This chapter explores how public speakers of the second and third centuries CE, accustomed to extravagant physical demonstrations of their art, exploited the architectural spaces where they performed. Theaters, temples, and smaller roofed assembly buildings were all locations for oratorical performances and adapted to achieve stronger oral expression through sharper acoustics. As the demand for public speaking increased, halls were built specially, their materials chosen to enhance the voices of orators. With the vast wealth they accrued from their teaching and public speaking, "sophists" sponsored ambitious building projects, particularly gymnasia, which included spacious auditoria, as from the later second century the *palaestra* became an intellectual and cultural arena instead of an athletic space. Private houses too had lavishly decorated halls for public speaking, as both literary accounts and archaeological evidence attest. At Rome, the emperors' projects, not only bath-gymnasia, but the imperial fora, were adapted to similar uses.

Keywords: architecture, rhetoric, acoustics, performance, orators, audience, theater, gymnasium, bouleuterion, auditoria, sounding-boards

Performance Space

Edmund Thomas

12.1 Sophistic Performance and Its Setting

One day in the reign of Antoninus Pius, the rhetorical teacher Favorinus waited in Trajan's Forum in Rome to meet the consul of the day. As a group of devotees, including the young Aulus Gellius, gathered around him, Favorinus used the time to improvise a display of literary learning, which took its starting point from the decoration of the building. Pointing to the inscription beneath the gilded statues of horses and standards that adorned the roof of the colonnade, he embarked on a learned explanation of the phrase ex manubiis (Gell. NA 13.25; Gleason 1995, 138–9). One might have thought that Favorinus would have shown more awareness of the visual or spatial aspects of this complex, which, still very recent in construction, continued to be regarded as sensational a generation later (Paus. 5.12.6); and indeed he may have done so, but we are dependent for our knowledge of this episode on the selective memory of the hyper-philologist Gellius, who took little interest in architectural details and with other monumental complexes in Rome also preferred to dwell on the semantics of inscribed text than on the surrounding buildings (Gell, NA 10.1.6–9; Holford-Strevens 2003, 325). For Favorinus's companions, a spatial turn around the porticoes of this grandiose new complex was a valued opportunity to learn from this celebrated intellectual. For the sophist himself, it gave him a chance to step out of the classroom and exercise his talents in an architectural setting. Extemporizing was an essential part of the sophistic repertoire, allowing the

rhetor space, literally, to expand on questions posed by the architecture of the city. But the urban environment did not only offer rich material for reflection and improvisation, it also provided a constructive physical environment in which to speak. The first-century orator Scopelian regarded his native city Smyrna as "a grove in which he could practice his melodious voice and thought it best worth his while to let it echo there" (Philostr. *V S* 1.21, 516). The teachers of the Second Sophistic were not just aware of their architectural surroundings; they positively fed off them.

There was, in fact, a very real equivalence between architecture and rhetoric. The two arts were analogous, each directed toward achieving utility as well as pleasure (Thomas 2014, 37–38, and passim). Their methods, too, could be similar, winning over audience or spectators by theatrical effects. The brilliant oral style of orators like Lollianus of Ephesus, with its "flashes of brilliance like lightning" (Philostr. V S 1.23, 527) was commended in similar terms (*lamprotes*) as the contemporary architecture of sophists (Thomas 2007, 219). Even where the subject matter of epideictic oratory was not explicitly architectural, speeches reflected the orator's immediate experience of the setting. Unlike a text read in the schoolroom, a rhetorical address had to adjust to the built surroundings. The acoustics of a venue determined the tone of the speaker's delivery and the success of his speech. He either stood out in the location and was remembered, or proved unworthy of the architectural grandeur, like Peregrinus at the Nymphaeum of Herodes Atticus at Olympia, who was almost stoned to death for his criticism of the expensive structure filled with marble statuary of the donor's and emperor's families (Bol 1984) as an effeminate waste (Lucian, De mort. Peregr. 19). It was in order to fit most effectively within their environment that speakers cultivated their outward appearance, in

Orators studied the proper posture and the correct manner of walking, made appropriate bodily gestures, and wore clothes, which, like the architectural decoration, were beautiful without being distracting or ostentatious (Gleason 1995, 155). Hadrian the Phoenician would arrive at his lectures in Rome in a carriage with silver bridles (Philostr. *V S* 2.10, 587). His destination, the emperor Hadrian's Athenaeum (Philostr. *V S* 2.10, 589), was no ordinary lecture room. Excavations between 2006 and 2010 have shown that it consisted of three adjacent auditoria, each paved in grey Egyptian granodiorite and Numidian yellow marble, with walls in colored marbles including Phrygian *pavonazzetto* and *Africano* from Teos in Asia Minor (Egidi 2010, 107–121). There was a sense of mutual expectation between the ostentatious style of sophistic performance and its glamorous and impressive settings.

There was no more consummate rhetorical performer than the sophist Antonius Polemon. Herodes Atticus recalled his mannerisms in a letter to the Roman Consul M. Vettulenus Civica Barbarus (Alföldy 1977, 328):

He would come forward to declaim with a serene expression and full of confidence, and he always arrived in a litter, because his joints were already diseased. When a theme was proposed, he did not rehearse it in public, but would withdraw from the crowd for a short time. His utterance was clear and incisive, and there was a fine ringing sound in the tones of his voice. According to Herodes, he used to rise to such a pitch of excitement that he would jump up from his chair when he came to the most striking conclusions in his argument, and whenever he rounded off a

period he would utter the final clause with a smile, as if to show that he could deliver it without effort, and at certain places in the argument he would stamp the ground just like the horse in Homer. (Philostr. *V S* 1.25, 537)

As André Boulanger has discussed, his declamations and delivery consisted of "a rolling fire of wordplays" and other verbal effects:

There is plenty of overkill, and considerable bad taste, but also a good deal of passion and enthusiasm. . . . If his schoolroom declamations hardly justify the reputation of the rhetor of Smyrna, it should be remembered that he owed his immense success above all to the public glamour of his eloquence. It was "the prodigy himself" [le monstre lui-même] that one needed to hear, his fervent delivery, his passionate impersonations. These declamations, edited and corrected for reading, as in particular the systematic exclusion of hiatuses shows, are for us like the librettos of cantatas whose music has been lost. (Boulanger 1923, 93–94; adapted from translation by Gleason 1995, 27)

Yet it would be even more appropriate to compare these works to operas, since their impact derived not just from the words and music, but from the rhetor's theatrical use of the spatial settings in which they took place.

Polemon's most famous oration, and "perhaps *the* symbolic event for the Second Sophistic" (Anderson 1986, 105), was a prose hymn delivered, at the invitation, or bidding (Philostratus uses the word ἐκέλευσε), of the emperor Hadrian, at the inaugural sacrificial ceremony of the Temple of Olympian Zeus in Athens in 131 or 132 CE (Weber

1907, 268–275; Benjamin 1963; Halfmann 1986, 208). Speaking at the open-air sacrifice in the temple precinct, he was inspired by the religiousness of the occasion, and, as he declared in the prelude of his oration, spoke "not without divine impulse" (Philostr. V S 1.25, 533). Religious sanctuaries, the high-point of cities' architecture and esteem, had by now become the locus for theatrical performances (Gödde 2015) and correspondingly offered the most compelling space for orators to demonstrate their virtuosity. By the third century CE it was common for rhetors to conduct classes inside temples. Philostratus recalls of the performer Hippodromus of Thessaly that "when he saw a temple with attendants sitting near it, and slaves in waiting carrying loads of books in satchels, he understood that someone of importance was holding his school inside." Once inside, he would take his seat on the lecturer's chair (τοῦ θρόνου), intermittently jumping up from it for rhetorical effect (VS 2.28, 618–19). Polemon stood outside, addressing presumably the large crowd that could fill the gigantic precinct. Reputedly fixing his own gaze on his inner thoughts, he was nonetheless himself an object of spectacle: he stood on the stylobate (ἀπὸ τῆς κρηπίδος) of this vast dipteral temple, with three rows of columns at the front and rear (a feature of the legendary Archaic sanctuaries at Ephesus and Samos), so that its overhanging ornamental cornices of the Corinthian order overshadowed him as he spoke (Hellmann 1992, 242–243; Willers 1990, 26–67). The variety of points of visual interest in this prestigious subject of his speech offered both potentially distracting fascination for the audience and convenient loca for the orator, from the supposed relics of the temple's mythical foundation by Deucalion, the hackneyed starting-point of many an oration (Lucian, Rhetorum Praeceptor 20) to the new statues of the living emperor (Paus. 1.18.6–8). It was no wonder that Philostratus described that final dedication by

Hadrian as a "great contest of time" (χρόνου μέγα ἀγώνισμα: V S 1.25, 533), a formulation so rhetorical that it may even have been drawn directly from Polemon's own words. For such ceremonial occasions, architecture and rhetoric came together in a harmonious synergy which could not be compromised. The unfinished state of the propylon on the north side of the precinct seems to indicate the haste in completing the work in time for this portentous event (Willers 1990, 38).

12.2 The Civic Theater and Other Loca of Sophistic Rhetoric

More commonly, the rhetors of the eastern provinces took up their station in a range of custom-built locations for the performance of rhetorical texts. These settings varied in audience and purpose. The largest and most public space for rhetorical display was the theater, the hub of civic identity, where oratorical performances were now among the most frequent activities (Hanfmann 1975, 53), delivered to large crowds who constituted the whole community of a city and sometimes even a province or region. Standing on the stage platform, backed by the authority of an engaged columnar façade of two or more stories, the orator could gain more attention than anywhere else. In the theater at Alexandria, Dio Cocceianus, "the golden-mouthed," reprimanded the Alexandrians for the "deceitfulness" of declaiming in the theater (Or. 32; Winter 2002, 40–50). At Smyrna it was in the theater that the "Egyptian fellow [ἀνθρωπίσκου] burst on the scene" to great popular acclaim and Aelius Aristides's chagrin; yet subsequently, after giving a rival performance himself in the civic council chamber (bouleuterion), Aristides took pleasure in sharing the report that there had been only seventeen people to hear the Egyptian in the Odeion (Or. 51.30–34). Audience numbers mattered. At festivals the crowds were vastest, and the stakes were highest. The Scythian Anacharsis is told of "the great

multitude of people gathering to look at such festivals, theaters filling up with tens of thousands, the competitors praised, and the winner regarded as equal to the gods" (Lucian, *Anach.* 10).

In the 160s Apuleius addressed an enormous gathering in the theater at Carthage:

You have come in such great numbers to hear, that I should rather

congratulate Carthage on having so many friends of learning than make

excuses for being a philosopher and for not refusing to speak. For the size

of the gathering suits the scale of the city, and the place of the gathering

has been chosen for its size. (Apul. *Flor.* 18, ed. Helm, 33–34)

Theaters were the ultimate test of an orator's rhetoric. These huge cavea constructions offered sensational acoustics, which were sometimes enhanced by devices like those described by Vitruvius (*De Arch.* 5.5): at Aezani in upland Phrygia, twelve pairs of rectangular compartments between the upper and lower tiers of the theater may have contained sounding vessels of terracotta (Plommer 1983, 137–138); at Scythopolis-Nysa in the Syrian Decapolis and Caesarea in Syria Palestine similar mechanisms, perhaps using bronze vessels, benefited not only theater performances but the public orator's voice (Plommer 1983, 133–137, 138–139). The stage buildings, too, could be constructed so as to allow the performers' voices to travel more clearly to their audiences. In the theatre at Aspendus a wooden roof built out from the inner wall of the stage building with a backward slope provided a sounding board (Dodge 1999, 222).

If the grandeur of the theater architecture and the cavernousness of its space seemed too overwhelming or intimidating for an orator, he might take refuge in a virtual space, signaled by the columnar architecture of the stage building (cf. Vitr. 5.6) and

developed through his rhetorical skills for his audience. In that oration in the theater at Carthage, Apuleius pointed first to its dizzying furnishings—marble pavements, *proscaenium* beams, columns of the stage building, high roofed spaces, glowing coffers, and encircling seats in the cavea (Apul. *Flor.* 18, ed. Helm, 33–34)—before appealing to the audience to avert their gaze from those enticing features and focus instead on his own oration. His rhetoric conveyed them to a different architectural setting, inventing its own fictive spaces to transport them to the senate house or library of Carthage, just as a playwright conveyed his audience to a dramatic scene, suggested by the otherworldliness of the stage architecture; and the balance of his own verbal phrases paralleled the balanced structure and contrasting materials of the real stage building.

The theater was only the largest of many different locations where orators could declaim. Less overawing were the many smaller auditoria for city councils, assemblies, or public performances of poetry and epideictic oratory. Many sophists, like Heraclides of Lycia (Philostr. *V S* 2.26, 614), declaimed in law courts (*dikasteria*) and received high fees for their trouble. Others spoke in theater-like city council buildings (*bouleuteria*). Aristides's celebrated oration on the occasion of the dedication of the Temple of Hadrian at Cyzicus was delivered not in the sanctuary, but in the city *bouleuterion* from where the temple was not directly visible. Yet he used the distance to create a virtual architectural environment in his rhetoric, bringing the temple to his listeners. Singled out by ancient and modern writers alike as a model of sophistic ekphrasis (Menander Rhetor 345.20–21, in Russell and Wilson 1981, 30–31; Boulanger 1923, 344), the speech visualized the tripartite structure of the building and unfolded to the audience "the greatest work ever seen by man" (Aristid. *Or.* 27.1). Not intimidated by the scale of his subject, Aristides

took comfort in the way that architecture provided an easy subject to describe in words, while at the same time he rose to the challenge of doing so in a manner that was not commonplace but distinctive and effective: "As for beauties of public buildings and the overall construction and size of the city, no one is so resourceless in words that he cannot praise them nor so competent in speaking that he can easily make a show" (*Or.* 27.13).

In the West the equivalent of the *bouleuterion* was the room for the civic assembly (*curia*). At Carthage, where Apuleius spoke in the 160s (*Flor.* 4.18.85), this was probably a small room at the end of the basilica (Gros 1985, 151n86); at Oea the basilica was "the site of the auditorium" (Apul. *Apol.* 73.2). These western assembly rooms usually took the form of a rectangular space lined by benches (Balty 1991, 33-81). But some western *curia* buildings adopted the semi-circular cavea of eastern cities, as most dramatically at Augst (*Augusta Raurica*) in modern Switzerland, where the speakers addressed a civic assembly perched high above the Violenried plain (Balty 1991, 271-275).

In the Greek world purpose-built, roofed theater-like settings for oral performances went back to the Odeum of Pericles in Athens, built around 440 BCE, which seems to have been used primarily for musical contests at the Panathenaea, for dramatic performances at the City Dionysia, especially the Proagon (Csapo and Slater 1994, 109–110), and as a lawcourt (Ar. *Vesp.* 1109; Dem. 59 (*In Neaeram*) 52, 54). But by the third century BCE the building is called a mouseion or philosophical school, where, among others, Chrysippus is reported to have lectured (Diog. Laert. 7.183–185; Robkin 1976, 66–67); a fragment attributed to the comic writer Alexis projects this back to the sophists of the fourth century BCE, "babbling nonsense at the Lyceum, Academy, and gates of the

Odeum" (Kassel–Austin, PCG 2, fr. 25.1-3), but this is most likely a forgery written a century later (Arnott 1996, 819–823). Yet the forest of columns that supported the roof would undoubtedly have severely compromised the visual and acoustic experience of the spectators (Izenour 1992, 32). The construction, however, in 16–14 BCE of the new Odeum of Agrippa (Agrippeion), with its broad timber-truss roof, provided the Athenians with a much more commodious space for oral performances. Decorated entirely in marble, it developed Hellenistic spaces such as the Bouleuterion at Miletus by producing an auditorium space without any internal supports, in the manner of smaller Italian examples such as the covered theater at Pompeii; the roof span of some 25 meters created an impressive acoustic space for speakers (Baldassarri 1998, 130–133). Here in the second century CE, the Cilician Philagrus, a pupil of Herodes Atticus, performed improvised recitals, although Herodes's other students were less impressed by the content, claiming that they were in fact taken from his own hackneyed declamations (Philostr. V S 2.8, 579). Philagrus also declaimed in the probably more modest council chamber of the Technitai of Dionysus, "near the Cerameicus Gates not far from the Knights' Grounds" (Philostr. V S 2.8, 580; Csapo and Slater 1994, 255–258).

The demand for such covered spaces for rhetorical performance increased. At Rome a large odeum was constructed under Domitian in the Campus Martius, to the design of the architect Apollodorus of Damascus (Dio 69.4.2), which was decorated with column shafts of Euboean *cipollino* and Corinthian capitals, and which continued to be admired three centuries later for its vast size, with a cavea about 100 m in diameter (Virgili 1996); in the fifth century it was listed among the seven wonders of Rome (Polemius Silvius, in Valentini and Zucchetti 1940–1953, 1:310). As if to reassert the

cultural preeminence of Athens, the millionaire sophist Herodes Atticus paid for the construction of an even larger odeum around 140 CE in memory of his wife Regilla. Modern acousticians have argued that, like other roofed theaters in antiquity, the Odeum was less well suited for the human voice than for musical performances (Vassilantonopoulos and Mourjopoulos 2009); but this overlooks that it was designed to respond specifically to the needs of orators, with its innovative and expensive ceiling of cedar wood (Paus. 7.20.6; Philostr. V S 2.1, 551), a material chosen not just for its exoticism and expense, but for its acoustic properties. As modern theory confirms, cedar wood is a natural sound absorber which only enhances the sound of the human voice, rendering it into a crisp and clear sound. Today, the vast Cathedral of Our Lady of the Angels in Los Angeles, designed by José Rafael Moneo and opened in 2002, and at 195,000 square feet the third-largest cathedral in the world, has an 85-foot-high ceiling of cedar wood to absorb the services crisply for its vast congregations (Bradley, Ryherd and Ronsse 2016, 304). In the same way, in sixteenth-century Venice, the Franciscan friar Francesco Zorzi claimed in his *Memoriale* of 1533 that flat wooden coffered ceilings were preferable for listening to sermons (Howard and Moretti 2009, 55), an assertion which accords with more recent acoustic analysis. However, such analysis also finds that even more effective than the material in absorbing sounds are the human spectators: the larger the audience, the better the acoustics as the audience absorbs the sound best (Davis and Kaye 1932, 142–143; Watson 1930, 33); this is also noticed in a study of the acoustics of ancient auditoria (Canac 1967, 82).

Herodes's Odeion is still substantially preserved on the south slope of the Acropolis, but now lacks its iconic ceiling, and, although roof tiles are recorded as having

been stamped with their destination θέατρον Ήρώδου καὶ Ρηγίλλης, it remains disputed whether the enclosed space was roofed entirely (Meinel 1980, 110) or only partially, with cantilevered beams over the rear of the auditorium and a sloping roof over the stage platform where orators and other artists performed (Izenour 1992, 137–140, fig 2.13). The building would have seated up to 5000 spectators for epideictic performances, as well as musical shows, creating an audience comparable in numbers to civic theaters. Herodes was, of course, a thunderous speaker himself, and when he spoke at other venues, he relished the huge audiences that such buildings offered. An inscribed statue base, reused in the Byzantine aqueduct but which perhaps originally came from the sanctuary of Artemis, has encouraged the hypothesis that he was invited, at the instigation of the leading Ephesian citizen M. Claudius P. Vedius Antoninus Sabinus, whose portrait was found in the 1990s at Herodes's Peloponnesian villa at Loukou (Smith 1998, 82; Szewczyk 2015), to give an oration at Ephesus, possibly in his role as *corrector* of the cities of Asia in 134 CE (Keil 1953, 12–13; see Barresi 2007, 148n73). At that date he must have delivered the oration in the city's theater, then recently enlarged with a third level of orders behind the stage, and, as he stood in this architectural space, he persuaded the emperor Hadrian to donate funds for the aqueduct of Alexandria Troas. The sophists' oratory was frequently harnessed to efforts by cities to seek imperial funding for their local projects. In the same way Polemon had very recently convinced the emperor Hadrian to finance architectural developments in Smyrna (Philostr. V S 1.25, 533), and the oratory of Aristides would later persuade Marcus Aurelius to rebuild Smyrna after the earthquake of 177 CE (*Or.* 19; Philostr. *V S* 2.9, 582).

Some fifteen years after Herodes's oration, Vedius's son, the senator M. Cl. P. Vedius Antoninus Sabinianus, prytanis, grammateus, gymnasiarch, and panegyriarch at Ephesus, who has been called "some kind of Ephesian Herodes" (Smith 1998, 81), enlarged the Domitianic or Trajanic bouleuterion behind the Stoa Basileios on the city's State Agora to create a vast new theater-like structure for rhetorical performances both in and outside meetings of the city council. A statue erected in the orchestra in Vedius's honor by a group calling itself "the teachers in the Mouseion" (hoi peri to Mouseion paideutai) (IvE 2065) seems to attest to their use of this space for educational purposes and to Vedius as being the patron of such groups (Steskal 2001,187). Although a local aristocrat and not himself a sophist, Vedius seems to have identified with sophistic culture, as emerges from his own self-presentation: his likely portrait from the East Baths exhibits the studied facial expression of an intellectual (Dillon 1996; Smith 1998, 82). In this vast new Roman-style setting, mounted on a substructure of mortared rubble, orators addressed not only the Ephesian bouleutai, but, every few years, the provincial assemblies of the Ionian cities. The exceptional appearance here of a double-scotia, composite or "Ionic" base follows the stylistic taste of Rome, where it occurs in some Augustan examples and especially in the Flavian period (Strong and Ward-Perkins 1962, 5–12; Iara 2015, 37–40). Its use in the Bouleuterion of Vedius, instead of the Attic-Ionic form more commonly used in the province, has not been explained (Bier 2011, 65–66). Yet its adoption in the second century CE as an iconic image of Ionian historical culture, as in the restored Temple of Artemis at Sardis, where an inscription draws attention to these formal elements, suggests that it could have been intended as a visual reflection of the Ionian idea of oratory practiced at Ephesus (Philostr. V S 2.18, 598). The "baroque"

character of the architectural ornament in the dynamic, syncopated design of jutting aedicules in two levels of the new *scaenae frons* behind the speakers—projecting the statuary more visibly toward the audience than in the previous, flatter arrangement—and the disposition of exotic material elements, including shafts of red Egyptian granite (Bier 2011, 51, 57–64), would have been well suited to this florid and ostentatious Gorgianic style (Kennedy 1994, 231; Kim, chapter 4 of this volume, on second-century Asianism).

12.3 The Sophist as Builder: Gymnasia as Sophistic Space

As these examples illustrate, a remarkable feature of the world of the Second Sophistic in the eastern empire was that the exponents of spoken rhetorical performance were also frequently those who financed the venues in which they took place. Herodes Atticus had access to exceptional wealth through his marriage to the Roman Annia Regilla, descendant of the prodigious Annii family, and when Flavius Damianus married the daughter of Vedius Antoninus Sabinianus, Vedia Phaedrina, who inherited Vedius's substantial estate, he acquired considerable spending power. But other sophists acquired substantial fortunes from their work which gave them the opportunity to finance extraordinary building projects. The sophist and legal advocate Nicetes of Smyrna is credited not only with restoring the art of oratory, but also with building a grand approach road between the inner city of Smyrna and the city gate leading to Ephesus. The sheer physical scale of this project was said to have brought his actions to the level of his words (Philostr. V S 1.19, 511) and, apparently, to have matched the grand style of his oral delivery (megalophonia, Philostr. V S 1.21, 518). If that is so, this term may suggest that Nicetes's architectural work was a portico roofed by a barrel vault, which created loud echoes for the orator's voice. Nicetes's wealth no doubt accrued from his successful legal

advocacy. If so, he was not the only sophist to amass a huge personal fortune. Others accumulated prodigious earnings from their lectures or declamations. Nicetes's pupil Scopelian adjusted his fee according to the means of his clients, which suggests that for the richer ones he charged a pretty sum; meanwhile, Lollianus of Ephesus charged "handsome fees" (*misthous gennaious*), though he was sometimes known to remit them altogether (Philostr. *V S* 1.21, 518; 1.23, 527).

With their diverse building projects, the sophists had a dual and bicultural focus: on the one hand, they set out to satisfy the needs of the crowds according to the fashions of the Imperial period; on the other hand, they respected Greek cultural traditions, not only in the objects of benefaction—gymnasia, stoas, and nymphaea (Philostr. V S 2.26, 613)—but also in their cultivation of virtues of the qualities of *philotimia*, bringing honour and lasting esteem to the donor, and *eunoia*, which they showed by offering utility to the inhabitants (Barresi 2007, 141). The projects of the highly rich Herodes Atticus were exceptional. In addition to his odeum, he paid for the reconstruction in white marble of the Panathenaic Stadium at Athens (Philostr. V S 2.1, 549–551); a new aqueduct for Alexandria Troas (VS 2.1, 548), which supplied a new bath building at that city; a stadium and odeum at Athens (VS 2.1, 551); and the notorious nymphaeum at Olympia, inscribed in the name of his wife, Regilla (Bol 1984; Settis 1968, 25). Following Trajan's example at Rome and the contemporaneous Library of Celsus at Ephesus, libraries were also an object of patronage. C. Flavius Antesthianus Memnon constructed the library at Cremna with ten statues (Horsley 1987), and other examples were built at Nysa (Ídil 1999, 440-1; Hiesel and Strocka 2006) and Sagalassus (Devijver 1993; Waelkens and Poblome 2011).

Yet the space which symbolized most of all the sophists' cultural mission and their self-presentation to an audience was the gymnasium, both the site of many oral performances and a hub of intellectual life in general, so it was natural that it was the focus of much of their financial attentions. In this, as in much else, they followed a classical tradition (Delorme 1960). The fourth-century BC Athenian orator Lycurgus is said to have used his immense wealth not only to complete the Theater of Dionysus but also to build a "gymnasium near the so-called Lyceum," in addition to sponsoring several state projects (Paus. 1.29.16; cf. *IG* II².457.7–8, with Delorme 1960, 42–43). By the Roman Empire, gymnasia were among the largest public buildings of the cities of Roman Greece and Asia Minor, and had become symbols of education and Greek culture. As Trajan famously put it, "gymnasiis indulgent Graeculi" (Plin. *Ep.* 10.40.2).

As is well known, the gymnasia of Asia Minor evolving between the first and third centuries CE had spacious palaestras devoted to athletic activities. The vast open spaces at the center of the palaestras accommodated athletic exercise and agonistic competitions, as at the Harbor Baths in Ephesus, probably associated with the revival of contests in honor of Zeus Olympios under Domitian (Barresi 2007, 138; Engelmann 1998, 305–307); an even larger area was given over to the palaestra in the gymnasium at Aezani, and in the Theater Baths at Ephesus rows of steps alongside the palaestra provided seating for spectators. At Aphrodisias, the vast "Portico of Tiberius" which gave access to the Baths of Hadrian was fortified with seating along the long sides which could have been used for sporting contests (Chaisemartin 1996). These settings were sumptuously decorated with marbles and mosaics in an ostentatious, almost glitzy manner. In the Harbor Baths at Ephesus, the prestigious colored marble from Docimium

in Phrygia (*pavonazzetto*), with its bright purple vein polished to look like porphyry—a privilege of wealthy and well-connected donors (Fant 1993, 156)—was used for both the columns of the palaestra and the marble revetment of the back walls of the xystus (*IvE* 430, 661). The marbles used to decorate the Hadrianic gymnasium at Smyrna—Synnadic marble from Docimium, marble from Simitthus (Chemtou) in North Africa, and Egyptian porphyry—offered a gaudy combination of purple and blood-stained hues (*ISmyrna* 697.41–42).

Alongside their buildings and exercise courts were sheltered colonnades (xystoi) enclosing garden areas, which offered ambulatories for strolling and discussing literary or philosophical concerns, and purpose-built structures for declamations. Such a space is found in the gymnasium at Pergamon (Schazmann 1923). Originally built in the early second century BCE, the upper terrace of the gymnasium was embellished under Trajan (Mathys, Stappmanns, and von den Hoff 2011, 273) or Hadrian (Radt 1988, 146), its Doric colonnades replaced by a marble architecture of the Corinthian order. The rebuilding involved the construction of a large auditorium on the west side of the main hall at the rear of the rectangular court which was excavated in 1906–7 (Dörpfeld 1908, 334–336; Schazmann 1923, 62; Radt 1988, 146–7; Mathys, Stappmanns, and von den Hoff 2011, 273). With a marbled exterior and a painted interior, its capacity is estimated at around 1,000. There was no stage, but the orator stood directly on the wooden floor (Radt 1988, 146). A sumptuous room was added, probably in the 160s, on the other side of the main hall (Dörpfeld 1907, 200–202; Hepding 1907, 347–349 no. 99; Schazmann 1923, 57; Radt 1988, 145). The gymnasium at Pergamon also probably included other spaces that were used as lecture halls.

The first proper attempt to introduce the Greek gymnasium to Rome was the inauguration in 60 CE of the Gymnasium of Nero, "the most remarkable such building at Rome [θαυμασιώτατον τῶν ἐκεῖ]." The Cynic philosopher Demetrius infiltrated the ceremony and, in front of the emperor, senate, and equestrian order, in a manner not unlike the later Cynic Peregrinus at Olympia, "declaimed a speech against bathers, saying that they were effeminates who defiled themselves. Such things he tried to show were a useless extravagance" (Philostr. VA 4.42, trans. C. P. Jones). Yet if the bathing activities in the adjacent areas could be despised in this way as a modern fashion which sapped the strength—a specious argument, of course, as the now extensive evidence of Greek bathing culture demonstrates (Lucore and Trümper 2013)—the sporting and cultural activities of the gymnasium were a prized asset of Greek culture at Rome and in the Greek world, and were thought to encourage the mental and physical improvement of the citizen body. Little remains of Nero's complex, which was completely rebuilt under Alexander Severus, but it seems to have consisted of the extension of Agrippa's Horti by a new bathing area, the particular butt of Demetrius's criticisms, and a palaestra comparable in size to classical Greek models (Krencker 1929, 264-265). It was of this complex that Domitian's odeum, and the adjacent stadium, formed the western boundary, completing the creation in Rome of a gymnasium area in the Greek manner with gardens and spaces for reading and declamation (Ghini 2000; Nielsen 1990, 46). In the outer precinct of Trajan's Baths it is even clearer how this imperial Roman concept of thermae was strongly shaped by the idea of a Greek gymnasium. Like Domitian's odeum the work of Apollodorus, it continued to be known as a gymnasium into the third century (Dio Cass. 69.4.1; Volpe 2007, 428–429). Excavations between 2003 and 2006 have thrown

more light on the imposing curvilinear exedras of brick-faced concrete still visible on the Oppian Hill, revealing a semicircular hall with marble seats incorporated off the portico of the palaestra in the manner of Vitruvius's xystus, with seats for "philosophers, rhetors, and others" (Vitr. 5.11.1–2; Volpe 2007, 427). An inscription found in the area in the sixteenth century (Caldelli 1992) suggests that this space was used for ἡ ἰερὰ ξυστιχή σύνοδος, an athletic association established by the grandfather of the Ephesian athlete M. Ulpius Domesticus (*IG* 14.1054–1055; Volpe 2007, 431). The great third-century bath complexes of Caracalla and Domitian included not just spaces for athletics and gymnastic exercise but lecture rooms and rooms for intellectual discussion.

At Ephesus, Vedius Antoninus Sabinianus did not only enlarge the Bouleuterion or Odeion, but also sponsored a new gymnasium building near the stadium (Steskal 2001). Yet Vedius's gymnasium, now extensively analyzed and published in full (Steskal and La Torre 2008), shows no sign of custom-built auditoria for oral performances like that at Pergamon. The "marble hall" on the west side of the palaestra (formerly called the Kaisersaal), with its marbled walls, opus sectile floor, and statuary, might be imagined as an imposing setting for orations, but there is no clear evidence that it performed this role.

The orator Flavius Damianus (Fischer 2014, 128-131) had extensive means at his disposal after marrying the daughter of Vedius Antoninus, Vedia Phaedrina. For Damianus, who allegedly paid 10000 drachmas to study with Aelius Aristides at Smyrna and Hadrian of Tyre at Ephesus, it was as important to make a show of wealth (*ploutou epideixin*) as a display of rhetoric (Philostr. *V S* 2.23, 605-606). In 166, in the tradition of the extravagant state benefaction of the Athenian Lycurgus, he donated 7000 tons of grain to Lucius Verus's legions passing through Ephesus on his Parthian campaign.

Damianus was himself magnificently endowed with wealth of various sorts, and not only maintained the poor of Ephesus, but also gave most generous aid to the State by contributing large sums of money and by restoring any public buildings that were in need of repair. Moreover, he connected the temple with Ephesus by making an approach to it along the road that runs through the Magnesian Gate. This work is a portico a stade in length, all of marble, and the idea of this structure is that the worshippers need not stay away from the temple in case of rain. When this work was completed at great expense, he inscribed it with a dedication to his wife, but the banqueting-hall in the temple he dedicated in his own name, and in size he built it to surpass all that exist elsewhere put together. He decorated it with an elegance beyond words, for it is adorned with Phrygian marble such as had never before been quarried. (Philostr. *V S* 2.23, 605)

In such architecture Damianus found a real opportunity for self-expression. His covered stoa from the Temple of Artemis (Knibbe and Langmann 1993, 16-27; Knibbe and Thür 1995, 26-33; Engelmann 1995, 77-85; Knibbe 1999, 449 and 2002, 207-211; Steskal, Grossschmidt, Heinz, Kanz, and Taeuber 2003) recalls Nicetes's work at Smyrna and seems almost certainly designed not only in the context of the well-known civic competition between the two cities, but as an act of personal competition with the Smyrnaean sophist. The tomb monument of Damianus and Phaedrina, a Corinthian tholos, was erected beside this *kathodos* street, possibly close to Damianus' villa estate (*IvE* 2100; Koenigs and Radt 1979, 317-318 and 345-348; Fischer 2014, 130n23). The

banqueting hall in Phrygian marble offered a space for speaking to more select gatherings (Barresi 2007, 143 and fig. 3; Engelmann 1995, 79).

Damianus might be thought to have been particularly interested in creating buildings that promoted his sophistic expertise more widely and enhanced his oratory. Two statue bases attest to his benefactions, including an *oikos* in the Baths of Varius on the Curetes Street (IvE 672, 3080). Nothing is said of the function of this room, but that his benefaction included "both the structure and the whole decoration." At the same time, it has often been claimed that the palaestra of the East Baths was restored by Damianus and Phaedrina. In the later second century, this new space was given a monumental modern approach, a propylon entering a vestibule area of which the side walls had apses each crowned by an aedicule with composite capitals and decorated with statues of Dionysus, Venus, and Pan (Keil 1930, 30). Just inside the palaestra were two statues of barbarian prisoners emulating the Dacians of Trajan's Forum in Rome (Keil 1930, 38), but presented instead as Persians, evoking both the legendary Persian Stoa at Sparta and Verus's recent Parthian campaign (Barresi 2007, 148; Thomas 2013, 177-179). This architecture was also geared to more intellectual pursuits. The original porticoes were narrowed and two spacious rooms flanked the open space like exedras on either side, one of which served as an auditorium (Keil 1931, 31). On the east side of the palaestra and opposite the *Kaisersaal*, a room with benches running around the walls on three sides seems to have been used as an auditorium for declamations (Keil 1933, 9-10; Maccanico 1963, 44). It opened onto the palaestra by two side doors and one wider central door, which on the inner side had a porch supported by two columns carrying an acanthus frieze (Keil 1933, fig. 3). As the rear of the room was taken up by a base for statuary, the

speaker is thought to have stood below or in front of the porch. So the excavator of the area, Josef Keil, imagined the scene (1933, col. 10):

Anyone who recalls the splendid entrances of the rhetors and sophists of the second and third centuries described in Philostratus's *Lives* and reflects that this newly discovered hall and the exedra were in all likelihood built by the famous Ephesian sophist Flavius Damianus, will understand that in the building of the auditorium was foreseen such a sumptuous context for the person of the speaker.

More recently, it has been suggested that a statue of Damianus himself, as both orator and donor of the building, may have stood here (Barresi 2007, 148). But Keil's identification of the dedicator of the palaestra (*IvE* 439), whose wife or daughter seems to be named Anto[nina], with Damianus himself remains questionable (Burrell 2006, 448n45; Dillon 1996, 272; Steskal 2003, 232–233). The true benefactor of the East Gymnasium awaits further analysis of the building.

Nevertheless, the archaeology of the spaces here presents clear evidence of a change in the spatial uses of the palaestra from the later second century, from an essentially athletic character to one of intellectual activities and musical-cultural pursuits (Steskal 2003, 234–235). This also seems to be reflected in the choices of statuary, with images of religious and cultural subjects, including the Muses, replacing the athletic themes of Vedius's earlier gymnasium (Barresi 2007, 147). In the earlier Harbor Baths at Ephesus, a bronze statue in the palaestra of an athlete cleaning his strigil evoked Lysippus's notorious original on the theme (Lattimore 1972; Newby 2005, 232–233), but in the Severan period more moralizing themes became popular, such as the Punishment

of Dirce, whose fountain at Thebes had become a symbol of the Greek gymnasium (Plut. *De cup.* 7, 526b; Favorinus fr. 96.7). Such a statue was installed in the *hypaithron*, an open-air space in the gymnasium at Thyateira in Lydia, by Aelius Aelianus (*TAM* 5.2.926), perhaps in emulation of the colossal version of the same story in the Baths of Caracalla at Rome, the celebrated 'Farnese Bull' (DeLaine 1997, 79). Aelianus also contributed statue groups with Heracles and Ganymede, but it was the Dirce group which was represented on the city's coins (BMC *Lydia* 125–127). In the late Antonine period the enigmatic Building M at Side, which has all the characteristics of a gymnasium, was provided with lecture rooms; and the column façade facing onto the palaestra-like court was adorned with sculptures derived from classical models.

A similar hall was built in the early third century in the gymnasium at Sardis and has been reconstructed as the "Marble Court." The fifth- or sixth-century epigram, inscribed on the podium of its aedicular façade, appears to describe this hall as an "immense, high-roofed, gold-gleaming chamber," and its new restoration as "with a golden ceiling" (Yegül 1986, 171–172 no. 8), like Lucian's hall. Here one should probably not imagine a timber truss roof across the whole court, let alone a masonry roof, but, despite the grandiose rhetoric, a more modest structure like the "fountain for olive oil (elaiou krene) with a golden roof" in the gymnasium of Asclepius at Smyrna, which the sophist Heraclides of Lycia restored, "contributing to the beauty of Smyrna" (Philostr. V S 2.26, 613; Barresi 2007, 142). Archaeologists have suggested that it took the form of a cantilevered canopy with gilt wooden coffers projecting out over the aediculae (Yegül 1986, 65). If this was the case, the structure would have provided orators with both an august setting and an acoustic space with a sounding board like those at Aspendus and

elsewhere. Alternatively, the innovative vaulted architecture of the early second-century baths gymnasium complex at Argos (*BCH* 98 [1974]) also offered an appealing receptacle for the orator's voice (Lancaster 2015). Indeed, the arch poetic language of an inscription from the Agora, referring to waters "brought down from above" (*BCH* 102 [1978], 782–4 E 92; Spawforth and Walker 1986, 102-103 Walker 1987, 64), may preserve the rhetorical language of an oration delivered at the building's dedication.

The building at Athens itself that most resembles these gymnasia in Asia Minor is the so-called "Library of Hadrian." As several scholars have recognised, its form of open precinct surrounded by spaces that might be used for lecture rooms or meetings is very similar to that of Greek gymnasia, as well as the Temple of Peace in Rome (Boatwright 1997; La Regina 2014). The arrangement of columns around the complex suggests that the space might be the same as the location described by Pausanias "the Hundred Columns of Phrygian marble," which had rooms with gilded ceilings and ἀλαβάστρω λίθω (Paus. 1.18.9).

12.4 Domestic Space and Sophistic Rhetoric

The inclusion of a gilt ceiling recalls Lucian's description of the hall which he presents a remarkable venue for rhetorical delivery (*De domo* 4):

Anyone who sees it and is trained in the arts of rhetoric would surely have an equal longing to make a speech in it, fill it with shouting and become himself a part of its beauty, rather than looking it all over, feeling amazed, and leaving, as if deaf and dumb, without a word to anyone.

The writer goes on to describe how this "finest of halls" is filled with "fine speaking" (εὐφημία), echoing like a grotto and enhancing the speaker's delivery, stretching out the

last syllables of each phrase and lingering on the last words of each period to create a harmony between building and viewer that hints at the relationship of Echo and Narcissus. Lucian draws particular attention to the golden ceiling, the radiant "head" of the room and "decorated as much with gold as the sky is with the stars" (*De domo* 8), and he also described the paintings with potential for evoking moralising themes. Yet this inspirational and acoustically convenient environment threatened to undermine the speaker with its distracting allure (Thomas 2007, 231–235).

The gilt decoration and concern with acoustics may suggest the grandeur of a public auditorium, and it has been suggested that this hall was part of a public gymnasium (Barresi 2007, 148). However, its spatial and decorative characteristics could equally have found place in a private house. The recently excavated houses on the terrace south of the main Kuretenstresse at Ephesus provide a good archaeological parallel. In House 1, for example, the heightening of Room B in the Antonine era (Period 3 of the house's history) would have created a commodious space for recitations; the walls were painted with faux marbles and the flat wooden ceiling could have been gilt or painted gold (Lang-Auinger 1996, 197–199, figs. 71a–b).

That Lucian's description seems to refer to the highly embellished room of a private house, rather than a public building, emerges not so much from the ambiguous name later given to this work as from the writer's comparison of experience of the space to Telemachus' response to the house of Menelaus (*De Domo* 3):

The response is not just a eulogy of the hall—it was perhaps appropriate for the young islander in this way to be bowled over by Menelaus's house and to compare its gold and ivory to the beauties in heaven, as he had seen

no other beautiful thing on earth—but actually speaking in it and assembling all the best men and making a display [epideixin] of words would itself be a part of the eulogy.

The same Homeric passage (*Od.* 4.300) is cited by Plutarch, who commented on the self-indulgent materialism of contemporary private houses (*De Cup.* 9):

Most of us make the mistake of Telemachus, who, through inexperience, or rather lack of good taste, when he saw Nestor's house furnished with beds and tables, garments and carpets, and well stored with sweet and pleasant wine, did not look upon his host as so happy a man in being thus well provided with things necessary and useful; but when he saw the ivory, gold, and amber in Menelaus's house, cried out in amazement:

Such, and not nobler, in the realms above,

My wonder dictates is the dome of Jove. [Od. 4.74]

Whereas Socrates or Diogenes would instead have said:

What vain, vexatious, useless things I've seen,

And good for nothing but to move one's spleen.

You fool, what are you saying? When you ought to have stripped your wife of her purple and gaudy attire, so that she might cease to live luxuriously and run mad after strangers and their fashions, instead of this, do you adorn and beautify your house, so that it may appear like a theatre or a stage to all comers? (trans. W. W. Goodwin, 1874, adapted)

Many rhetors, like Proclus of Naucratis, Philostratus's own teacher (Philostr. *V S* 2.21, 603–4), who shared his substantial private library with his own students, rehearsed their

declamations in their own houses, but this did not mean that the architectural setting was more modest than public spaces. Polemon's house was reputed to be the finest in Smyrna (Philostr. *V S* 534; Gleason 1995, 26). The covered porticoes of ancient houses would have offered a suitable space not just to converse or contemplate, but to practice oratory, inspired by thematically appropriate decoration. Herodes Atticus's father is reputed to have "instructed that all the herms of ancient orators that were in the colonnades [*dromoi*] of [Herodes's] house should be pelted with stones, because they had ruined his son" (Philostr. *V S* 1.21, 521). This may refer to Herodes's villas in Greece or in the Triopion outside Rome. If the Younger Pliny's villas seem more suited for quiet reading than public recitations (Pliny, *Ep.* 2.17.7), the two theaters at Hadrian's Villa at Tivoli, on a grander level – the South Theater with twelve rows of seats in Greek marble and an Imperial loggia, and the smaller so-called 'Greek Theater' (Sear 2006, 46) – must have served rhetorical performances as well as plays and poetry.

In the light of what we know of the great set-piece speeches by Polemon and Aristides, there is no reason to believe that sophistic rhetoric was confined to purposebuilt interior spaces. Just as many theaters demanded open-air delivery, other external venues could also offer potential for epideictic oratory. Public space offered opportunities as much as religious precincts. Aristides's great Rome oration must have been delivered in one of the great public spaces of the capital. While the auditoria of Hadrian's Athenaeum would have offered a suitable theater for such an oration, perhaps nowhere would have been more appropriate for that extravagant set-piece than the recently completed and consecrated Temple of Venus and Rome, the Templum Urbis, whose festival on April 21, 143 Aristides undoubtedly attended. The showpiece court erected

by the benefactress Plancia Magna in front of the Hellenistic city gate at Perge in Pamphylia invited orators to exalt the city and dwell on its founding legends. Among the statues of local mythological heroes arranged in the lower-story niches of the horseshoe-shaped court were images of the seers Calchas and Mopsus, whose legendary poetic contest presented a model for Second Sophistic orators. The Panhellenic associations of the whole group with their links to the tale of the Argonauts would have formed an easy visual reference point for local speakers seeking evidence of a link to Hadrian's Panhellenion or a counterweight to arguments that this Pamphylian community did not belong to the *genos Hellenikon* (Scheer 1993, 201).

By late antiquity the imperial fora where we began this chapter had become the venue not just for learned conversations, but for public recitals. Around 380 CE, a space known as the *schola Traiani*, very likely the curved exedra of Trajan's Forum, appears to have been used by the Syrian rhetor Hierius and his brother Dracontius to revise declamations. Some fifteen years later, the Christian rhetor Severus Sanctus Endelechius used the Forum of Augustus as a schoolroom in which his pupil Sallustius rehearsed a critical reading of the ninth book of Apuleius's *Metamorphoses* (Marrou 1932). If this seems a more formalized version of the improvisations of the second century, it very probably continues that tradition and may hint that Favorinus's excursus was not untypical of the earlier period. It witnesses the very real nexus between architecture and rhetoric and how the intellectual endeavours of the Second Sophistic were constantly played out in formal architectural space.

Further Reading

For more detail on the architectural aspects of the theaters and odeia discussed here, see Izenour 1992 and Dodge 1999; and, for the gymnasia of Rome, Greece, and Asia Minor, see Nielsen 1990 and Yegül 1992. Newby 2005 surveys athletic decoration in gymnasia in the context of the Second Sophistic. An analysis of the odeum at Cos is offered by Chlepa 1999, but the fullest and most enlightening discussions of such buildings are the studies by Steskal and La Torre 2008 of Vedius's Gymnasium and Bier 2011 of the Bouleuterion at Ephesus. Lucian's text is discussed in more detail in the context of monumental architecture of the Antonine period by Thomas 2007, and Newby 2002 provides an excellent close discussion of the relations between this text and sophistic performance. The essays collected in Borg 2004, Cordovana and Galli 2007, and Elsner 2002 provide good explorations of the relations between verbal and visual culture in the Second Sophistic. For a consideration of the deeper relations between architecture and rhetoric in particular, see Thomas 2014.

Bibliography

- Alföldy, G. 1977. Konsulat und Senatorenstand unter den Antoninen. Prosopographische Untersuchungen zur senatorischen Führungsschicht. Bonn.
- Anderson, G. 1986. *Philostratus: Biography and Belles Lettres in the Third Century A.D.*London.
- Arnott, W. G. 1996. Alexis: The Fragments. A Commentary. Cambridge.
- Baldassarri, P. 1998. Sevastoi Soteri: Edilizia monumentale ad Atene durante il Saeculum Augustum. Rome.
- Balty, J.-C. 1991. Curia Ordinis: recherches d'architecture et d'urbanisme antiques sur les curies provincials du monde romain. Brussels.

Barresi, P. 2007. "Il sofista Flavio Damiano di Efeso e la costruzione di terme-ginnasi nell'Asia Minore romana di età imperiale." In *Arte e memoria culturale nell'età della Seconda Sofistica*, edited by O. D. Cordovani and M. Galli, 137–152.

Catania.

Benjamin, A. S. 1963. "The Altars of Hadrian in Athens and Hadrian's Panhellenic Program." *Hesperia* 32.1: 57-86.Bergemann, J. 2010. "Die Hadriansbibliothek in Athen. Kaiserliches Bauwerk zwischen Klassizismus und romantischer Erinnerungskultur." In *Neronia VIII: Bibliothèques, livres et culture écrite dans l'empire romain de César à Hadrien*, edited by Y. Perrin, 54–62. Brussels.

Bier, L. 2011. The Bouleuterion at Ephesos. Forschungen in Ephesos 9.5, Vienna.

Boatwright, M. T. 1997. "The Traianeum in Italica (Spain) and the Library of Hadrian in Athens." In *The Interpretation of Architectural Sculpture in Greece and Rome*, edited by D. Buitron-Oliver, 192–217. Washington, DC.

Bol, R. 1984. Das Statuenprogramm des Herodes-Atticus-Nymphäums. Berlin.

Borg, B. E., ed. 2004. Paideia: The World of the Second Sophistic. Berlin and New York.

Boulanger, A. 1923. Aelius Aristide et la sophistique dans la province d'Asie au IIe siècle de notre ère. Paris.

- Bradley, D. T., E. E. Ryherd, and L. M. Ronsse (eds.) 2016. Worship Space Acoustics: 3

 Decades of Design. New York.
- Burrell, B. 2006. "False Fronts: Separating the Aedicular Facade from the Imperial Cult in Roman Asia Minor." *AJArch.* 110: 437–469.
- Caldelli, M. L. 1992. "Curia athletarum, iera xystike synodos e organizzazione delle terme a Roma." *ZPE* 93: 75–87.

- Canac, F. 1967. L'acoustique des théâtres antiques, ses enseignements. Paris.
- Chaisemartin, N. de, and A. Lemaire. 1989. "Le portique de Tibère: Recherches sur son architecture et sa function." *Aphrodisias Papers 3*: 149–172.
- Chlepa, E. A. 1999. "The Architecture of the Roman Odeion at Kos." BSA 94: 415–435.
- Cordovana, O. D., and M. Galli, eds. 2007. *Arte e memoria culturale nell'età della Seconda Sofistica*. Catania.
- Csapo, E., and W. J. Slater. 1994. The Context of Ancient Drama. Ann Arbor, MI.
- Davis, A. H., and G. W. C. Kaye. 1932. *The Acoustics of Buildings*. London.
- DeLaine, J. 1997. The Baths of Caracalla: a study in the design, construction, and economics of large-scale building projects in imperial Rome, JRA Supplementary series 25. Portsmouth, RI.
- Delorme, J. 1960. Gymnasion: Étude sur les monuments consacrés à l'éducation en Grèce. BEFAR 196. Paris.
- Dillon, S. 1996. "The Portraits of a Civic Benefactor of 2nd-c. Ephesos." *JRA* 9: 261–274.
- Dodge, H. 1999. "Entertaining the Masses: The Structures." In *Life, Death and Entertainment in the Roman World*, edited by D. Potter and D. Mattingly, 205–255. Ann Arbor, MI.
- Dörpfeld, W. 1907. "Die Arbeiten zu Pergamon, 1904–1905. I. Die Bauwerke." *MDAI(A)* 32: 161–240.
- Dörpfeld, W. 1908. "Die Arbeiten zu Pergamon, 1906–1907. I. Die Bauwerke." *MDAI(A)* 33: 327–374.

- Egidi, R. 2010. "L'area di Piazza Venezia: Nuovi dati topografici." In *Archeologia e Infrastrutture. Il tracciato fondamentale della Linea C della Metropolitana di Rome: Prime indagini archeologiche*, edited by R. Egidi, F. Filippi, and S. Martone, 93–121. Rome.
- Elsner, J., ed. 2002. "The Verbal and the Visual: Cultures of Ekphrasis in Antiquity." Special issue, *Ramus* 31, no. 1–2.
- Engelmann, H. 1995. "Philostrat und Ephesos." ZPE 108: 77–87.
- Engelmann, H. 1998. "Ephesiaca." ZPE 121: 305-311.
- Fant, J. C. "Ideology, gift, and trade: a distribution model for the Roman imperial marbles." In *The Inscribed Economy: Production and Distribution in the Roman Empire in the light of Instrumentum Domesticum*, edited by W. V. Harris, 145-170. Ann Arbor, MI.
- Fileni, M. G. 2014. "I luoghi dell'oratoria politica nell'Atene di Aristofane: L'Agora e la Pnice." In *La città greca: Gli spazi condivisi*, edited by F. Serra, 75–91. Pisa.
- Fischer, J. 2014. "Redner, Sophisten und Philosophen im römischen Ephesos." In Der Beitrag Kleinasiens zur Kultur- und Geistesgeschichte der griechischenrömischen Antike. Akten des Internationalen Kolloquiums Wien, 3.-5. November 2010, edited by J. Fischer, 125-151. Vienna.
- Fontani, E. 1996. "I Vedii di Efeso nel II secolo d.C." ZPE 110: 227–237.
- Ghini, G. 2000. "Thermae Neronianae/Alexandrinae." In LTUR 5:60–62. Rome.
- Gleason, M. W. 1995. Making Men: Sophists and Self-Presentation in Ancient Rome.

 Princeton, NJ.

- Gödde, S. 2015. "Theater." In *A Companion to the Archaeology of Religion in the Ancient World*, edited by R. Raja and J. Rüpke, 333–348. Chichester.
- Gros, P. 1985. Byrsa. III: Rapport sur les Campagnes de Fouilles de 1977 à 1980: la basilique orientale et ses abords. Rome.
- Halfmann, H. 1986. *Itinera Principum: Geschichte und Typologie der Kaiserreisen im Römischen Reich*. Stuttgart.
- Hanfmann, G. M. A. 1975. From Croesus to Constantine: the Cities of western Asia

 Minor and their arts in Greek and Roman times. Ann Arbor, MI.
- Harrison, S. J. 2000. Apuleius: A Latin Sophist. Oxford.
- Hellmann, M.-C. 1992. Recherches sur le vocabulaire de l'architecture grecque, d'après les inscriptions de Délos. BEFAR 278. Athens.
- Hepding, H. 1907. "Die Arbeiten zu Pergamon 1904–1905: II. Die Inschriften." *MDAI(A)* 32: 241–377.
- Hiesel, G., and Strocka, V. M. 2006. "Die Bibliothek von Nysa am Mäander: Vorläufiger Bericht über die Kampagnen 2002-2006." *Archäologischer Anzeiger* 2006 (2): 81-97.
- Holford-Strevens, L. 2004. *Aulus Gellius: An Antonine Scholar and His Achievement*. Rev. ed. Oxford.
- Horsley, G. H. R. 1987. "The inscriptions from the so-called "Library" at Cremna." Anatolian Studies 37: 49-80.
- Howard, D., and L. Moretti. 2009. Sound and Space in Renaissance Venice: Architecture, Music, Acoustics. New Haven, CT.

- Iara, K. 2015. Hippodromus Palatii: die Bauornamentik des Gartenhippodroms im Kaiserpalast auf dem Palatin in Rom. Wiesbaden.
- Ídil, V. 1999. "Die Römischen Bibliotheken in Kleinasien: Die Celsusbibliothek in Ephesos und die Bibliothek in Nysa." In 100 Jahre Österreichische Forschungen in Ephesos: Akten des Symposions Wien 1995, edited by H. Friesinger and F. Krinzinger, 437-442. Vienna.
- Izenour, G. C. 1992. Roofed Theaters of Classical Antiquity. New Haven, CT.
- Jarratt, S. C. 2016. "An Imperial Anti-Sublime: Aristides' *Roman Oration (or.* 26)." In *Ælius Aristide Écrivain*, edited by L. Pernot, G. Abbamonte, and M. Lamagna, 213–230. Antwerp and Turnhout.
- Keil, J. 1929a. "XIII vorläufiger Bericht über die Ausgrabungen in Ephesos." *JÖAI* 24, Beiblatt: 34–38.
- Keil, J. 1929b. "XIV vorläufiger Bericht über die Ausgrabungen in Ephesos." *JÖAI* 25, Beiblatt: 42–46.
- Keil, J. 1930. "XV vorläufiger Bericht über die Ausgrabungen in Ephesos." *JÖAI* 26, Beiblatt: 17–62.
- Keil, J. 1931. "XVI vorläufiger Bericht über die Ausgrabungen in Ephesos." *JÖAI* 27, Beiblatt: 25–52.
- Keil, J. 1933. "XVII vorläufiger Bericht über die Ausgrabungen in Ephesos." *JÖAI* 28, Beiblatt: 14–22.
- Keil, J. 1953. "Vertreter der Zweiten Sophistik in Ephesos." JÖAI 40: 5–26.
- Kennedy, G. A. 1994. A New History of Classical Rhetoric, Princeton.

- Knibbe, D. 1999. "Via Sacra Ephesiaca." In *100 Jahre Österreichische Forschungen in Ephesos*, edited by H. Friesinger and F. Krinzinger, 449–454. Vienna.
- Knibbe, D., and Langmann, G. 1993. Via Sacra Ephesiaca I. Vienna.
- Knibbe, D., and Thür, H. (eds.) 1995. Via Sacra Ephesiaca II. Grabungen und Forschungen 1992 und 1993. Vienna.
- Knibbe, D. 2002. "Topographica Ephesiaca. Damianosstoa, Androklosgrab Olympieion und Koressos." Österreichische Jahreshefte 71: 207-219.
- Koenigs, W., and W. Radt. 1979. "Ein kaiserzeitlicher Rundbau (Monopteros) in Pergamon." *Istanbuler Mitteilungen* 29: 317-354.
- Krencker, D. M. 1929. Die Trierer Kaiserthermen mit einer Übersicht über die wichtigsten Thermenanlagen des römischen Reiches. Augsburg.
- Lancaster, L. M. 2015. *Innovative Vaulting*. Cambridge.
- Lang-Auinger, C. 1996. *Hanghaus 1 in Ephesos: Der Baubefund*. Forschungen in Ephesos 8.3. Vienna.
- La Rocca, E. 2014. "Il Traianeo di *Italica* e la Biblioteca di Adriano ad Atene:

 Costruzione e fortuna di una morfologica architettonica." In *Adriano e la Grecia:*Villa Adriana tra classicità ed ellenismo, edited by E. Calandra and B. Adembri,
 61–70. Verona.
- Lattimore, S. 1972. "The Bronze Apoxyomenos from Ephesos." AJArch. 76: 13–16.
- Lucore, S. K., and M. Trümper, eds. 2013. *Greek Baths and Bathing Culture: New Discoveries and Approaches*. Leuven.
- Maccanico, R. 1963. "Ginnasi romani a Efeso." Archeologia Classica 15: 32-60.

- Marrou, H.-I. 1932. "La vie intellectuelle au Forum de Trajan et au Forum d'Auguste." *MÉFRA* 49: 93–110.
- Mathys, M., V. Stappmanns, and R. von den Hoff. 2011. "Das Gymnasion—Architektur, Nutzung und Bildwerke." In *Pergamon: Panorama der antiken Metropole*, edited by R. Grüssinger, V. Kästner, and A. Scholl, 270–277. Petersberg.
- Meinel, Ru. 1980. Das Odeion. Untersuchungen an überdachten antiken

 Theatergebäuden. Frankfurt am Main, Bern, and Cirencester.
- Newby, Z. 2002. "Testing the Boundaries of Ekphrasis: Lucian on the Hall." In "The Verbal and the Visual: Cultures of Ekphrasis in Antiquity," edited by J. Elsner. Special issue, *Ramus* 31, no. 1–2: 126–135.
- Newby, Z. 2005. Greek Athletics in the Roman World: Victory and Virtue. Oxford.
- Nielsen, I. 1990. Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths. Aarhus.
- Oliver, J. H. 1953. The Ruling Power: A Study of the Roman Empire in the Second

 Century after Christ through the Roman Oration of Aelius Aristides. Philadelphia,

 PA.
- Pernot, L. 2008. "Aelius Aristides and Rome." In *Aelius Aristides between Greece, Rome, and the Gods*, edited by W. V. Harris and B. Holmes, 173-202. Leiden and Boston, MA.
- Pleket, H. W. 1984. "Urban Élites and the Economy in the Greek Cities of the Roman Empire." *Münster Beiträge zur antiken Handelsgeschichte* 3: 3–36.
- Plommer, H. 1983. "Scythopolis, Caesarea, and Vitruvius: Sounding Vessels in Ancient Theatres." *Levant* 15: 132–140.

- Radt, W. 1988. Pergamon: Geschichte und Bauten, Funde und Erforschung einer antiken Metropole. Cologne.
- Robkin, A. L. H. 1976. *The Odeion of Perikles: Some Observations on Its History, Form, and Functions*. Unpublished PhD dissertation, University of Washington.
- Russell, D. A., and Wilson, N. G. (eds.) 1981. Menander Rhetor. Oxford.
- Schazmann, P. 1923. *Das Gymnasion der Tempelbezirk der Hera Basilea*. Altertümer von Pergamon 6. Berlin.
- Scheer, T. S. 1993. Mythische Vorväter: Zur Bedeutung griechischer Heroenmythen im Selbstverständnis Kleinasiatischer Städte. Munich.
- Sear, F. 2006. Roman Theatres: An Architectural Study. Oxford.
- Settis, S. 1968. "Il ninfeo di Erode Attico a Olimpia e il problema della composizione della periegesi di Pausania." *Annali della Scuola Normale Superiore di Pisa* 37: 1-63.
- Smith, R. R. R. 1998. "Cultural Choice and Political Identity in Honorific Portrait Statues in the Greek East in the Second Century A.D." *JRS* 88: 56–93.
- Spawforth, A. J., and Walker, S. 1986. "The World of the Panhellenion: II. Three Dorian Cities." *JRS* 76: 88-105.
- Steskal, M. 2001. "Zu den Stiftungen des M. Claudius P. Vedius Antoninus Phaedrus Sabinianus und ihrem Echo in Ephesos." *Tyche* 16: 177–188.
- Steskal, M. 2003. "Bemerkungen zur Funktion der Palästren in den Ephesischen Bad-Gymnasium-Komplexen." *JÖAI* 72: 226–239.

- Steskal, M., K. Grossschmidt, M. Heinz, F. Kanz, and H. Taeuber. 2003. "Die Damianosstoa in Ephesos. Bericht über die Ausgrabung 2002 im Abscnitt Kathodos III." *Österreichische Jahreshefte* 72: 241-273.
- Steskal, M., and M. La Torre. 2008. *Das Vediusgymnasium in Ephesos*. Forschungen in Ephesos 14/1. Vienna.
- Strong, D. E., and J. B. Ward-Perkins. 1962. "The Temple of Castor in the Forum Romanum." *PBSR* 30: 1-30.
- Szewczyk, M. 2015. "Nouveaux éléments pour l'étude d'un portrait de notable." *Rev. Ét.*Anc. 117: 129–151.
- Thomas, E. V. 2007. Monumentality of the Roman Empire: Architecture in the Antonine Age. Oxford.
- Thomas, E. V. 2013. "Translating Roman architecture into Greek regional identities." In Les Grecs Héritiers des Romains, Entretiens sur l'Antiquité Classique 59, edited by Paul Schubert, 147-202. Vandœuvres.
- Thomas, E. V. 2014. "On the Sublime in Architecture." In *Art and Rhetoric in Roman Culture*, edited by J. Elsner and M. Meyer, 37–88. Cambridge.
- Valentini, R., and G. Zucchetti. 1940–1953. *Codice topografico della città di Roma*. Rome.
- Vassilantonopoulos, S. L., and J. N. Mourjopoulos. 2009. "The Acoustics of Roofed Ancient Odeia: The Case of Herodes Atticus' Odeion." *Acta Acustica United with Acustica* 95: 291–299.
- Virgili, P. 1996. "Odeum, Odium." In *Lexicon Topographicum Urbis Romae*, edited by E. M. Steinby, 3:359–360. Rome.

- Volpe, R. 2007. "Le Terme di Traiano e la ξυστιχή σύνοδος." In Res bene gestae:

 Ricerche di storia urbana su Roma antica in onore di Eva Margareta Steinby,
 edited by A. Leone, D. Palombi, and S. Walker, 427–437. Rome.
- Waelkens, M., and Poblome, J. 2011. *Sagalassos: eine Römische Stadt in der Südwesttürkei*. Cologne.
- Walker, S. 1987. "Roman nymphaea in the Greek world." In *Roman Architecture in the Greek World*, edited by S. Macready and F. H. Thompson, 60-71. London.
- Watson, F. R. 1930. Acoustics of Buildings, Including Acoustics of Auditoriums and Sound-Proofing of Rooms. 2nd ed. New York and London.
- Weber, W. 1907. Untersuchungen zur Geschichte des Kaisers Hadrianus. Leipzig.
- Willers, D. 1990. Hadrians panhellenisches Programm: Archäologische Beiträge zur Neugestaltung Athens durch Hadrian. Basel.
- Winter, B. W. 2002. Philo and Paul among the Sophists. 2nd ed. Grand Rapids, MI.
- Yegül, F. 1986. *The Bath-Gymnasium Complex at Sardis*. Cambridge, MA.
- Yegül, F. 1992. *Baths and Bathing in Classical Antiquity*. New York and Cambridge, MA.