influenced by this kingdom[1] (Figure 1). It has also been claimed that polygonal columns outside of Pergamon were unfinished or that the fully faceted columns emerged only after the rise of the partly faceted columns. The reasons for the development of the second-century style with the lower part of the columns left faceted might have been economical, practical or aesthetical[2]. However, these causes cannot explain the existence of twenty-sided polygonal columns in the earlier periods, nor that the majority of the polygonal columns are not unfinished.

Faceted columns in general have often been disregarded as something less expensive or displaying lack of technical knowledge of the construction of fluted columns. Many examples of unfinished Doric columns with a polygonal shape of the shaft have prompted such conclusions. However, the large majority of the faceted columns show little indications of being unfinished[3]. Their facets are polished and they are often incorporated into buildings made of expensive materials, such as marble, or they were in use in the same facades as fluted Ionic columns. The polygonal and the fluted column seem to be two distinct styles that have already coexisted in Geometric times[4]. Polygonal or faceted columns in Greek architecture have been excavated at over sixty ancient sites in Greece, Turkey, Albania, Cyprus, Italy, Libya and Ukraine. They are most commonly Doric octagonal or twenty-sided polygonal in their cross-section, clustered in different areas in different periods. After the Second World War, these columns were often downgraded as a second-rate architectural phenomenon, an older technique or economical choice of construction[5]. Earlier scholars did not regularly differentiate fluted columns from twenty-sided polygonal columns[6], but simply defined them as Doric, possibly because they trusted Vitruvius' descriptions of the Greek architecture. Vitruvius

This article is based on my published PhD-thesis Polygonal Columns in Greek Architecture, Classical Archaeology and Ancient History at the Department of Archaeology and Ancient History, Stockholm University 2020, where I studied the use of polygonal columns from the Geometric to the Hellenistic periods. – I am most grateful to Director Prof. Felix Pirson of the German Archaeological Institute Istanbul and the Pergamon excavations for granting me the permit to study all these columns in Pergamon during my fieldwork at the site in 2014 and 2015. – Dates refer to the pre-Christian era, unless differently specified.

1 C. Börker, Die Datierung des Zeus-Tempels von Olba-Diokaisareia, AA 1971, 37–54, here 44 s.; F. Rumscheid, Untersuchungen zur kleinasiatischen Bauornamentik des Hellenismus (Mainz 1994) 301.

2 J. J. Coulton, The Architectural Development of the Greek Stoa (Oxford 1976) 112 s.; Rumscheid, Bauornamentik (previous note) 301; F. E. Winter, Studies in Hellenistic Architecture, Phoenix Suppl. 42 (Toronto 2006) 66.

3 Emanuelsson-Paulson, Columns 62–68.

4 H. Drerup, Griechische Baukunst in geometrischer Zeit. ArchHom 2 O (Göttingen 1969) 115.

5 For example see K. Hoffelner, Die Sphinxsäule. Votivträger, Altäre, Steingeräte, in: H. Walter – E. Walter-Karydi (eds.), Alt-Ägina II 4 (Mainz 1996) 7–58, here 14; M.-C. Hellmann, L'architecture grecque I. Les principes de la construction, Les manuels d'art et d'archéologie antiques (Paris 2002) 85 s.

6 For example see W. Dörpfeld, Die 1900–1901 in Pergamon gefundenen Bauwerke, AM 27, 1902, 10–43, here 20.

Figure 1 Pergamon, the large peristyle house in complex VII, twenty-sided polygonal columns.

reports that a Doric column should have twenty sides, which could be hollowed out or be left flat[7], thus rendering the column polygonal.

Columns that have been defined as unfinished are often left uncompleted on the shaft only. Their capitals are often finished, including the upper part of the drum, which connects it to the capital. The lowest part of the column towards the stylobate was similarly finished before the column was installed into the building, since cutting the column close to the stylobate might damage the stylobate[8]. The finished part of the shaft can be as small as five to ten centimetres in both the top and bottom of the shaft, and this practice seems to have been used on columns that were intended to be fluted, polygonal or round. The major part of these column shafts was then left incomplete. This could take place during different stages of the construction process. The shafts that remained roughly cut round were most probably in that state of stone dressing when the drums arrived at the construction site[9]. The drums could also be processed slightly closer to the finished state where the shaft is more carefully dressed round or faceted, and even the arrises or facet edges could be cut and partially smoothened[10].

Unfinished columns are no unusual phenomenon in Greek architecture. There are several unfinished colonnaded buildings, for example the temples in Segesta, Rhamnus and Stratos, the Apollon Temple of the Athenians in Delos, the Lion Tomb of Knidos, Philon's Stoa in Eleusis, and the temples of Athena and Demeter in Pergamon[11]. Columns in these buildings remain in various stages of finishing. As shown in the next section leaving buildings in an unfinished stage could be an intentional way of saving time and money during the construction rather than caused by a halt of construction for various unknown reasons[12].

In Pergamon the first building left unfinished is the fourth-century Doric Temple of Athena Polias Nikephoros where the fluted columns were roughly cut, round and unfluted or only fluted on the capital necking[13]. In the first half of the second century an L-shaped stoa was built, which is particularly unusual because this large structure was built without any attempt to complete the unfinished nearby temple itself. In both buildings, the columns were left unfinished[14]. The portico had roughly cut twenty-sided faceted columns with fluting on the necking of the Doric capitals. However, the bottoms of the column shafts are faceted, indicating that the columns had originally been planned with a polygonal lower third[15]. Such unfinished state might not necessarily have been unintended, as if the building project had ended due to the lack of economical means or the death of the builder. Based on the fact that the lower parts of the undermost drums of the temple were never fluted and that only the capital necking was fluted, it seems that the Temple of Athena at Pergamon was rather left unfinished intentionally[16], as was later also the near stoa.

There are unfinished twenty-sided polygonal columns with fluted necking of the Doric capitals in other towns of the Attalid Kingdom, for example in the House of the Ktistes in Termessos. These columns are sometimes claimed to be unfinished fluted and sometimes regarded as polygonal: In the first publication of the building in 1892 Karl Graf Lanckoroński-Brzezie claims that the capitals of the columns were fluted and suggests that these columns are unfinished fluted ones[17]. Christoph Börker, for his part in 1971, regarded them as fully faceted[18]. This is probably not the only building, whose columns have been defined as both unfinished and finished fully faceted. This and many other buildings still await proper publication. Thus, we need to consider which characteristics would classify a column as unfinished. Columns with fluted capital necking and flutes in the lowest part of the columns are generally classified as unfinished columns meant to be fluted later.

The problem in defining finished and unfinished arises with polygonal columns, which show the necking of their capital and their lowest part as faceted like the entire shaft. Such columns should not be classified as unfinished because their uniform layout is rendered throughout the column; this indicates intentional shaping. More details of the shafts have to be studied in order to further clarify the nature of the Pergamene polygonal columns, namely the finishing of the facet surface. Almost all of the polygonal columns of Pergamon display polished facet surfaces, among them some twenty-sided polygonal columns of imported limestone and marble. The

Figure 2 Pergamon, sacred precinct of the cult of the Rulers, twenty-sided polygonal drums made of polished andesite.

7 Vitr. 4, 3, 9.

8 W. Hoepfner, The Architecture of Pergamon, in: R. Dreyfus – E. Schraudolph (eds.), Pergamon. The Telephos Frieze from the Great Altar II (San Francisco 1997) 23–57, here 32.

9 Emanuelsson-Paulson, Columns 69–71.

10 For example see the difference between the drums of the stoa and the propylon in the Demeter sanctuary discussed below (Figures 4–5) and the unfinished drums from an unknown building (Figure 7).

11 Börker, Diokaisareia (note 1) 39.

12 Winter, Hellenistic Architecture (note 2) 66.

13 R. Bohn, Das Heiligtum der Athena Polias Nikephoros, AvP II (Berlin 1885) tab. 8; K. Seaman, Pergamon and Pergamene Influence, in: M. M. Miles (ed.), A Companion to Greek Architecture (Chichester 2016) 406–423, here 414.

14 A. W. Lawrence, Greek Architecture (2nd ed. London 1967) 208.

15 Bohn, AvP II (note 13) 34 s. figs. 21–22.

16 Hoepfner, Pergamon (note 8) 32.

17 K. Lanckoronski, Städte Pamphyliens und Pisidiens II. Pisidien (Wien 1892) 102 fig. 64.

18 Börker, Diokaisareia (note 1) 45.

local andesite, however, probably cut from the hill on which the town is located, is used for most of the constructions at Pergamon. Andesite is a hard volcanic rock that is not suitable for decorative cuttings. The building techniques were obviously adjusted to comply with the material[19]. The andesite columns are smoothed on the facets (Figure 2), but the surfaces are not nearly as smoothly polished as is possible on limestone

Figure 3 Pergamon, propylon of the Demeter sanctuary, unfinished twenty-sided polygonal columns.

or marble (Figure 6). The quality of the polished surface depends on the quality of the stone, not only on the time used to smoothen the surface. It takes more time to polish andesite than limestone or marble. Andesite is used for fluted columns in Pergamon, too, but their fluting is not of the same quality as with the marble and limestone columns. Therefore, the poor suitability of hard andesite for decorative cuttings probably made the polygonal shape preferable, since fluting these columns would take much more time than those of marble or limestone.

Viewed from a distance it is difficult to differentiate between the polished fluted and the few unfinished fluted columns that are faceted but lack polishing of the facets. These combinations of finished and unfinished polygonal columns did not exist anywhere else before the significant expansion of Pergamon; in earlier periods there were either finished twenty-sided polygonal columns or in other cities unfinished fluted columns with a roughly faceted shaft, but not both types in the same location.

Consequently, facets on column shafts existed in a polished form, which shows that these columns are finished, and they appear in an unpolished form, which indicate that they are unfinished. Smaller sections of polished facets do also occur on unfinished polygonal column shafts. In the Demeter Sanctuary at Pergamon, columns in both, the Upper North Stoa and the Propylon, both constructed by Queen Apollonis (223–159 B. C.), were left unfinished[20] (Figures 3–5). The columns of the propylon were smoothly cut round but left unpolished with finished polished facets only on ten centimetres from the bottom upwards[21] (Figure 4). The stoa column drums were faceted in a similar manner, but the round parts of the drums were left very roughly cut (Figure 5). There are also examples of unfinished fluted columns that are constructed in the same way as the unfinished polygonal columns of the Demeter Sanctuary, for example the late fourth-century Doric Temple of Zeus at Stratos in Western Greece which never had been finished[22]. The columns of this temple are fluted only around the bottom of the lowest drum and on the necking of the capital, while the majority of the column drums are only roughly cut round and their lifting bosses are intact. Sometimes lifting bosses could even be intentionally left on otherwise finished columns[23].

In the case of unfinished faceted columns, as in the Demeter stoa and the propylon, only the lowest ten centimetres of the lowest drum are twenty-sided polygonal. In the propylon the in-between drums are, however, cut to a much more complete state, being quite round, while in the stoa the drums are only roughly cut and possibly left in the shape they had got in the quarry. Perhaps this displays the difference between a structure with its columns already standing upright, and a building where they are still under construction.

Fully polished facets and unpolished facets are not the only stages of finishing in Pergamon.

The marble drums of the twenty-sided polygonal columns of the Temple of Hera have highly smoothened surface and are examples of faceted drums with marked facet corners where the middle of the facets is not as highly polished as the facet edges (Figure 6). Marked facet edges of twenty-sided polygonal columns are a fashion that can be found in only four buildings with polygonal columns of the second century[24]. Only one of these structures can be adduced as possibly unfinished. The drums from an unknown colonnade in Pergamon (Figure 7), where the marked facet edges and the roughly cut centres of the facets might indicate that the columns were supposed to be fluted with sharp ridges in their finished form. In all other cases of finished polygonal columns the facets are evenly polished. This was a time-consuming work that would not have been undertaken if the columns were intended to be fluted or cut round during the construction process.

Pergamon is the only city where we find twenty-sided polygonal columns in many public and private buildings; this is the case in at least thirty colonnades, finished and unfinished alike[25]. Faceted columns with fluted necking of the Doric capitals are found only in three buildings. Only one of these, the North Stoa on the middle terrace of the Gymnasium, has flutes in the lower part of the lowest drums of the columns, as well as unpolished facets, and therefore these columns should be seen as unfinished fluted[26]. It is possible that the two colonnades, the Stoa west of the Asklepieion and the upper story above Exedra K in the Gymnasium, which only have very shallow flutings of one to two millimetres on the necking of the capitals (Figure 8), were indeed intended

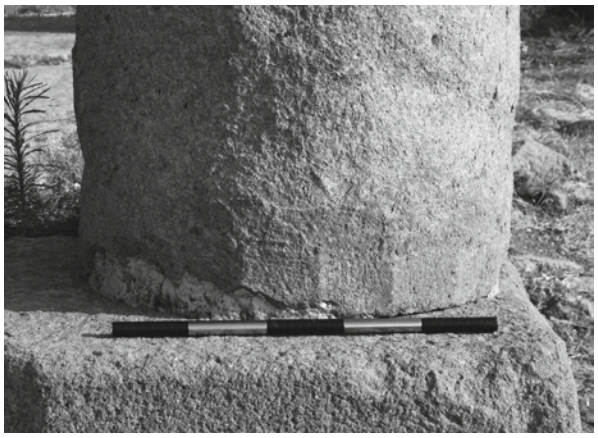

Figure 4 Pergamon, propylon of the Demeter sanctuary, unfinished twenty-sided polygonal column.

19 Hoepfner, Pergamon (note 8) 25.

20 C. H. Bohtz, Das Demeter-Heiligtum, AvP XIII (Berlin 1981) 17–20. 38 s. 58 figs. 25, 3; 45. 51. – The exact chronology of the project have long been disputed with dating either to the regime of Attalos I or Eumenes II. For discussion of the age determination see Rumscheid, Bauornamentik (note 1) 34 s. and C. Piok Zanon, The Sanctuary of Demeter at Pergamon. Architecture and Dynasty in the Early Attalid Capital (Diss. Pittsburgh, Ann Arbor 2009) 136–144. Stylistically the unfinished polygonal columns are more similar in design and construction to the third century B. C. polygonal columns in the Aegean than to the second century B. C. polygonal columns in Pergamon, suggesting a construction before Eumenes II's multiple constructions of polygonal columns, see Emanuelsson-Paulson, Columns 197.

21 Piok Zanon, Demeter (note before) 93 s. misinterprets these facets as a decorative element. However, no other decorative bands have been found finished on an unfinished surface on other polygonal columns shafts, see Emanuelsson-Paulson, Columns 85 s. The polished facets are also uneven in height, as the termination towards the unfinished round surface of the drum is not defined as found on other unfinished columns, see Emanuelsson-Paulson, Columns 407 s. cat. 144.2–3.

22 J. Pakkanen, Classical Greek Architectural Design. A Quantitative Approach, Papers and Monographs of the Finnish Institute at Athens 18 (Helsinki 2013) 75–79.

23 H. Lauter, Künstliche Unfertigkeit. Hellenistische Bossensäulen, Jdl 98, 1983, 287–310, here 287–310. – Compare the contribution of Matthias Grawehr in this volume (note editor).

24 Emanuelsson-Paulson, Columns 83 cat. 88 (third phase of the South Portico of the lower terrace in the Asklepieion at Kos). 140 (drums from an unknown building at Pergamon). 147 (Hera Temple at Pergamon). 164 (south peristyle of the Villa at Samos).

25 For example Pergamon, see R. Bohn, Die Theater-Terrasse, AvP IV (Berlin 1896) 35–37 pl. 24; P. Schazmann, Das Gymnasion. Der Tempelbezirk der Hera Basileia, AvP VI (Berlin 1923) 47. 60. 63. 66 fig. 21E pls. 14, 2–3. 10; 17; 20, 26; D. Pinkwart – W. Stammnitz, Peristylhäuser westlich der unteren Agora, AvP XIV (Berlin 1984) 25–33 figs. 3–4. 6; Emanuelsson-Paulson, Columns 365–436 cat. 127–156 pls. 39 c; 40–68; 69 a–b.

26 Schazmann, Gymnasion (note before) 39 fig. 30.

Figure 5 and 6 Pergamon, twenty-sided polygonal drums. – Upper North Stoa in the Demeter sanctuary, unfinished (left). – Temple of Hera (right).

to be left in this stage that sometimes has been described as unfinished[27]. However, the polished facets indicate that these columns were finished. Columns are always expensive to produce, but facets are obviously quicker to make than flutes and consequently more economical. Faceting was an economical option that possibly became an inexpensive fashion for a short period during the reign of Eumenes II and his successors.

The construction of polygonal columns during the second century was not restricted to the metropole of Pergamon, but the practice spread rapidly throughout the Pergamene Kingdom. The fully faceted columns in the North Stoa at Assos, the Athena Stoa and Stadium Stoa at Priene, the Hellenistic Stoa at Sillyon and in the Peristyle House R2 at Side[28] are some examples. In addition, partly faceted columns can be seen

27 Emanuelsson-Paulson, Columns 81.

28 J. Clark – F. Bacon – R. Koldewey, Investigations at Assos. Drawings and Photographs of the Buildings and Monuments and Objects Discovered during the Excavations of 1881–1882–1883 (Boston 1902–1921) 23–51; Th. Wiegand – H. Schrader, Priene. Ergebnisse der Ausgrabungen und Untersuchungen in den Jahren 1895–1898 (Berlin 1904) 258–265; A. Hennemeyer, Das Athenaheiligtum von Priene. Die Nebenbauten – Altar, Halle und Propylon – und die bauliche Entwicklung des Heiligtums, AF 28, Priene II (Wiesbaden 2013) 68–90 figs. 52–55; K. Graf Lanckoronski, Städte Pamphyliens und Pisidiens I. Pamphylien (Wien 1890) 82 s. fig. 66; A. M. Mansel, Die Ruinen von Side (Berlin 1963) 157–161.

29 J. Bouzek – J. P. Kostomitsopoulos – I. Ondřejová, Kyme II. The Results of the Czechoslovak Expedition (Prag 1980) 75–88 figs. 7–10.

30 Lanckoroński, Pisidien (note 17) 101 s. figs. 63–64.

31 E. Lapalus, L'Agora des Italiens, Délos XIX (Paris 1939) 14–17 figs. 10–15.

32 Börker, Diokaisareia (note 1) 44; Hoepfner, Pergamon (note 8) 515–519.

33 F. Dürrbach, Fouilles de Delos. Le portique Tétragone, BCH 26, 1902, 480–553, here 494 s.; J. Chamonard, Les Mosaïques de la maison des masques, Délos XIV (Paris 1933) 7–11 fig. 2.

34 For example see L. M. Caliò, The Agora of Kamiros. A Hypothesis, in: A. Giannikouri (ed.), The Agora in the Mediterranean from Homeric to Roman Times (in Greek also). Congr. Kos 2011 (Athens 2011) 343–355. 348 note 7 (Kamiros); W. Martini, Das Gymnasium von Samos, Samos XVI (Bonn 1984) 98 (Samos); P. Schazmann, Asklepieion. Baubeschreibung und Baugeschichte, Kos. Ergebnisse der deutschen Ausgrabungen und Forschungen I (Berlin 1932) 74 (Kos).

for example in the vertically divided half fluted and half faceted columns of the Stoa at Kyme[29]. There are also examples of faceted column shafts with fluted neckings of the Doric capitals in the Peristyle House at Termessos[30].

In the same period we have twenty-sided polygonal columns at Delos, both with or without fluted capitals, as well as unfinished faceted columns, which were intended to be fluted: For example, at the Agora of the Italians both the capital neckings and the lowest parts of the lowest drums are fluted but their facets never polished[31]. Faceted columns with fluted necking on the capitals are found in the House of Dionysos and the House of Herms where they might have been intended to be left in this manner[32]. Finished polygonal columns are found on the island for example in the House of Masks or the L-shaped stoa at the Agora of the Delians[33]. Some constructions of polygonal columns were facilitated by Attalid sponsorship, but not all. Many buildings in Asia Minor and in the Aegean fall into the architectural phase when the Attalids set the norm for architecture during the second century. The large majority of these buildings have fully polished polygonal columns.

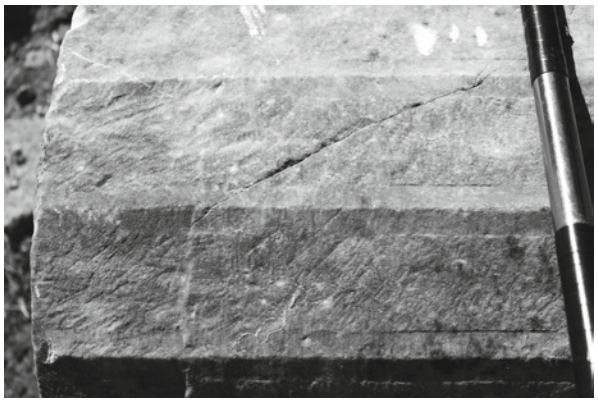

Figure 7 Pergamon, unknown building, unfinished twenty-sided faceted drum.

The first fully faceted twenty-sided polygonal columns with Doric capitals have been found in the eastern Aegean. They were constructed for their own sake, notably for the fountain at Kamiros dated to the late fourth or the beginning of the third century (Figure 9), for parts of the Gymnasion on Samos, dated to the mid third century, and for the stoa on the lower terrace of the Asklepieion at Kos, dated to the same century[34].

Figure 8 Pergamon, stoa west of the Asklepieion, twenty-sided polygonal columns with a slightly fluted necking of the capital.

Figure 9 Kamiros, Doric portico, polygonal half columns.

At Pergamon polygonal columns started in the second century possibly inspired by the earlier ones on the Aegean islands. Even if a few of the Pergamene columns could be explained to be unfinished or their production to have stopped abruptly, how can we explain all the other twenty-sided polygonal columns of the Hellenistic period in the same area? Several of them are slightly earlier than the Pergamene examples. Those on the Aegean islands are not to be regarded as representatives of a short-lived phenomenon in Pergamon, but rather as a spread-out fashion of about two hundred years. The question about who inspired whom in the use of polygonal columns could be extensively speculated upon, but might, nevertheless, lead to non-conclusive answers. The earliest Aegean polygonal columns could hardly have been inspired by Pergamene columns constructed a hundred years later[35]. There is nonetheless one major difference between the column construction in the Aegean Islands and Pergamon: We have no unfinished polygonal columns in Aegean during the third century.

The twenty-sided polygonal columns at Pergamon were not only used in combination with Doric capitals, as confirmed by Vitruvius and as found on the Aegean Islands. At Pergamon the polygonal column shafts appear in combination with Tuscan and Aeolic palm or leaf capitals, and sometimes even combined with cylindrical bases. Therefore they were not only used in the traditional Doric sense, but also something new and local was created. Hellenistic architecture often combined elements of different architectural styles[36]. The starting point in the monumental Pergamene architecture combined influences from both Greece and Asia Minor[37]. Earlier polygonal columns on the west coast of Turkey, from the archaic Temple of Athena at Smyrna, have been regarded as an alternative shape for the Aeolic columns[38]. The re-emergence of the leaf capitals in Pergamon has been connected to a renewal of the older Aeolic traditions incorporated into the regional Pergamene architecture.

The locally emerged style in Pergamon explains the use of polygonal columns in the

35 Ibid. 75–77.

36 A. Conze et al., Stadt und Landschaft, AvP I 2 (Berlin 1913) 215 f.; Rumscheid, Bauornamentik (note 20) 335 s. (with further literature).

37 Seaman, Pergamene Influence (note 13) 414.

38 J. M. Cook – R. V. Nicholls – D. M. Pyle, Old Smyrna Excavations. The Temples of Athena, BSA Suppl. 30 (London 1998) 194. 202 s. note 978.

Attalid Kingdom. After the peace of Magnesia the kingdom was of considerable size, its economy had developed and a magnificent royal capital was to match the size of the expanded kingdom. Consequently, massive construction programs took place in the city during the reign of King Eumenes II and his successors. The arguments basing on a political change or the death of the builder can probably be dismissed as explanations for the characteristics of most Pergamene polygonal columns. For a short period, polygonal columns were favoured in all buildings since the time required to produce them is shorter than that for fluted columns. In Pergamon, at its peak of development, polygonal columns supplemented the fluted ones and were incorporated to the Pergamene architecture, spreading to other towns whose architecture was then directly influenced by the Pergamene model.

Polygonal columns were produced less expensively than fluted ones, but how important was their shape? This question seems redundant, since in Pergamon polygonal columns are almost as common as the fluted Doric ones during the second century, and they were integrated within equally large and important building programs. The majority of the polygonal columns shows the same level of finishing as fluted columns, they present the same proportions and only a few examples have a slightly fluted necking on the Doric capital. Most of the polygonal columns had a polished surface on the facets and must therefore be considered as finished. Therefore, it seems likely that the earlier unfinished faceted columns used at Pergamon inspired a new inexpensive fashion of finished polygonal columns in a short-lived style in the second century.

Dr. Therese Emanuelsson-Paulson, Stockholm University, Classical Archaeology and Ancient History, Department of Archaeology and Classical Studies, Wallenberglaboratoriet 106, 91 Stockholm, Sweden,
therese.paulson@antiken.su.se

Summary: Twenty-sided polygonal columns were incorporated in the Pergamene architecture, a style developed when Eumenes II and his successors monumentalized the capital of their shortly before expanded kingdom in the second century. There were earlier faceted columns in unfinished buildings at Pergamon, whereas finished polygonal columns appear in the Aegean islands at least from the third century onwards in the Doric order, as Vitruvius confirms. The polygonal columns of the Aegean, the earlier unfinished faceted columns in Pergamon and the lack of proper stone for construction altogether inspired the use of the new shaft shape, the polygonal column, which was easily produced from the local andesite and a quicker economical choice. Therefore, the polygonal column became an inexpensive fashion for a short period of time.

Resümee: Zwanzigseitige polygonale Säulen wurden ein Element der pergamenischen Architektur, als Eumenes II und seine Nachfolger die Hauptstadt ihres kurz vorher erweiterten Königreichs im zweiten vorchristlichen Jahrhundert monumentalisierten. Frühe facettierte Säulen gibt es in unvollendeten Gebäuden in Pergamon, fertige polygonale Säulen tauchen auf den Ägäischen Inseln spätestens im dritten vorchristlichen Jahrhundert in der dorischen Ordnung auf, wie Vitruv bestätigt. Beides lieferte wichtige Anregungen, um den in Pergamon lokal vorhandenen und damit günstigen Andesit, der als Baumaterial kaum feine Ausarbeitung zulässt, effizient zu solchen polygonalen Säulen zu verarbeiten, die daher für eine begrenzte Zeit lokal in Mode kamen.

Abbreviation

Emanuelsson-Paulson, Columns
T. Emanuelsson-Paulson, Polygonal Columns in Greek Architecture, PhD diss. Stockholm University (Stockholm 2020).