CHAPTER ONE

INTRODUCTION

Explaining Architectural Change

A NEW STYLE

The old Aphaia temple on Aegina represents a new style in Greek temple building that emerged around 600 BC. Ancient authors referred to it as “Doric,” as it first spread on the Peloponnese, where the Dorians lived, and in neighboring regions such as Attica, Phocis, and Aetolia. The Doric style was also very popular in the Greek colonies of southern Italy and Sicily, many of which had been founded by settlers from the Peloponnese from the eighth century BC onward (Figure 2).

As a result, by the mid sixth century BC, Greek temples from Aegina to Selinous and from Tarentum to Poseidonia looked alike. They all followed the Doric order, although there was still a certain degree of local and regional variation. However, the fact that all Doric temples featured a series of typical elements – Doric columns and capitals, pediments, and a frieze with triglyphs and metopes, often decorated with figures in relief – is astonishing, given that the Greek world was not in any way united under one political power. There were hundreds of city-states, each theoretically autonomous and independent. Violent conflicts among them were frequent, and some were conquered or even destroyed by others. Yet, the Greek cities in the region from Attica to Western Sicily and up north to Campania on the Tyrrhenian coast of Italy adopted the Doric style across all political and cultural groupings.
How can we explain the diffusion of the Doric style across the Central and Western Greek diaspora? Is there a general pattern to the transformation of the Aphaia temple and its wider context that applies to other sites as well? And if so, what role did the Doric style play in this transformational process?

Building on studies emphasizing the innovative nature of the first Doric temples, this book aims to contribute to the debate about the origins and diffusion of the Doric architectural order by looking at the relationship between temple building, architectural sculpture, religious practices, and social change in the sixth century BC. I argue that we can improve our understanding of the novel architectural style known as Doric if we contextualize it against the backdrop of the economic, environmental, social, and political transformation processes taking place in the Greek world around 600 BC.

Between the late seventh and the first half of the sixth century, when the first Doric temples were built, the Greek world was undergoing a period of profound change. Increasing contacts with the ancient civilizations of Egypt, the Levant, and Asia Minor triggered technological, administrative, artistic, and scientific innovation. Agricultural production and trade were intensifying, and the population in many parts of the Greek world was growing. Many of those born in this period, especially young men without property, emigrated to the colonies in southern Italy, Sicily, and on the Black Sea. At the same time in homeland Greece, formerly uncultivated land was reclaimed and put under cultivation. Villages and small towns grew into cities with populations of
unprecedented size, although they might seem small by modern standards. The dimensions of some colonial settlements of the period, such as Selinous, Akragas, or Poseidonia, show that they were laid out from early on to provide space for several thousand inhabitants. Although some communities may never have filled all the available space, the large areas included in the urban centers established during the late seventh and sixth centuries are indicative of the expectations of their founders.

The evidence suggests that agricultural intensification, urbanization, and colonization went along with a profound change in the social structure of many Greek communities. The growing numbers of landless people and tenants lacking sufficient livelihood challenged traditional social hierarchies and forms of dependent labor and debt slavery. The foundation of new settlements, many of which were established in order to get rid of elements perceived to threaten the social or economic order, the rise of tyrants from local aristocracies who allied themselves with the demos (people) against their peers, and social upheaval were among the consequences recorded in the historical sources.

However, colonization, changing land use, and urbanization arguably also had an impact on the religious practices and experience of ancient Greek communities. This is less evident in the written sources, as it was not the object of theoretical reflection in the Archaic and Classical periods. Yet, as may be inferred from modern and contemporary examples, a religious system such as the ancient Greek one, which was intrinsically bound to natural features and places, could hardly remain unaltered under the impact of colonization, large-scale migration, changing settlement and social patterns, and land reclamation. Traditional Greek religion was neither particularly suited for being transplanted into foreign lands, nor apt to cope easily with the intensifying exploitation of resources (water, woods, fields, and pastures) that traditionally had been considered as sacred spaces beyond the human sphere.

As I argue here, the Doric temple is a response to this situation. By redefining the sacred space of the sanctuary, the new architectural style also redefined what lay outside the sacred precinct, the “profane” land. And by providing a stage for representing gods, monsters, and heroes in statues, on pediments and friezes, it promoted a new way of interpreting the divine, of imagining its presence.

The new way in which Doric temples reshaped sacred spaces and religious representation was anything but detached from the social transformation underway in Greece at the time. On the contrary, it complied strikingly with the political agendas of local elites in the Greek world in the period 600/550 BC. This can be shown by pointing out how architectural, artistic, political, and cultural innovation processes led toward a general shift in the wielding of religious and social power. In a way, Doric temples served the same purpose as
monumental *kouros* statues, horse races, and Archaic choral poetry: They deterritorialized religious meaning and myth by consigning religious performance to sophisticated and costly “containers” (temples, games, feasts, commissioned poems, and so forth) controlled by wealthy aristocrats and tyrants who presented themselves as the procurators of divine order. The answer to the question of why the Doric style spread so rapidly, then, would be that it came to signify an architecture of power embodying the agenda of urban elites in Central and Western Greece during the sixth and fifth centuries BC.

**VITRUVIUS’ LEGACY AND THE DORIC**

This book does not claim to pursue an entirely original project. Exploring the relation between architecture, economic and social structures, and political power is nothing new. From Egyptian temples to Late Antique churches, scholars have analyzed how ancient architecture was used to express the ideologies and further the agendas of the wealthy and powerful. Classicists engaging with gender studies and postcolonial criticism have further widened our understanding of how art, architecture, dominance, and subalternity were entangled in antiquity. However, Doric temples have not figured prominently in this debate. There are, of course, exceptions that will be discussed later in this book. Yet, speaking generally, Archaic Doric temples are rarely described as expressions of political and social power and hegemony. One reason probably is that the Western tradition tends to associate positive values such as authenticity, freedom, and equality with ancient Greek culture, whereas the use of architecture as a means of expressing and enforcing political hegemony is seen as some kind of ideological deviation and negative counterpoint. In the period of European neoclassicism, Greek art and architecture were portrayed as universal achievements of timeless value. The idea that classical art and architecture helped reiterate social hierarchies and promote political agendas risked tarnishing the immaculate conception of classical culture.

In the modern tradition, an explicitly non-political vision of the Doric order has long been sustained by a model that explained the Doric order as the result of a long and gradual evolution of wooden architectural forms that eventually led to the formation of the Doric canon as we know it. Thus, monumental buildings that in Egypt or Assyria were seen as expressions of imperial self-representation and despotism, in Greece tended to be viewed as some kind of natural expression of the “incredibly consequent culture of Greece” and its “inherent greatness” (Gruben 2001: 25, 44). As the quote illustrates, the idea of “natural” evolution is linked to Greek exceptionalism; it is part of a historical narrative that depicts ancient Greek art and architecture as something miraculously special, something that cannot be explained merely by social, economic, and political dynamics but is collocated in the realm of timeless “greatness.”
In the attempt to distinguish Greek architecture from other architectural traditions and to present it as a natural development, modern theorists and historians derived encouragement from the Roman author and architect Vitruvius (first century BC). In *Ten Books on Architecture*, Vitruvius included a series of remarks that have given rise to the idea that the Doric order was the result of the transformation of functional wooden elements into decorative stone elements. According to Vitruvius, the form of Doric columns derived from tree trunks stripped of their bark and used as posts, while the triglyphs originated in small wooden plaquettes that were nailed on the ends of the roof beams. The metopes are supposed to have developed from wooden or terracotta panels filling the gaps between the roof beams (*De architectura* IV 2,2–3).

Taking Vitruvius as a starting point, the Doric order could be explained as the result of the “petrification” of structural elements that initially were made in wood and subsequently were translated into stone. During this translation process, elements that originally had a constructive function, such as the triglyphs or the *mutuli* (decorative panels with conical projections on the underside of the cornice), became purely ornamental. Still, the ornamental parts of the Doric order seemed somehow to conserve the memory of their original function. The vertically channelled triglyphs, for instance, were supposed to be a reminiscence of the wooden plaquettes that according to Vitruvius protected the roof beams of archaic wooden buildings. In other words, the form of the triglyph was not arbitrary; it could be explained through an evolutionary process from wood to stone.

At several points, Vitruvius emphasizes the naturalness of ancient Greek architectural orders, including the Doric. He maintains that the ancient Greek builders “proceeded in all their works on definite principles of fitness and in ways derived from the truth of Nature; thus they reached perfection, approving only those things which, if challenged, can be explained on grounds of the truth” (*Omnia enim certa proprietate et a veris naturae deducta moribus transduxerunt in operum perfectiones, et ea provabent quorum explicationes in disputationibus rationem possunt habere veritatis*).\(^4\) This, then, would explain both the origin and the success of the Doric style. Following Vitruvius’ idea of a wood-to-stone evolution, eighteenth and nineteenth-century authors depicted the Doric order as an architecture that corresponded to universal (natural) principles; on these grounds, its wide adoption, not least in the post-classical period, appeared logical and seemed to require no further explanation.\(^5\)

Today, most scholars from the field of ancient Greek architecture reject Vitruvius’ explanation of triglyphs and metopes and see the wood-to-stone model critically. Authors such as Ernst–Ludwig Schwandner (1985), Manolis Korres (1994), Barbara Barletta (2001), Hermann Kienast (2002), and Mark Wilson Jones (2002; 2014: 63–87) have long pointed out that the available evidence contradicts the Vitruvian hypothesis.
I briefly summarize here the most striking arguments that recent scholars have advanced against the evolutionary theory. The frieze, as the most characteristic feature of the Doric order apart from the columns, has been at the center of this debate. In this context, Kienast (2002: 64) has pointed out that the terracotta panels dating to around 625 BC found in Thermon and Kalydon in northern central Greece, which are commonly held to be the oldest metopes known so far, are way too high – about 90 centimeters – to be used as fillings “between the wooden roof beams,” as one might have expected following Vitruvius. It is not even clear whether they were part of a frieze or whether they were deployed in other parts of the building. At any rate, on constructive grounds the idea that the roof beams of the seventh-century temples in Kalydon and Thermon had a height of more than 40, maximum 50 centimeters, can be dismissed.

Other early Doric buildings corroborate the impression that the frieze had a purely decorative function from the moment it first appears in the archaeological record. The metope-triglyph-friezes of the tholos (round temple) of Athena in Delphi and of the Temple of Apollo in Syracuse (both usually dated to c. 580 BC) appear to be completely detached from the colonnades: Some triglyphs lie on the same axis as the columns, while others do not. Only from around the middle of the sixth century, Greek architects started to regularly position one triglyph over each column and one in between. Many centuries later, Vitruvius imagined that the original function of the triglyphs was to cover the ends of the roof timbers, which for structural reasons had to be positioned over the columns – probably without being aware that some of the earliest examples of Doric friezes contradict this hypothesis.

That the Doric frieze was a decorative rather than a structural feature is further corroborated by a number of non-peripteral temples of early date such as the old Temple of Aphaia on the island of Aegina, dated to around 580 BC. The temple was a rectangular building with a pitched roof and four columns on the front side (see Figure 1). If the triglyphs originally covered the ends of the roof timbers, one would not expect to have them on the narrow sides as well. In addition, the prooma (entrance hall) of the Temple of Aphaia had a double-faced Doric frieze, which is also in contrast with the alleged function of the triglyphs. Another example is the Apollo Temple on Aegina, as reconstructed by Klaus Hoffelner (1999) based on fragments of capitals, triglyphs, and geison blocks, which had a frieze only on the front. This underlines the aesthetic nature of the frieze, as suggested also by later Doric friezes running round the entire building but being sculpted only on the main facade, as in the case of Temple C in Selinous.

The decorative and playful nature of early Doric architecture also emerges from a group of terracotta roofs and panels from southern Italy and Sicily which have been described as “Proto-Doric,” although they are partly
So-called Proto-Doric buildings are characterized by features that are typical of the Doric order such as *guttae* (hanging conical or cylindrical “drops”) and *regulae* (small strips decorated with *guttae* beneath the frieze) though without entirely conforming to the canon. According to the evolutionary model based on Vitruvius, the *regulae* derived from wooden ledges that were fixed beneath the frieze with big nails. In line with this, the *guttae* on the downside of the *regulae* were interpreted as representing the nails that once held the wooden ledges/*regulae* in their place. However, as early as the first half of the sixth century, *regulae* and *guttae* were used in non-canonic contexts as merely decorative elements, for instance by being inserted in terracotta panels without any connection with their alleged function as ledges and nails in the Vitruvian model (Figure 3).

The same holds true for the pre-canonical Doric temple at Contrada Gaggera west of the urban center of Selinous. It has been described as an *oikos* temple, because it had no colonnades, that is, it was a non-peripteral building. The temple, which dates to the first half of the sixth century, was entirely built of stone, except for the roof structure. However, the front ends of the roof...
timbers were not hidden behind a frieze, as there was none; instead, the roof beams were embedded in the geison.  

Doubtless, Greek temples of the eighth to early sixth centuries anticipated some features of later canonical stone temples, as suggested also by recent discoveries in Selinous and Kalapodi.  

But unlike canonical Doric temples, earlier buildings were not designed according to a uniform model or order; it is therefore problematic to label these buildings as “Doric.”  

It is true that as early as the eighth and seventh centuries, columns, capitals, and sculptured or painted panels could apply to forms that later became part of the Doric order.  

At the same time, certain features in some sixth-century Doric buildings, such as the geison of Altar A in the urban sanctuary of Metapontum (c. 550 BC), clearly imitate wooden prototypes.  

However, the adaption of wooden elements to stone buildings appears to have been highly complex and should not be imagined as a linear process.  

It is also beyond question that some of the pre-canonic temples were quite monumental. In the seventh century, stone, terracotta, and bronze works were used to embellish sacred buildings.  

Early temples at Ano Mazaraki, Isthmia, and Ephesus were surrounded by posts that could be interpreted as forerunners of the colonnades of later peripteral temples.  

Yet, in the same period, quite different building types were in use across the Greek world, for example, on the Aegean islands. The cult buildings of Yria on the island of Naxos and in Dreros and Prinias on Crete apply to a pattern that may go back to the Minoan and Mycenaean palaces of the second millennium BC.  

The ground plan and the furnishing of these temples, some of which were richly decorated, suggest that their principal function was to house ritual banquets and gatherings.  

Only later, when Greek temples were generally conceptualized as “houses of the god,” ritual banquets were relocated in separate buildings in the vicinity of the temple.  

Vitruvius, who lived more than 500 years after the emergence of the Doric order, was probably no less amazed than we are today when considering the uniformity and regularity of ancient Greek Doric temples from the sixth century onward. His attempt to explain this by tracing stylistic features back to functional necessities has to be seen against the backdrop of theories of the Hellenistic period that aimed at identifying the causes (aitia) of cultural and artistic conventions dating back to a distant past. Such theories and their modern legacy are highly interesting in terms of cultural history and scientific explanatory models, though they tell us little about the original genesis and meaning of the Doric order.
of earlier periods, the Doric order as it appears in Greek stone temples from the early sixth century onward is the result of an “invention” (Howe 1985) rather than of a long evolutionary process. By drawing attention to the creative and innovative nature of early Doric architecture, scholars such as Ernst-Ludwig Schwandner (1985), Barbara Barletta (2001), Clemente Marconi (2007), and Mark Wilson Jones (2014) have questioned narratives based on evolutionary models and explored the multiple factors that may have contributed to the formation and diffusion of Doric temples. Apart from structural and other functional aspects, these scholars have stressed the importance of foreign influences, symbolism, and meaning, as well as the role of early Doric architecture for the reaffirmation of local and regional identities in a period in which the colonies in southern Italy and Sicily tried to keep their Hellenic origins alive. Such contributions show that as soon as we abandon a linear, evolutionary approach, a broad spectrum of questions arise regarding the aesthetic, social, cultural, and political context in which the Doric canon emerged in the sixth century BC. If the Doric is not the outcome of a “natural” process, where and when was it created, and who had an interest in adopting and propagating it?

Thanks to the new perspectives recent scholarship has opened up, even Vitruvius, often considered a key witness for the evolutionary model, appears in a different light. Wilson Jones (2016) has emphasized the “multifaceted nature of architectural form, and that of the Doric, Ionic and Corinthian orders in particular.” He goes on:

> Purpose, setting, construction and practicalities, influences from varied sources both local and foreign, visual concerns and fashion, symbolism and meaning – all these and more played a role. To anyone who has practised art or design, or who has commissioned buildings, the point is so obvious as to seem unnecessary to labour it, except that some commentators adopt oppositional terms: if structure is important then symbolism is presumed not to be, and so on.

Vitruvius seems to allude to the same multifaceted nature of the Doric when he presents what might appear as an alternative explanation of the Doric. This seemingly contradictory explanation of the origins of the Doric order has mostly been overlooked, or misinterpreted, by modern authors who were more interested in the evolutionary approach. However, before describing the evolution of the Doric frieze out of wooden roof elements by the sense and sensibility of the “ancient artificers” (IV 2,2), Vitruvius gives a different account of the origins of the Doric (IV 1,3–5):

> E columnarum enim formationibus trium generum factae sunt nomina- tiones, dorica, ionica, corinthia, e quibus prima et antiquitus dorica est nata. Namque Achaia Peloponnesique tota Dorus Hellenos et Pthias nympheæ filius regnavit, isque Argis vetusta civitate Iunonis templo
aedificavit eis generis fortuito formae fanum, deinde isdem generibus in ceteris Achaiae civitatibus, cum etiamnum non esset symmetriae ratio nata. postea autem quam Athenienses ex responsis Apollinis Delphici, communi consilio totius Hellados, XIII colonias uno tempore in Asiam deduxerunt ducesque in singulis coloniis constituerunt et summam imperii potestatem Ioni Xuthi et Creusae filio dederunt, quem etiam Apollo Delphis suum filium in responsis est professus, isque eae colonias in Asiam deduxit et Cariae fines occupavit ibique civitates amplissimas constituit Ephesum, Miletum, Myunta, quae olim ab aqua est devorata, cuinis sacra et suffragium Milesi Iones attribuerunt, Prieni, Samum, Teon, Colophona, Chium, Erythras, Phocaeam, Clazomenas, Lebedon, Melien. istae Melie propter civium adrogantiam ab is civitatibus bello indicto communi consilio est sublata, cuinis loco postea regis Attali et Arsinoes beneficio Zymiæorum civitas inter Ionas est recepta. hae civitates, cum Caras et Lelegas eiecissent, eam terrae regionem a duce suo Ione appellerunt Ioni ibique deorum immortalis templum constituentes coeperunt fana aedificare, et primum Apollini Panionio aedem uti viderant in Achaia constituerunt et eam Doricam appellerunt, quod in Dorion civitatibus primum factam eo genere viderant.

To the forms of their columns are due the names of the three orders, Doric, Ionic, and Corinthian, of which the Doric was the first to arise, and in early times. For Dorus, the son of Hellen and the nymph Phthia, was king of Achaea and all the Peloponnese, and he built a temple, which was an ancient city, and subsequently others of the same order in the other cities of Achaea, although the rules of symmetry were not yet in existence. Later, the Athenians, in obedience to oracles of the Delphic Apollo, and with the general agreement of all Hellas, despatched thirteen colonies at one time to Asia Minor, appointing leaders for each colony and giving the command-in-chief to Ion, son of Xuthus and Creusa (whom further Apollo at Delphi in the oracles had acknowledged as his son). Ion conducted those colonies to Asia Minor, took possession of the land of Caria, and there founded the grand cities of Ephesus, Miletus, Myus (long ago engulfed by the water, and its sacred rites and suffrage handed over by the Ionians to the Milesians), Priene, Samos, Teos, Kolophon, Chios, Erythrai, Phocaea, Clazomenai, Lebedos, and Melie. This Melie, on account of the arrogance of its citizens, was destroyed by the other cities in a war declared by general agreement, and in its place, through the kindness of King Attalus and Arsinoe, the city of the Smyrnaeans was admitted among the Ionians. Now these cities, after driving out the Carians and Lelegans, called that part of the world Ionia from their leader Ion, and there they set apart precincts for the immortal gods and began to build temples: first of all, a temple to Panionian Apollo such as they had seen in Achaea, calling it Doric because they had first seen that kind of temple built in the states of the Dories.

(trans. M. H. Morgan, 1914, slightly altered)