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.
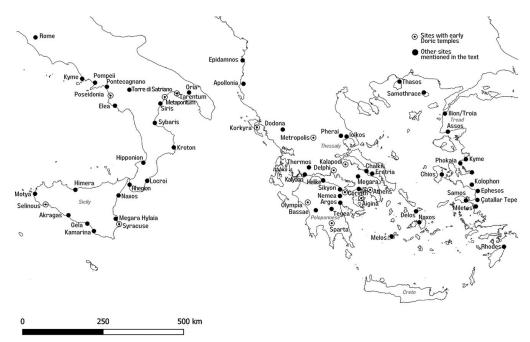
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FIGURE 2. Sites mentioned in the text (author).

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.[1] Classicists engaging with gender studies and postcolonial criticism have further widened our understanding of how art, architecture, dominance, and subalternity were entangled in antiquity.[2] 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.[3] 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 channeled 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.[4]

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 provaberunt quorum explicationes in disputationibus rationem possunt habere veritatis*).[5] 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.[6]

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.[7] 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.[8] 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 *pronaos* (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.[9] 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

contemporary with early canonical Doric buildings.[10] 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.[11] 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
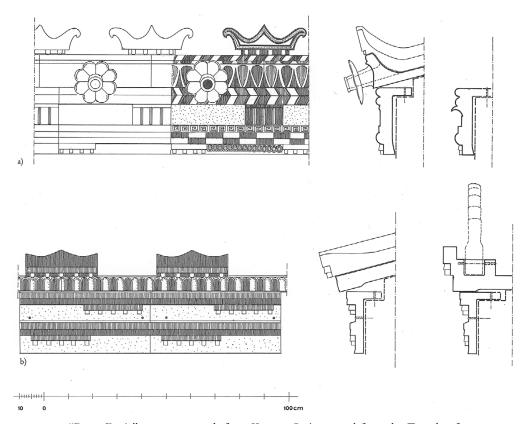

FIGURE 3. "Proto-Doric" terracotta panels from Kroton, S. Anna, and from the Temple of Apollo at Cirò (Mertens 1993: fig. 74, with permission).

timbers were not hidden behind a frieze, as there was none; instead, the roof beams were embedded in the *geison*.[12]

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.[13] 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."[14] 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.[15] 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.[16] However, the adaption of wooden elements to stone buildings appears to have been highly complex and should not be imagined as a linear process.[17]

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.[18] 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.[19] 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 Mycenean 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.[20] 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.[21]

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.[22]

ALTERNATIVE NARRATIVES?

Since the 1980s, an increasing number of authors have argued that although single features of the Doric order might have originated in wooden buildings

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 nominationes, dorica, ionica, corinthia, e quibus prima et antiquitus dorica est nata. Namque Achaia Peloponnesoque tota Dorus Hellenos et Pthias nymphae filius regnavit, isque Argis vetusta civitate Iunonis templo

aedificavit eius generis fortuito formae fanum, deinde isdem generibus in ceteris Achaiae civitatibus, cum etiamnum non esset symmetriarum 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 eas colonias in Asiam deduxit et Cariae fines occupavit ibique civitates amplissimas constituit Ephesum, Miletum, Myunta, quae olim ab aqua est devorata, cuius sacra et suffragium Milesiis Iones attribuerunt, Prienen, Samum, Teon, Colophona, Chium, Erythras, Phocaeam, Clazomenas, Lebedon, Melien. istaec Melie propter civium adrogantiam ab is civitatibus bello indicto communi consilio est sublata, cuius loco postea regis Attali et Arsinoes beneficio Zmyrnaeorum civitas inter Ionas est recepta. hae civitates, cum Caras et Lelegas eiecissent, eam terrae regionem a duce suo Ione appellaverunt Ioniam ibique deorum inmortalium templa con- stituentes coeperunt fana aedificare, et primum Apollini Panionio aedem uti viderant in Achaia constituerunt et eam Doricam appellaverunt, quod in Dorieon 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 chanced to be of this order, in the precinct of Hera near Argos, a very 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, Klazomenai, 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 Dorians.

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

The story about Dorus building the first Doric temple does not fit into the evolutionary narrative that has been elaborated in the eighteenth and nineteenth centuries based on other passages in Vitruvius' text (although it must be stressed that Vitruvius' ideas were highly debated and contested already in the eighteenth century).[23] In Greek mythology, Dorus, son of Hellen, stands at the beginning of history, or almost so. He is the progenitor of the Dorians; as a grandson of Pyrrha and Deucalion "who first founded cities and reared temples to the immortal gods" (Apollonius Rhodius, *Argonautica* III 1087–1089), and as a great-grandson of Prometheus, he belonged to the third generation after the great deluge. According to the ancient periodization, Dorus lived in a primordial time of heroes, long before human "artificers" took the course of the arts into their hands.

Apparently, Vitruvius did not bother with the inconsistency of this passage with the genealogical account of the Doric. He evidently was much less concerned with the question of identifying a single, linear origin for the Doric than many modern interpreters of his work. However, Dorus' story contains a series of features that resonate with the sociohistorical interpretation of the Doric temple as put forward in this book, although it is set in a mythical past and not in the sixth century BC. Still, the story about Dorus and the first Doric temples somehow anticipates the modern, postcolonial, and sociohistorical, critique of the Doric architecture as a "natural," apolitical, and ultimately ahistorical, phenomenon.

To begin with, it is noteworthy that in this context Vitruvius explicitly refers to the "invention" (*inventio*) of the architectural orders (IV 2,1), thus emphasizing the creative and intentional nature of the process leading to the diffusion of the Doric. Further, in the quoted passage, Vitruvius writes that the temple Dorus built "happened to be of this (Doric) order" *(eius generis fortuito formae)*. The contingency (*fortuito* means "contingent, accidental") the text attributes to the form/order of the first Doric temple leaves the question of artistic determination open and makes it appear possible that the building's style was based on accidental impulses rather than on the imitation of nature and/or on constructive necessities. The invention and diffusion of the Doric order is then linked to a series of circumstances that are also the focus of this book, and have partly been explored also by scholars such as Barletta, Marconi, and Wilson Jones.

The ethnic/identarian nature of the Doric. Far from describing the Doric as an outcome of a gradual process based on universal principles of structural necessity and evolution, the story connects the invention of the order with the affirmation of the Dorian ethnic identity through its progenitor Dorus. Doric architecture is presented here as a means to express identity from the moment of its first emergence. At the same time, it is presented as an arbitrary and casual invention that is instrumentalized for political purposes.

Land occupation and colonization. The Dorians who occupy the Peloponnese use the Doric style as an expression of their hegemony and dominance. Subsequently, the Doric is deployed as an identity marker during the colonization of Asia Minor. What emerges here is the role colonization played – both in myth and history – in the formation of the world of the polis with its temples and sanctuaries – not only overseas, but also in homeland Greece. Such forms of "internal" colonialization in homeland Greece have often been overlooked in modern historiography, but have received increasing attention in the last decades, especially thanks to the work of Irad Malkin (1994).

The Doric as a man-made and artificial style. When referring to the colonial context of Asia Minor, Vitruvius uses the term *templa constituere*, "to establish/allot sacred precincts." This alludes to the man-made nature of sacred spaces in the colonies of Asia Minor. Furthermore, it is only in this colonial setting that the Doric is named: "there they set apart precincts for the immortal gods and began to build fanes: 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 Dorians." This sounds like a mythical rationale of the notion that the emergence of the Doric order was amplified by the colonial experience of the Greeks overseas. The Greeks developed the notion of a Dorian/Hellenic identity in response to the diaspora and in memory of "what they had seen in Achaia."

While none of this can, of course, be considered as a historical fact (Vitruvius' account clearly is not a first-hand, contemporary testimony), the Dorus story opens a different perspective on ancient Greek views of the standardization of architecture and the origins of the architectural orders.[24] The Greek source Vitruvius probably took the story from might reflect the vision of Greek travelers and colonists who in the sixth century BC explained the meaning of the Doric to themselves and to others. Judging from its literary structure, the Dorus-story appears to be older than the wood-to-stone genealogy. The wood-to-stone genealogy of the Doric order as reported by Vitruvius is likely to have been inspired by Aristotle and his school, especially with regard to the role of nature (*physis* in Greek) and the empirical method deployed by the author (from the observation of natural phenomena to the reconstruction of their origins).[25] The legend of Dorus, on the other hand, fits into a well-known pattern going back to the Archaic period of re-elaborating migration and colonial experience in mythical and semi-mythical accounts.[26] It is therefore likely to reflect the circumstances of the emergence of the Doric order more closely, although in an indirect manner. Just as the adventures of Odysseus in southern Italy and Sicily somehow reflected the experience of Greek seafarers in the pre- and early colonial periods, the story about Dorus and the spread of the Doric order can be read as a mythological transformation of the origins of the Doric order in a historical situation characterized by ethnic

conflicts and identity-building, social transformation, land occupation, and colonial expansion.[27]

While the Dorus story highlights the ethnic background of the Doric order, it also makes it clear that Doric architecture is not limited to ethnically Dorian peoples. The Athenians, for instance, did not consider themselves Dorians, but Ionians. Their claim to be the ancestors of the Ionian cities of Asia Minor was generally acknowledged by other Greeks. Yet Athens was among the first cities to adopt the Doric style. The adoption of the Doric order by non-Dorian tribes, as described in the story about Dorus and supported by archaeological evidence, invites us to think of the Doric order as a political statement rather than an ethnic tradition.

This brings us to another important point: If the Doric style is not considered a genuine expression of any national identity or "Hellenic spirit," it is less problematic to integrate stimuli from the Near East and Egypt into the history of its genesis.[28] In the Near East and Egypt, Greek travelers could see a broad range of monumental stone buildings that were covered with reliefs and architectural sculptures. The establishment of an emporium in Naukratis in the Western Nile delta under the leadership of the Ionian city of Miletus contributed to an intensification of contacts and exchange between Egypt and Greece.[29] Recent research has shown that the settlement was established as early as the late seventh century BC.[30] The port of Naukratis gave Greek traders access to the Egyptian market, but it also provided an opportunity to become acquainted with a totally different type of architecture. "People from Ionia stood amazed before the column halls of Egypt," so Gruben plausibly imagined: "Egypt encouraged building on a colossal scale."[31]

It is true that most of the cities that according to Herodotus (II 178–179) participated in the foundation of Naukratis were in Asia Minor, that is, in a region that did not actively contribute to the development and diffusion of the Doric order. However, among the cities mentioned by Herodotus are also Aegina and Rhodes, two places with an important tradition of Doric temple building. At any rate, more important than direct relations with single Greek cities was the general opening toward Egyptian art and culture triggered by the foundation of Naukratis. From Solon of Athens to Thales and to Pythagoras, travelling to Egypt meant gaining access to an ancient culture the Greeks contemplated with amazement and admiration. What they admired was, apart from the antiquity of Egyptian culture, the extraordinary stability and mathematical regularity applied to the arts, to the reckoning of time, and to the service of the gods.[32] For someone coming from the Greek world with its countless city-states, civil wars, social conflicts, and colonial adventures, this must have been rather novel and fascinating.

Besides merchants, Greek mercenaries in the service of foreign rulers were possible conduits of new approaches and ideas from Egypt and the Near East.[33]

Walter Burkert (1976) has argued that verses 381–385 in book IX of the *Iliad* – "Thebes of Egypt, where many treasures are stored in the houses; Thebes which is a city of a hundred gates, and through each 200 warriors with horses and chariots come forth" – were probably coined by a Greek soldier who participated in the looting of Thebes under the Assyrian king Assurbanipal in 663 BC. Alongside the booty from Thebes, descriptions of Egyptian temple reliefs, architectural sculptures, and hypostyle halls might have reached the Greek homeland.

The impact of Egyptian architecture on early Greek temple building finds a striking parallel in the first monumental stone sculptures introduced in Greece around 600 BC, which clearly were inspired by Egyptian models, as has long been observed; the *kouros* statues of the sixth century followed Egyptian models in style and typology, although a novelty of the Greek sculptures consisted in the nudity of the male figure.[34]

Scholars such as Martin L. West (1997) and Walter Burkert (2004) have long argued that Archaic Greek culture should be considered as part of a Near Eastern/Eastern Mediterranean *koine* rather than as a distinct and autonomous culture. While this has proven fruitful in widening our understanding of Greek myth, literature, art, technology and science, architecture – especially Doric architecture – has continued to be depicted as an essentially autochthonous development. This has historical roots that go back to the beginnings of Classical Archaeology and Art History.

The question of foreign, especially Egyptian, influence on Doric temple architecture was raised as early as the eighteenth century. At that time, European authors became aware that many Egyptian monuments were considerably older than Archaic and Classical Greek temples, although for ideological reasons few were ready to acknowledge that Egyptian architecture and art might have influenced early Greek builders and sculptors.[35] Thus, Johann Joachim Winckelmann asserted that the Doric temples of Paestum were probably "the oldest surviving architecture in the world *outside Egypt*."[36] He wondered whether Doric temples might have been influenced by Egyptian models.[37] In particular, he paused over the form of the doors of Doric buildings that according to Vitruvius were supposed to narrow toward the top (*De architectura* IV 6,1). A number of Doric buildings, some of them of an early date (e.g., the temple at Contrada Gaggera near Selinous), actually have such doors. Comparable doors are not common in ancient Egyptian architecture, though, but this Winckelmann did not know. Although his analogy was mistaken, Winckelmann raised a question that has been controversial ever since.[38] For there actually are ancient Egyptian buildings, such as the Mortuary temple of Queen Hatshepsut in Western Thebes, that could have served, if not as models, at least as sources of inspiration for Doric temples. Besides the fluted columns crowned by an abacus (but lacking the echinus) that

FIGURE 4. Deir–El–Bahari, Mortuary Temple of Hatshepsut, 18th Dynasty (photo: Wolfgang Filser, with permission).
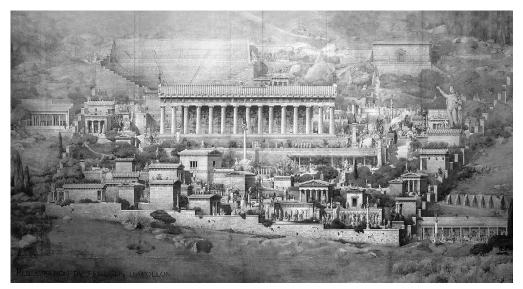

FIGURE 5. Reconstruction of the sanctuary of Apollo at Delphi by Albert Tournaire, 1894 (by permission of École nationale supérieure des Beaux-Arts, Paris).

recall Doric columns, it is the incorporation of a symmetrical architectural body into the landscape that represents a striking parallel (Figures 4 and 5).[39] As Erik Østby (2001) has emphasized, possible Egyptian influence on Doric architecture cannot be pinned down to specific ornaments and typological

patterns, although the columns of the Temple of Hatshepsut somehow adumbrate the shape of Doric columns. Rather, it is the general principles of Egyptian architecture that are likely to have inspired Greek architects of the period. The structure of colonnades and cornices, the importance of symmetry, rhythm, and repetition as architectural means of expression, and the prominence of sculptural and relief decoration as an integral part of monumental stone buildings – all this characterized Egyptian sacred architecture long before it appeared in Greece as typical features of the Doric and Ionic orders.

Yet, while drawing attention to what he believed were parallels between Egyptian and Doric buildings, Winckelmann also made an argument *against* foreign/Egyptian influence on Greek art and architecture. He based his argument on the same evolutionary approach that has shaped the discussion ever since in important ways. In his *History of Ancient Art* (*Geschichte der Kunst des Alterthums*, 1764), Winckelmann dismissed the possibility of Egyptian influence on Greek art on the grounds that certain primitive forms were the outcome of natural evolutionary processes that all peoples pass through. Just as a child forming a clay figurine unconsciously reenacts the early history of the arts so, Winckelmann believed, different peoples (*Volk* in German) in the earliest stages of history develop similar, "natural" solutions to certain aesthetic and functional problems related to sculpture, painting, and architecture.[40] The similarities between Egyptian and Greek works of art are therefore casual and do not reflect any contact or exchange between the two countries. The ideological bias of this argument is obvious: Just as for many of his successors, it would have been problematic for Winckelmann to accept that the origins of Greek art and architecture lay – even partly – outside Greece, especially in an African country like Egypt.[41] The rejection of the possibility of Near Eastern and Egyptian influences on Doric architecture was thus conditioned by ideological premises from the outset. To admit such influences would have meant jeopardizing the myth of Western art and architecture as authentically and uniquely Greek/European.

The evolutionary paradigm has shown extraordinary resilience – probably not least because of its ideological implications. Another reason for the success of evolutionary narratives is that architecture, unlike many other art forms, seems indispensable for any form of human life; thus, the idea that architecture develops naturally in a given human culture continues to be appealing. Therefore, the lasting impact of evolutionary models in ancient architectural history should not be underestimated: Classical Archaeology is far from done with architectural evolutionism. Although today probably few scholars in the field would back the old evolutionary theory based on Vitruvius' observations, it is striking that the ancient architectural orders, and the Doric in particular, are still implicitly presented as some kind of exceptional phenomenon. While this is rarely stated positively nowadays, it can be detected in the reluctance to

contextualize the architectural orders against the backdrop of ancient Greek social history and Mediterranean connectivity and in the reiteration of metaphysical readings based on the Eurocentric idea of an autonomous, "natural" (in the sense of unconditioned by social structures and cultural contacts) development. Marie-Christine Hellmann (2001), for instance, cites neither Vitruvius nor Winckelmann when she rejects Erik Østby's conclusions regarding possible Egyptian influences on Greek temple architecture. But she uses the same argumentation based on Vitruvius' wood-to-stone narrative that Winckelmann adopted, claiming that the monumental stone temples of the sixth century evolved from structural necessities (e.g., the *peristasis* derived from the necessity of protecting the walls against rain: Hellmann 2001: 740), and concluding that any analogy with Egyptian architecture is purely superficial and casual (Hellmann 2001: 738). Hellmann's review of Østby 2001 offers an example of how the evolutionary model minimizes technological and artistic transfer as well as social agency. Early Iron Age buildings in Greece are presented as evidence for an autochthonous, autonomous development of Greek temple building and as an argument against foreign influence. Yet, as Wilson Jones (2016) has observed, even if we accept the hypothesis that Early Iron Age wooden elements and constructive solutions lived on in the Doric order, this does not necessarily mean that foreign influence has to be ruled out. A case can be made for almost any of these explanatory models. This only becomes a problem if one origin model (evolutionary, foreign influence, invention) is adopted at the expense of all others.

How fruitful a multivalent approach can be, becomes clear if we contrast the discussion about early Doric architecture with other fields, for instance, Medieval Gothic architecture. Many questions discussed with regard to the origin and diffusion of Doric architecture actually are comparable to those discussed with regard to the emergence of the Gothic style. Like the Doric, the Gothic style emerged roughly simultaneously in a large, politically and geographically diverse area. However, the study of Gothic architecture has long taken a direction that scholars interested in early Doric architecture have explored only more recently. Although the Gothic style can partly be explained through the evolution of earlier, Romanesque, forms, a broad set of sources on the design, perception, and meaning of early Gothic architecture has prompted scholars to view it as an innovation triggered by technological, economic, social, and theological shifts rather than as a mere result of art-immanent evolutionary processes. As early as 1956 – six years after William Dinsmoor published the revised edition of his influential *Architecture of Ancient Greece*, in which he endorsed the wood-to-stone genealogy of the Doric order based on Vitruvius[42] – the art historian Otto von Simson ascribed the origins of the Gothic cathedral to a new worldview and a changing social environment, arguing that "[t]he Gothic cathedral originated in the religious experience, the

metaphysical speculation, in the political and even the physical realities, of twelfth-century France, and in the genius of those who created it."[43]

A text with the title *The Origin of the Work of Art* by Martin Heidegger, written in the 1930s and published for the first time in 1960, shows that while scholars like Arnold Hauser and Otto von Simson began to explore the entanglement of art, architecture, and social structures, the Doric temple continued to serve as a paradigm for a genre of architecture that was viewed as standing outside the sociopolitical context of the historical period in which it originated. While rarely quoted by scholars of ancient Greek architecture, Heidegger's text illustrates the far-reaching impact – also beyond the field of Classical Archaeology – of a scholarly tradition aimed at naturalizing architectural development, and Doric architecture in particular.[44] The text therefore can help us understand why new sociohistorical approaches emerging after World War II have only more recently been applied to the study of Doric architecture. Heidegger's text also highlights some of the paradoxical aspects of an approach that blanks out the social divisions and hierarchies embodied in architecture. It is important because it associates the Doric with the fulfilment of Progress (or at least Enlightenment), as the climax of the expression of the human spirit, and because Heidegger understands this allegorically as a premonition of the German *Geist* and *Volk*. Of course, this kind of teleological thinking can be dismissed as pure racist exceptionalism having nothing to do with historical inquiry. Yet, it is worth a mention here, because it highlights very eloquently why a materialist (even neo-Marxist) account of Doric architecture has started to emerge only recently.

To begin with, while by Heidegger's time excavations in Greece and Italy had revealed the central role of architectural sculpture in the history of the Doric (an aspect we are also concerned with in this book), Heidegger notably refused to imagine Greek temples as covered with sculptures and paintings: "A building, a Greek temple, is not an image of anything/does not represent anything" (*ein Bauwerk, ein griechischer Tempel, bildet nichts ab*). In this context, Heidegger mentions the "temple of Paestum," although the building that inspired him more than any other to reflect on the Greek temple as a work of art was apparently the Temple of Apollo at Bassae, which he visited during a trip to Greece.[45] He omits to mention the metopes from Foce del Sele near Paestum (discovered in the 1930s and known to a wider audience only since the 1950s) or the frieze showing an Amazonomachy that decorated the cella of the Bassae temple.[46] Further, when Heidegger speaks about the temple "encasing the figure of the god" (... *umschließt die Gestalt des Gottes*), and "projecting it (the figure of the god) into the sacred precinct through the open colonnade" (*und läßt sie ... durch die offene Säulenhalle hinausstehen in den heiligen Bezirk*), it remains unclear whether he is referring to the statue or to the god himself. Heidegger plays here with an ambivalence between divinity and

image that can be traced back to the Homeric poems.[47] The only image mentioned in the passage on the Greek temple in *The Origin of the Work of Art* – the "statue of the god that the winner in the contest dedicates to him" – is *not* an image in the sense of representation (*Abbild*), as Heidegger underscores. Instead, it is "a work of art that lets the god himself be present and thus *is* the god himself" (*ein Werk, das den Gott selbst anwesen läßt und so der Gott selbst* ist).[48]

As becomes clear in the text, it is this kind of aniconism that allows Heidegger to place the origin of the temple in a natural landscape and to imagine it as an autonomous expression of the land and of the divinities inhabiting it:

> Through the temple, the god is present in the temple. This presence of the god is, in itself, the extension and delimitation of the precinct as something holy. ... Standing there, the building rests on the rocky ground. This resting of the work draws out of the rock the darkness of its unstructured yet unforced support. Standing there, the building holds its place against the storm raging above it and so first makes the storm visible in its violence. The gleam and luster of the stone, though apparently there only by the grace of the sun, in fact first brings forth the light of the day, the breadth of the sky, the darkness of the night. The temple's firm towering makes visible the invisible space of the air. The steadfastness of the work stands out against the surge of the tide and, in its own repose, brings out the raging of the surf. Tree, grass, eagle and bull, snake and cricket first enter their distinctive shapes and thus come to appearance as what they are.[49]
>
> (trans. Young and Haynes 2002)

The image as representation (*Abbild*) would interrupt the continuity between land and architecture that is central to Heidegger's reading of the Greek temple. The unmediated presence, the fullness of the *être chez soi* (Jacques Derrida),[50] risks falling apart once representation comes into play and creates a difference between being there and being represented. Thus, screening out architectural sculpture can be seen as part of a vision that conceives the origin of the temple in an autonomous, continuous process that is largely detached from social interests and artistic choices. Accordingly, Heidegger refers to the human community living around the temple as "the people" (*Volk*),[51] a term evoking an ethnically ("naturally") defined community that is not divided into powerful and subaltern, into patrons, architects, workmen, and visitors to the temple. Since Heidegger's temple is free of images/representations, it is also free of difference, violence, subordination, and exclusion. Greek temple architecture thus is located outside historical time. The Greek architects and aristocrats who built the first Doric temples in the sixth century did not invent it; they just gave a universally recognizable architectural form to an already

existing relationship between the divine, the land, and the people. By naturalizing and dehistoricizing the Doric temple and by detaching it from social and political representation, Heidegger's text reiterates the narration of Western/classical culture as world culture, a notion also reflected in the UNESCO World Heritage symbol showing a stylized Greek temple.

Archaeologists tend to consider readings of ancient architecture such as the one by Heidegger as irrelevant to the discipline. This is understandable, given that Heidegger's analysis offers no positive insight into ancient architecture that could be integrated meaningfully into the academic discourse. Yet, I believe that the cited passage has the potential of enhancing our understanding of ancient Doric architecture and of the way it found its way into the macro-narratives of European historiography. Firstly, it partly explains why the social and political context of early Doric architecture and its relation with architectural sculpture have received less attention than similar phenomena in other fields, such as Gothic or Renaissance art and architecture. The Doric temple as a paradigm of architectural evolution precludes itself from sociohistorical analysis.[52] Secondly, precisely because the Doric has been raised to a paradigm of evolutionism also outside the field of Classical Archaeology, questioning the evolutionary paradigm is an opportunity for archaeologists and art historians to re-engage in a dialogue with other fields and contribute to a postcolonial critique of naturalizing and dehistoricizing representations of Western/classical/Greek culture. Contributions like Heidegger's *Origin of the Work of Art* can be cast aside as unqualified and speculative ideas; however, they also can be viewed as an invitation to think about the way in which the study of ancient art and architecture relates to broader historiographical and ideological frameworks – a point we return to in the final chapter of this book.

METHODOLOGY AND THEORETICAL FRAMEWORK

If we can learn anything from Vitruvius, it is that we may need to integrate different explanations of the origins of the Doric order, rather than pursue one exclusive genealogy. Exploring the semantics and social context of the Doric order does not mean discarding allusions to older wooden buildings, nor ruling out Egyptian or Near Eastern influences, as many nineteenth- and twentieth-century authors seem to have believed. Instead, it means putting into perspective models that pretend to explain architectural change solely through looking at art-immanent processes.

However, advancing a multivalent, sociohistorically informed explanatory model, as advocated here based on recent scholarship,[53] poses new challenges at the methodological level. In nineteenth-century archaeology, the search for the one lineage, the one original behind all copies, replicas, and imitations, fostered the rise of the typologically organized catalogue as the methodological

paradigm of archaeological inquiry.[54] Doubtlessly, systematic overviews and catalogues are of fundamental importance for the understanding of ancient architectural development.[55] Yet, if we want to explore the social, economic, and cultural factors leading to the diffusion of aesthetic phenomena such as the Doric order, it is necessary to integrate broad overviews with bottom-up studies and close readings of local contexts.

Imagining the evolution of the Doric as a natural and self-fulfilling process has led to local perspectives being systematically screened out. The genesis of the Doric order out of primitive building techniques as hypothesized by eighteenth- and nineteenth-century architects and theorists such as William Chambers (*A Treatise on Civil Architecture* (1768), see especially pl. 1, "The Primitive Buildings", with the Doric order as the final stage) could have taken place anywhere and at any time. Ultimately, if architectural innovation is reduced to the fulfillment of constructive, art-immanent principles, the socio-historical context and the local environment of innovative buildings (like Doric temples) become interchangeable. As I argue in this book, however, the transcendence of local contexts and traditions really was part of a strategy deployed by ancient Greek sponsors and architects. The builders of early Doric temples deliberately created a type of building capable of rising above social divisions and local environments subject to urbanization, colonization, and land reclamation. But that does not mean that we as modern interpreters should take this artistic strategy at face value and also abstract from local contexts of early Doric buildings: this would be to mistake culturally codified aesthetics for authentic historical genealogies. Doric architecture plays with its own genealogy by creatively simulating the derivation of certain stone elements such as mutuli, triglyphs and metopes from wooden prototypes; making such playful and creative references the basis for a critical historical narrative of the origins of the Doric would be like taking a game seriously. Even someone like Gruben, who essentially followed the evolutionary approach, was skeptical about the attempts of writers like Heinrich Richard (1970) to explain every single detail of the Doric order through an evolutionary transformation from wood to stone, commenting that Richard's work would be *erheiternd* (exhilarating) – "if it were not for its misleading claim of being a scientific contribution."[56]

During the last decades, there has been a return to spatial analysis in the humanities. The emerging field of "geocriticism" (Westphal 2011) offers stimuli to reflect on architectural change from new perspectives. As a methodological paradigm developed in the field of literary studies, geocriticism describes a shift from author to place; on the level of architectural history, this can be seen as an encouragement to take the urban or rural landscape in which a building is set more seriously and to put into perspective interpretations focusing entirely on genre, typology, and author-based classification.

Against this backdrop, recontextualizing Doric temples by looking at the places and landscapes in which they were located can contribute to re-historizing architectural development in Archaic Greece. By analyzing the multiple ways in which Doric temples were related to local cultural, ritual, social, agricultural, and economic landscapes, we can widen our historical understanding of the meaning and function of this type of architecture in its early stages.

In this study, I would like to look particularly at two colonial sites: Poseidonia/Paestum and Selinous, and to compare them with other sites that have yielded early evidence of Doric buildings, especially Korkyra and Delphi (see Figure 2).

This is not because these sites have yielded evidence of particularly early temples, let alone *the* earliest Doric temple (if this notion makes sense), although the buildings we will be looking at all belong to the early periods of the Doric style, dating roughly from 580 to 530 BC. Nor are the buildings discussed here necessarily the most impressive and important ones: there are possibly earlier (though partly doubtful) Doric temples, such as the Heraion of Olympia, and more monumental ones, such as the Apollo temples of Corinth and Syracuse. However, the case studies we will look at in the following chapters, especially the Hera I temple at Foce del Sele near Poseidonia, are particularly useful in shedding light on the social and cultural context in which the Doric order spread for two reasons. One is the possibility to study the relation between architecture and urban and rural landscapes characterized by colonization, migration and urbanization; the other is that these sites have yielded significant evidence of sculptural decoration.

Let me briefly explain this. In *The Origins of Greek Architectural Orders* (2001), based on a thorough analysis of the available archaeological evidence, Barbara Barletta has convincingly concluded that the adoption of the Doric architectural order cannot be dated securely to before 580/570 BC. Apart from suggesting a different framework for discussing the origins of the Doric order, the low chronology advocated by Barletta opens up new perspectives on early examples of Doric architecture in the colonies of southern Italy and Sicily. Attempts to trace the Doric order back to Early Iron Age archetypes tended to leave the colonies out of the picture. The colonies of southern Italy and Sicily were founded from the second half of the eighth century BC onward, that is, after the period in which some of the alleged prototypes (e.g., Lefkandi) of later Doric temples were erected. What is more, most of the buildings that have played a central role in the discussion on the origins of the Doric (though not all of them are "Doric" according to Barletta's criteria) are situated in mainland Greece (e.g., Temple C I at Thermon, the Archaic temple of Mycenae, Temple B I at Kalydon, Apollo temples I and II at Aegina, Athena Pronaia temple I at Delphi, the so-called Hekatompedon on the

acropolis of Athens). On these grounds, scholars who embraced the high chronology of the Doric order tended to believe that the colonies essentially took over models that had already been established in the Greek homeland.[57]

However, if we abandon this perspective and focus on the multifaceted social and cultural factors that triggered the diffusion of the Doric order in a large area reaching from Athens to Selinous in the first half/middle of the sixth century, the colonies appear in a different light. In the last few years, actually it has become increasingly clear that colonial communities played a crucial role in the formation and diffusion of the Doric order. Wherever and whenever the Doric order was first adopted, it immediately had an enormous success, especially in the colonies, and arguably also thanks to the colonies. In order to understand this part of the story, it is important to look at how Doric architecture was used and perceived in colonial contexts. What was the role of Doric architecture at the level of political discourse and identity building in these communities?[58]

As has been suggested, the success of the Doric order in southern Italy and Sicily stemmed from a desire to share cultural codes and styles on the part of Greek colonists living far from their homelands in the Western diaspora.[59] The more the Greeks saw their culture being exposed to dispersion and hybridization, the more the desire of codifying Greekness through art, literature, and architecture grew. The ancient saying that a Greek man should be "grateful to fate for three reasons: first because he was born a human and not an animal, second, a man and not a woman, third a Greek and not a Barbarian" (ἔφασκε γάρ, φασί, τριῶν τούτων ἕνεκα χάριν ἔχειν τῇ Τύχῃ: πρῶτον μὲν ὅτι ἄνθρωπος ἐγενόμην καὶ οὐ θηρίον, εἶτα ὅτι ἀνὴρ καὶ οὐ γυνή, τρίτον ὅτι Ἕλλην καὶ οὐ βάρβαρος), allegedly coined by Thales of Miletus in the first half of the sixth century BC,[60] perhaps captures the mentality of a time in which (male) Greek identity began being perceived in terms of opposition and superiority. In a world of islands and "micro-regions" along the mountainous coasts of the Mediterranean Sea, emphasizing ethnic belonging was a means to bridge the distances between Greek settlements in the West and virtually unite them in a "small Greek world," as Irad Malkin (2011) has called it.[61]

Poseidonia and Selinous are particularly interesting in this regard, as the two cities were founded shortly before the period in which the Doric order first emerged (Selinous in 628 BC according to Thucydides, Poseidonia around 600 BC according to the archaeological evidence). The two sites, which have yielded a broad variety of data both from the urban center and the countryside, therefore offer an opportunity to study Doric temple buildings in the context of newly established colonial settlements. The temples built here were part of complex urban and rural landscapes that were structured according to the political and social visions shared by the colonists.[62] The overall structure and

development of these settlements thus may shed light on the role and meaning of sanctuaries in their broader historical context.

The second reason why Poseidonia and Selinous provide particularly useful case studies in the context of this book is the fact that both sites have yielded significant evidence of sculptural decoration on some of the earliest Doric stone temples known in Western Greece and beyond. The same holds true for Korkyra and Delphi, which will also be discussed at some length in this book.

The revised chronology of the Doric order and the adoption of the multi-valent approach advocated in some recent contributions invite us to reassess the role sculptural decoration played in the formation and diffusion of the Doric. If the Doric order was a novel phenomenon emerging in the first half of the sixth century, this means that it evolved simultaneously with architectural and freestanding stone sculpture – genres that had disappeared from the Greek world several centuries before to reappear only around 600 BC. Among the contexts in which stone sculpture first appeared were the friezes and pediments of early Doric temples. Many, though not all, early Doric buildings had decorated metopes and/or pediments (see Table 1).

Table 1 includes only buildings that are particularly well preserved. If we take into account other Archaic Doric temples (based on the catalogue in Lippolis, Livadiotti, and Rocco 2007), it turns out that for 47 out of 86 buildings there is evidence of figural decoration. The remaining 39 buildings, however, are often too poorly preserved to rule out the presence of reliefs and sculptures.

Considering the evidence discussed above, it appears possible that a major function of metopes and pediments, and arguably the Doric temple as a whole, was originally to provide an architectural frame for painted and sculptured images. This may not sound convincing from an evolutionist standpoint, since evolutionary models tend to establish a hierarchy between (necessary) functional elements and (unnecessary and secondary) embellishments such as ornaments, architectural sculptures, and so forth, an argument found, for instance, in Brunilde Sismondo Ridgway's (1999: 1) contention that: "There is to any building an underlying sense of function, whatever that function may be, that makes its construction necessary, for whatever reasons, at a specific moment in time. The same cannot be said for architectural sculpture. A building can exist, and be perfectly and totally functional, without external embellishment of any sort, let alone sculpture."

However, recent developments in the study of architecture and art history invite us to reconsider the traditional division between architecture and the visual arts, which was much less felt in pre-modern societies.[63] As Christy Anderson has pointed out in the introduction to the 2002 edited volume *The Built Surface*, "exchanges between architecture and pictures" can be seen as "ideologically potent, and therefore significantly expressive of their respective social and political histories."[64]

TABLE I *Early Doric temples and sculptural decoration*

	Pediment	Metopes
Olympia, Hera temple	Fragments of human figures and winged animals	Not known
Kalapodi, South temple (Temple 7)	?	Existence of frieze uncertain
Korkyra, Artemis temple	Medusa, Pegasus, Chrysaor, felines, Gigantomachia or Titanomachia	Decorated, but poorly preserved
Corinth, Apollo temple II	Not known	Not known
Aegina, Apollo temple I	Not known	Not known
Aegina, Old Aphaia temple	Plain	Plain
Delphi, Old Tholos	Plain	Plain
Delphi, so-called Monopteros of the Sikyonians	Not known	Argonauts, Dioscuri, Europa, boar
Philikorphi, Artemis temple	Acroterion with Gorgon	
Sparta, Temple of Artemis Orthia	Lions	Not known
Athens, Hekatompedon on the acropolis	Animal fights, Heracles and Triton, snakes and triple-bodied figure	Decorated? Divinity on chariot with four horses? (connection of metopes with temple questioned by Santi Sioumpara 2016)
Syracuse, Apollo temple	Gorgoneion, statue of horseman on ridge	Not known
Selinous, Temple Y	Not known	Europa, Sphinx, divinities
Selinous, Temple C	Medusa	Perseus, Heracles, divinities
Selinous, Temple M	Plain	–
Poseidonia, Hera I temple at Foce del Sele	Not known	Various episodes of Greek myth
Poseidonia, so-called Basilica	Perhaps sculptured (Buccino 2010)	Sculptured metopes, as inferred from imprints (Mertens 1993)

If metopes and triglyphs did not originate in any constructive necessity, as appears likely, the question of what prompted their inclusion in the Doric order arises. Considering that many of the recognizable metopes belonging to clearly identified early Doric buildings were carved and that those that were plain might have been painted, the hypothesis that metopes were originally conceived as image carriers appears not implausible. Wilson Jones (2002) has argued that triglyphs also had a pictorial, or symbolic, function, emphasizing that their form recalled a tripod, an "aristocratic gift with heroic overtones."[65] This is not to say that triglyphs originated in, or were directly derived from, tripods (this would be a return to linear and univalent explanation models).

Rather, it means exploring the multifaceted semantics and structural analogies between architecture, art, and ritual.

From such a perspective, it is not surprising that metopes and triglyphs were first deployed in the field of decorative arts, from whence they were eventually introduced into architecture.[66] Painted vases of the Geometric and Orientalizing periods (ninth to seventh centuries BC) show the same pattern of panels/metopes separated by vertical lines as Doric friezes. From an evolutionary standpoint, this has been explained either as a reflection of early Doric buildings of which no evidence remains, or as an expression of alleged tectonic principles shared by Greek artisans even before the emergence of the Doric order.[67] According to this view, both the metope-friezes on Geometric and Orientalizing vases and the Doric friezes on sixth-century temples and shrines originated in the "structural-tectonic vision" and "will to clarity" that allegedly characterized Greek thought and craftsmanship.[68] Just as plants and mussels grow according to natural processes leading to the development of similar forms in different species, the alleged predisposition of the Greeks toward "tectonic" thinking is supposed to have led to the adoption of similar patterns in different genres of art and architecture. In the light of more recent hypotheses about the origins of the Doric order mentioned before, it is likely that things were much simpler. A decorative pattern consisting of alternating metopes and triglyphs was used by painters and metalworkers (maybe also by textile workers) as early as the Early Iron Age; around the late seventh/early sixth century, the pattern was adopted in sacred architecture, where it became a main feature of the Doric order.

Such a purely decorative explanation of the metope-triglyph-frieze is not contradicted by the correct etymology of the term "metope," which is not the one Vitruvius provided (IV 2,4). He claimed that the term referred to that what is "in-between" (*meta*) the "beds for the roof timbers" (*opai*). Vitruvius probably based this view on what he or his Hellenistic sources deduced by looking at Doric buildings of their own time without having any direct knowledge of the situation in the seventh and sixth centuries BC.[69] It is now commonly assumed that "metope" originally referred to a "window, prospect, view in between." Therefore, the term, which is first attested in Delphi in the fourth century BC in the form *methopion* (SEG 246 II 67), could be applied both to painted or woven decoration patterns and to the Doric frieze. At any rate, the etymology of the word "metope" points to visual effects rather than to structural elements; metopes are something "to be looked at."[70]

If we accept the idea that there is a semantic dimension to the Doric order and that this reflected social and political values of the period in which it was created, the sculptural decoration of early Doric temples could help shed light on this process. For it is likely that figure-carved metopes and pediments were selected and designed according to the same underlying ideas and ideological structures that shaped the entire architectural order of which the images were a part.[71]

On these grounds, I am going to analyze the sculptural decoration of early Doric temples from two viewpoints. First, what relationship (functional, aesthetic, ritual) existed between early Doric buildings and their sculptural decoration? How were images and architecture combined, technically and aesthetically? Second, what relationship existed between the images and the broader context – the sanctuary, but also the landscape surrounding it and the community who attended it?

Addressing these questions has the potential to enhance our understanding of how the Doric temple as a whole related to its religious, social, and physical environment. Although the questions just mentioned do not pertain to the debate on the origins of the Doric order in the strict sense, I believe that they may help revise the terms in which that debate is conducted. Evolutionary models have a tendency to monopolize meaning by reducing it to the (alleged or true) genesis of a given phenomenon. Thus, not only are triglyphs believed to derive from plaquettes covering the ends of roof beams, but this alleged original function is also used as an argument against other explanations: as triglyphs derive from wooden plaquettes, they cannot represent tripods, nor be inspired by foreign models, and so forth.[72] By shifting the focus on the multiple layers of meaning that Doric friezes and pediments had as art works, the evolutionary model can be placed within a broader, multivalent framework. The possibility that single elements of the Doric order had forerunners in wood or terracotta does not exclude the possibility that they carried other meanings.[73] To use a metaphor from the field of linguistics, we may agree or not on the correct etymology (= evolutionary genesis) of a given term, but etymology covers only a small part of the meaning that that term has in any specific context in which it is applied. Another example is the Gothic cathedral, which functionally can be described as a building for religious gatherings; typologically, its origins can be traced back through Romanesque architecture to Late Roman basilicas. However, this genealogy says little about the multiple theological, scientific, cultural, and social meanings that Gothic cathedrals embodied and represented.

If we intend to analyze Doric temples with regard to their meaning and function in the context of ancient Greek society, economy, and culture, what is needed on the level of methodology is some sort of hermeneutics we can use to interpret Doric architecture beyond genealogical and functional lineages. The methodological framework deployed in this study is inspired by adoptions of philosophical hermeneutics in the fields of archaeology and architectural history.[74] In particular, I have mined contributions emphasizing the role of movement and "Being-in-the-world" for the process of understanding and interpreting literature, art, and architecture. Theorists of hermeneutics like Hans-Georg Gadamer have stressed the dynamic nature of understanding, arguing that by approaching the whole through its parts we necessarily make

assumptions and forecasts that later might be modified or cast aside.[75] We are "moving through the hermeneutic circle" (or spiral, as Paul Ricœur puts it); meaning reveals itself through movement. There is no objective representation of the whole that can be seized in a single view or moment. As for architecture, movement is quite concretely the form in which buildings are normally perceived and understood. This point was famously made by the Soviet film director Sergei Eisenstein when he described a walk around the acropolis of Athens as "the perfect example of one of the most ancient films."[76] By walking among the buildings of the Athenian acropolis, Eisenstein says, we create "a montage sequence for an architectural ensemble."

Giuliana Bruno (2003), elaborating on Eisenstein's text in her analysis of the relationship between architecture, movement, and cinema, emphasizes that it is by moving through architecture that we construct architectural meaning, and that therefore in a way "architecture is filmic." She continues: "This is a genealogical hypothesis, of course, for film had not yet been invented at the time of the construction of the Acropolis. The cinematic itinerary, analogous to the montage of the architectural ensemble, was a trace left by the future. The layout of an ancient site foreshadowed the work of the cinema, constructing a filmic path."[77]

Taking Bruno's "kinetic" approach to architecture as a starting point, we can conceive of the interpretation of ancient Doric temples as a kind of movement starting in the temple and moving through the sanctuary and through the settlements and fields surrounding it, and further toward the mountains towering in the distance.[78] All this is part of the lifeworld of ancient temples and architectural sculptures and therefore has the potential to shed light on their meaning. Bruno's work can be read as an invitation to explore the sociocultural meaning of architecture by integrating traditional, static forms of representation (ground plans, reconstruction drawings of buildings) and dynamic representations that move beyond the fixed physical limits of a building. The goal is to understand architecture through social practices, rather than limiting its meaning to alleged genealogies or tectonic necessities:

> A dynamic conception of architecture, which overcomes the traditional notion of building as a still, tectonic construct, allows us to think of space as practice. This involves incorporating the inhabitant of the space (or its intruder) into architecture, not simply marking and reproducing but reinventing, as film does, his or her various trajectories through space – that is, charting the narrative these navigations create. Architectural frames, like filmic frames, are transformed by an open relation of movement to events. Rather than being vectors or directional arrows, these movements are mobilized territories, mappings of practiced places.
>
> (Bruno 2003: 57)

In the last two or three decades, digital technologies have further contributed to the rise of dynamic conceptions of architecture. Elaborating on the possibilities offered by digital and 3D modelling, the editors of the volume *New Directions and Paradigms for the Study of Greek Architecture* (2020), Philip Sapirstein and David Scahill, have pointed out:

> While we understand the built environment by means of two and three-dimensional representations, we may now consider the fourth dimension of time – the movement through space that recreated environment – and the spatial realities of the built environment in new and exciting ways. Since we see and experience the world in three dimensions, we are compelled to think about not just the static presence of a building, but also its broader life history, from inception and design to construction, use, reuse, reception, destruction, and – in many cases – reconstruction(s).
>
> (Sapirstein and Scahill 2020: x)

Digital and 3D models are viewed here as a way to recreate ancient environments and explore the experience people had by moving through them. In my view, though, it is not digital models as such that have improved our understanding of ancient built environments. Most attempts at recreating ancient sanctuaries and urban landscapes in virtual reality are clumsy at best, and often actually misleading. The smoothness of surfaces and materials suggested by such visions, their videogame-like aesthetic, and the way users float through virtual spaces, arguably increase the distance separating us from the ancient experience rather than helping to bridge it. Yet, it should be acknowledged that the very possibility of representing past landscapes in virtual reality has stimulated a debate that has shown the limits of traditional, static modes of representation. In the field of landscape archaeology, Geographic Information Systems (GIS) have also substantially improved our understanding of spatial experience in ancient societies. The possibilities offered by new technologies can be combined with literary sources shedding light on the way in which sacred architecture was experienced, for example, during processions, and on ideas and values associated with architecturally defined spaces.[79]

As Clemente Marconi (2004: 224) has stressed, studying Greek sanctuaries and temples without exploring the perspective of those who used them is indeed pointless. Textual sources are essential in this. As Marconi emphasizes in this context, "for the Greeks, the same term, *theoria*, meant both going to a sanctuary and beholding." This suggests that religious, visual, and architectural/spatial experience were part of a complex reality, and that it makes little sense to approach ancient architecture as something detached from social practice.

Following a similar approach, Mary Emerson (2018) has drawn attention to ancient sources shedding light on the "kinetic" perception of sacred

architecture, describing "the ancient experience of visiting sanctuaries as spectacles."[80] Based on an analysis of verses 184–235 of Euripides' play *Ion*, where a chorus of slave women from Athens are walking through the sanctuary of Apollo at Delphi while looking at, and commenting on, metopes and sculptures set up in the sacred precinct, Emerson highlights the act of seeing and of reconnecting the seen with real or virtual landscapes for the experience of ancient sacred architecture:

> We can imagine the visitors at, for example, Foce Sele going all around the temples, taking in each individual scene and giving it some thought – or maybe linking the topics, once identified, with their own place of origin, or with moral issues, or possibly just with a pleasurable complacency at the presence, in some form, of the powerful goddess they worship.[81]

Through the movement of priestesses and priests, temple slaves, visitors, animals and objects, the physical, mythological, economic, and cultural landscapes outside of the sanctuary were constantly reconnected with the temple. Thus, for instance, before the entrance of the women in Euripides' play, the temple slave (and clandestine son of Apollo) Ion mentions a laurel bough he has broken at a sacred well outside the sanctuary to "sweep the pavement of the god all day" (vv. 112–124). Further, a rather long passage of Ion's introductory monologue (vv. 152–181) is dedicated to the birds of Mount Parnassus that threaten to pollute the temple and "place a straw-built nest under its cornice."

The way in which the text refers to the landscape outside the sacred precinct is an example of the manifold and mutable relations between temple and environment. In the second century AD, Pausanias was told at Delphi that "the most ancient Temple of Apollo was made of laurel, the branches of which were brought from the laurel in Tempe. This temple must have had the form of a hut. The Delphians say that the second temple was made by bees from bees-wax and feathers, and that it was sent to the Hyperboreans by Apollo" (*Description of Greece* X 5,9). In the course of time, the temple was enlarged and embellished, culminating in the Late Archaic Doric temple that could be seen in the late fifth century BC, when Euripides wrote his *Ion*. The laurel branches of which the oldest temple was made were now used to sweep the pavement. And while bees built the second temple, the monumental Late Archaic building needed to be protected from the birds of Mount Parnassus.

This mythopoetic narrative is reflected on the level of archaeology by the changing modes in which the sanctuary is embedded in the landscape. While in its earliest period it lacked a physical boundary that separated it from the land around it, in later periods it appeared more and more like an autonomous, enclosed, foreign body in the landscape (Figure 5). Arguably, the changing

architectural appearance of the temple was connected with the changing ways in which the sanctuary related to the environment from the eighth to the fifth century BC through architectural features and ritual practices.

The following chapters are an attempt to explore the environmental, religious, and social landscapes in which the first Doric temples stood by moving from the analysis of architecture and architectural sculptures to sanctuaries, rituals, and urban and rural landscapes in Archaic Greece. Apart from archaeological evidence from ancient sanctuaries, I make use of excavation and field survey data as well as various kinds of written sources (inscriptions, poetry, historical sources). I do not pretend that this approach will reveal *the* origin of the Doric order. Rather, by studying the physical and social environment of the earliest period of Doric temple building, I hope to contribute to improving our understanding of the factors that led to the stunningly wide and rapid diffusion of the new architectural style known as the Doric.

CHRONOLOGY AND THE QUESTION OF ORIGINS

Before we start, however, a few words on chronology are needed. Chronology is often considered an exact science. But the problem of dating early Doric temples presents itself differently depending on whether one adopts an evolutionary or a diffusionist viewpoint. From an evolutionary viewpoint, identifying the first Doric temple is secondary. As any given building is seen as standing in an evolutionary line that can be traced further back, there are no breaks, but only the steady development of already extant forms. At the same time, evolutionary frameworks provide a grid for dating. The assumption that architecture develops according to certain art-immanent rules, for instance, from wood/terracotta to stone or from flat to straight capitals, allows for the formulation of hypotheses about the dating of buildings based on their position in an alleged line of development.

By contrast, from a non-evolutionary, diffusionist viewpoint, it would be highly significant to know where and under what circumstances the first Doric temple was built, for this might shed light on the political and cultural factors triggering the invention and diffusion of the Doric order. At the same time, however, the diffusionist model lacks the tight chronological grid provided by evolutionary approaches. As the emergence of a new architectural style is not placed on a continuous line of development, but ascribed to social and political decisions that tend to disturb and mark a departure from what went before, typological and stylistic change appears less strictly connected with diachrony, and more contingent and circumstantial.

This is mirrored in Vitruvius' alternative accounts of the genesis of the Doric order, insofar as the evolutionist transformation of wooden elements into triglyphs and metopes is ascribed to anonymous "artificers of old," while the

politically motivated diffusion of the order in the Dorus story is traced back to a precise place (Argos) and moment (the reign of Dorus).

Barletta's work (2001) in particular has highlighted what consequences the abandonment of an evolutionary approach has for dating. Apart from lowering the absolute chronology of the emergence of the Doric order to around 580 BC, Barletta has posed a series of questions regarding relative chronology. As it turns out, establishing the precise chronological relation between early Doric buildings is difficult if we take into account non-art-immanent factors such as artisanal networks, ritual and cultural semantics, and ideological and economic factors. Therefore, scholars embracing a non-evolutionary approach have been more cautious with regard to dating Doric architecture on stylistic grounds.

However, stylistic comparison is often the only way to establish a date, as several early Doric buildings, such as the Monopteros of the Sikyonians in Delphi or Temple Y in Selinous, are known only through reused building materials like metopes, capitals, and column drums. Other early Doric temples, such as the Heraion of Olympia or the Artemis temple in Korkyra, were excavated at a time when fieldwork methods were much less refined than they are today; as a result, a considerable amount of stratigraphic data that could have shed light on the chronology of these buildings has been lost. Still other buildings, such as the Apollo temple at Syracuse or the so-called Poseidon temple in Tarentum, have a highly complex history, as they were transformed into churches or habitations in the Middle Ages, which is why their original context and dating is extremely difficult to reconstruct. Another problem arises from the fact that the construction of a temple could take several decades. In some cases (Paestum, "Basilica"; Selinous, Temple C) this can be deduced from stylistic differences within the building, for instance, between the columns and the roof decoration or architectural sculpture.[82] Recent excavations of the foundation layers of the so-called Neptune temple in Paestum, which is usually dated to around 460 BC on stylistic grounds, have shown that the building was begun in the Late Archaic period and that it probably was redesigned or even partly dismantled and rebuilt during the construction process.[83]

This book focusses on early Doric buildings in order to contextualize and explain the diffusion of the Doric order from the early to the mid sixth century BC; however, it is not an attempt to trace the diffusion of the Doric order on the ground by defining relations and dependencies between single buildings or regions. Considering the available evidence, it would be problematic to draw a pedigree of early Doric temples based on their chronological relation, let alone to identify the "first" Doric temple. Judging from stylistic and technical details, it appears likely, for instance, that the Artemis temple in Korkyra was built before Temple Y in Selinous; still, it is difficult to assess how much time passed between the construction of the two buildings and how technical and artistic know-how was transmitted from one place to the other.

Yet, the problem of origins stems not only from difficulties in dating. One may ask if it is reasonable in the first place to imagine that there was something like the first Doric temple – an equivalent to Dorus' temple in Vitruvius – whether we can identify it in the archaeological record or not. While it is intriguing to think of the Doric order as an invention, and of its diffusion as entangled with religious, social, political, and economic transformation processes, tracing the birth of the Doric order back to a single building, as the Dorus story does, seems historically improbable.

"Invention," though, can also refer to more complex processes. The question of how invention and innovation can be explained historically by moving beyond the model of a single, definable origin has been the subject of debate in recent years. Against the genius model of invention, scholars have put forward models aiming at analyzing the networks in which invention and innovation processes took place. These models offer a starting point for understanding the Doric order beyond a simplistic evolution–versus–invention dichotomy. In *Social Networks in the History of Innovation and Invention* (2014), Francis C. Moon has applied a network approach to major scientific and technological innovation processes of the nineteenth and early twentieth centuries. What emerges from Moon's work is the "societal nature of invention" in fields such as steam power, internal combustion engines, and aviation. As a matter of fact, the ongoing discussion about who invented photography or the combustion engine shows that even for a historical period for which we have incomparably more evidence than for antiquity, it is often difficult or even impossible to identify the precise place and date of a new invention. Like the search for the one inventor (*protos heuretes* in ancient Greek), which is so characteristic of ancient accounts of artistic and technological innovation, the quest for the "first Doric temple" is wrongheaded and futile. The first Doric temple will never be found – not because archaeologists are unable to track it down, but because it never existed. The existence of *the* one Doric temple presupposes the existence of the Doric style, which, however, historically manifests itself through reiteration, that is, through multiplicity (unless one takes Vitruvius' Dorus story literally, which, of course, would be even more problematic). We have here a paradox that invites us to pause over the complexity of architectural innovation. In positivistic terms, there really is no such thing as "*the* Doric temple"; yet, the repetition of architectural features that are typical of the Doric order constitutes a new, uniform idea of the temple as a building type that is clearly recognizable through its architectural appearance.

The notion that the kind of process leading to the emergence of the Doric temple can have a "societal nature," and as such might be viewed as the product of networks rather than of an ingenious inventor's mind, has been applied also to ancient Greek architecture, in particular by Barletta in her 2001 book on the origins of the Greek architectural orders. Barletta concluded that

the emergence of the Doric and Ionic orders involved contributions from different regions, both in the homeland and in the colonies. Wilson Jones has added an interesting perspective by focusing on the practice of design and building rather than on theoretical oppositions between evolution and invention: "Design is a non-linear activity. It encompasses logic, yet is not wholly logical and nor is it susceptible to clean divides or polarities. The orders were not the result of an incremental evolution, and nor were they born in an instant . . ."[84] However, scholars have expressed doubts on network-based explanation models. In a review of Barletta (2001), Rhys Townsend (2002) has objected that

> [i]t is hard to see how the Doric order could happen "by committee," so to speak. For Barletta, the architectural development she outlines fits into a broader social context, one that moves from multiplicity to unity, a kind of "melting pot" in which different regional traditions evolve into a more unified "national" identity. As fitting as this *mentalité* may be in the context of the last one hundred years of "America's century," or in connection with multi-cultural globalization of the world village of the 21st century, it is not necessarily applicable to the Greek world of the 7th and 6th centuries BC.[85]

More recent research encourages us to be more confident about the interconnectedness of the Archaic Greek world. In particular, the work of Irad Malkin (2011) has illustrated how network analysis can improve our understanding of colonization and identity building in the Mediterranean during the seventh and sixth centuries BC. The application of network theory to the study of past societies has opened new perspectives, and I believe that it might help to explain the multifaceted genesis and diffusion of the Doric order and to dispel some of the doubts about the historical plausibility of a non-linear, multifactorial approach to architectural change in ancient Greece. As must be stressed, however, the network model I propose here is not based on data analysis, given that the available evidence regarding the movement of artisans, architects, sculptors, and sponsors is far too various and sparse yield to network analysis.[86] What I suggest is a thought experiment that describes a possible scenario for the genesis and diffusion of the Doric order by taking into account both the multivalent origins and the high level of uniformity of the new architectural style. As I hope the following chapters will show, a network approach to early Doric architecture not only offers a possible explanation for the genesis and diffusion of the Doric order, but also fits into a broader picture of elite networks and increasing mobility that are part of the social context in which the Doric order emerged.

Apart from diachronic and polytopic variation and connectivity, the network model proposed in Figure 6 contains two further variables. One concerns the degree of uniformity/architectural standardization and is expressed on a
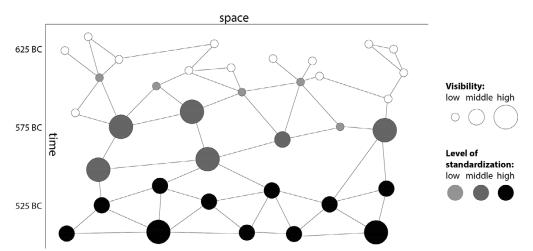
FIGURE 6. Model exemplifying the emergence of the Doric order (author).

scale from white (little or no correspondence to supralocal standards) to black (high degree of conformity with the Doric order). The other variable in the model concerns the visibility or impact a single building (dot) potentially had within the network. Small dots stand for buildings with low visibility/impact on a supralocal level, large dots for high impact. For example, the Hera temple in Olympia would have reached a high degree of visibility given that it stood on the site of the Panhellenic games.

The first stage in the model comprises buildings with low supralocal visibility and little or no conformity with any architectural order – here we find the buildings Barletta has labelled as "precanonic." In terms of network analysis, this stage is characterized by a low level of connectivity (relatively few lines connecting the single dots) and by the formation of local and regional clusters that are loosely connected with other parts of the network. Thus, for instance, the terracotta panels from Thermon and Kalydon that might have been prototypes of metopes remained a rather isolated phenomenon. Terracotta panels of similar size and form, though possibly used not in a frieze but as wall decorations, are known from Lokroi Epizephyrioi, a city colonized by people roughly from the same region in which Thermon and Kalydon are situated.[87] This, then, would be a cluster of nodes which were loosely connected but had little impact beyond the cluster's extension. Another cluster could be seen in a number of "Proto-Doric" *oikos* temples in early sixth-century Selinous, which lack a frieze while sharing a simple type of *geison*, which anticipates the canonical *geison* of slightly later buildings.[88] Yet another example of early network clusters can be seen in a late seventh-century stone relief showing a female figure, possibly a metope. This was found in Mycenae, not far from the old Hera temple at Prosymna near Argos, where an early peripteral temple is recorded, like the one in Isthmia near Corinth.[89] None of these buildings can

be called Doric in the strict sense, yet they deployed elements that later became part of the Doric order.[90]

The second stage comprises a series of buildings datable to the first half of the sixth century. These can be considered the first Doric temples, insofar as they show a relatively high degree of conformity to the Doric order, although with some local variations. In this book, I refer to them as "early Doric temples" in order to avoid the impression that they necessarily rank prior to others in terms of chronology and importance. What is important is that with this stage, an architectural order is established based on the forging of numerous local traditions into a uniform style. Early Doric buildings may remain in the low numbers, but they are located in important regional and superregional centers (Athens, Aegina, Corinth, Delphi, Kalapodi, Olympia, Korkyra, Tarentum, Sybaris, Poseidonia, Syracuse, Selinous). Therefore, they are likely to have reached a high degree of visibility. By applying a novel, monumental architectural language, they were also likely to attract attention at a time when monumental stone architecture was still relatively rare in Greece.

The following stage, which corresponds to the period from around the mid sixth century onward, witnesses a wide diffusion of Doric temples, both in the Greek world and beyond (e.g., Pompeii). Standardization reaches a high level, coming close to that of the Classical canon. Regional connections and exchanges also intensify, as reflected in finds of transport amphorae, luxury goods, coins, and in the increasing standardization in material culture and iconography.[91] Yet, given the ubiquity of Doric temples in Central and Western Greek cities of the period, single buildings were less conspicuous, except for some extraordinarily original projects such as the Late Archaic Temple of Athena Aphaia on Aegina or the colossal Zeus Temple in Akragas.[92]

As should be stressed, the model proposed here does not provide an answer to the question raised at the beginning of this chapter, namely why the Doric order spread so rapidly and so widely; it only explains how this could have happened in a historical situation where there was no centralized power capable of directing artistic and architectural change.

If we accept this model as a working hypothesis, the precise chronology of single buildings becomes less important. From this perspective, it ceases to be critical whether the Delphian Monopteros was older than the Hera I temple at Foce del Sele, and if so, by how many years or decades. As noted above, given that in most cases we lack the basic material needed to establish precise dates, the obsession with exact dating characterizing so many contributions on ancient art and architecture proves to be an academic exercise that is unable to throw significant light on the history of architectural innovation and production. Therefore, I have not engaged in chronological dissection. The dates proposed in this book are based on previous scholarship, as specified in

the references. I do not pretend that in controversial cases such as Foce del Sele, Hera I temple, or Selinous, Temple C, my dating represents the only or even the most widely accepted hypothesis. However, what is important to stress here is that alternative dates for this or that Doric temple would not change the overall picture I attempt to paint in this book.

NOTES

1   See the edited volumes by Anderson 2002; Schwandner and Rheidt 2004. While the seminal work of Hauser (1951) does not discuss ancient Greek architecture, the issue Hauser takes with evolutionist theories insisting on autonomous and immanent development in art appears to be echoed in some more recent contributions on Doric architecture, although Hauser's work is not cited in this context as far as I am aware. The title of the book by Knell (1990), which refers to the political background of architectural sculpture in Greece, suggests that architectural style also might have had a political message, although the question is not explicated in the book.

2   Apart from the groundbreaking work on Roman houses by Wallace Hadrill (1994), the recent study of Roman architecture and subaltern experience by Joshel and Hackworth Petersen (2014) provides a stimulating introduction to the more recent developments in the field. See further Warburton 2012, who applies poststructuralist theory to ancient Egyptian architecture, arguing that architectural meaning anticipated verbal and mythical meaning in important ways.

3   Stimulating in this regard, though rarely cited: Burkert 1988; Fehr 1996. See also De Angelis 2012 on "art and power in Archaic Sicily."

4   Dinsmoor 1950: 35–58; Felsch 2001; Gruben 2001: 33–45.

5   Book IV, ch. 2,6. Trans. M. H. Morgan, 1914.

6   de Jong 2014: 173–227.

7   Barletta 2001: 67.

8   Kienast 2002: 58–61; Barletta 2001: 148.

9   Schwandner 1985.

10   Mertens 1993: 116–130; 2006: 90–103.

11   It has long been noted that it makes little sense to put the nails head–down, given that once the wood dries out, the nails risked dropping out: Schwandner 1985: 117 n. 168; Kienast 2002: 62.

12   Mertens 2006: 101.

13   Felsch 2001; Conti 2011; Marconi 2016; Hellner 2020.

14   Barletta 2001: 79–83.

15   Felsch 2001; Gruben 2001: 33–45; Hellner 2016; 2020.

16   Mertens 1993: 126–128, fig. 75. See also the *geison* from Temple A at Kalydon (Barletta 2001: 72–74).

17   Wesenberg 1986; Korres 1994.

18   Wilson Jones 2014: 33–60.

19   Gebhard and Hemans 1992; 1998; Bammer and Muss 1996; Petropoulos 2002.

20   D'Acunto 1995; 2002/3. See also Beyer 1976.

21   Leypold 2008; Reber 2009.

22   Hersey 1988; Onians 1990; Sanvito 2016.

23   de Jong 2014: 173–227.

24   On the historical contextualization of Vitruvius' writings, see Rowland 1999; Gros 2006.

25   Waterlow 1982.

26   Hartog 1996.

27 Cf. Hersey 1987 on what he depicts as the remembrance of (sacrificial) violence in the classical orders.
28 See the discussion in Bietak 2001; Tanner 2003; Wilson Jones 2014: 94–100.
29 Colburn 2018.
30 Schlotzhauer, Weber, and Mommsen 2012.
31 Gruben 2001: 358–359.
32 Assmann 2000.
33 Cf. Crielaard 2009: 58 on Greek mercenaries in the eastern Mediterranean during the seventh and sixth centuries BC.
34 Kyrieleis 1996: 121–127; Dunham 2005.
35 Wilson-Jones 2014: 89.
36 Letter to Heinrich von Brünau, Naples 1758, April 26. In *Johann Joachim Winckelmann: Briefe*, vol. I, ed. W. Rehm, H. Diepolder, 350. Berlin: De Gruyter. My emphasis.
37 Winckelmann 1762: 37.
38 Bietak 2001.
39 Hölbl 1984; Østby 2001; Wilson Jones 2014: 94–96.
40 Winckelmann 1764: 4–8.
41 Cf. Bernal 1987.
42 Dinsmoor 1950: 50–58.
43 Simson 1956: xxxiii.
44 Carneiro 2003. On the notion of the Doric as a primordial and "natural" style, see de Jong 2014: 173–227.
45 Babich 2003.
46 By contrast, when Heidegger refers to architectural sculpture (e.g., the pediment scultpures from Aegina exhibited in Munich), he insists on the impossibility of reconstructing their original context: The world of these works of art is "broken into fragments" as the result of a process that is "irreversible." In Heidegger's analysis, architectural sculpture and temple ruins therefore remain separated (1960: 26).
47 Cf. Chapter 4.
48 Heidegger 1960: 28 (italics in the original).
49 Heidegger (1960: 27–28):

> Durch den Tempel west der Gott im Tempel an. Dieses Anwesen des Gottes ist in sich die Ausbreitung und Ausgrenzung des Bezirkes als eines heiligen. … Dastehend ruht das Bauwerk auf dem Felsgrund. Dies Aufruhen des Werkes holt aus dem Fels das Dunkle seines ungefügen und doch zu nichts gedrängten Tragens heraus. Dastehend hält das Bauwerk dem über es wegrasenden Sturm stand und zeigt so erst den Sturm selbst in seiner Gewalt. Der Glanz und das Leuchten des Gesteins, anscheinend selbst nur von Gnaden der Sonne, bringt doch erst das Lichte des Tages, die Weite des Himmels, die Finsternis der Nacht zum Vorschein. Das sichere Ragen macht den unsichtbaren Raum der Luft sichtbar. Das Unerschütterte des Werkes steht ab gegen das Wogen der Meerflut und läßt aus seiner Ruhe deren Toben erscheinen. Der Baum und das Gras, der Adler und der Stier, die Schlange und die Grille gehen erst in ihre abgehobene Gestalt ein und kommen so als das zum Vorschein, was sie sind.

50 Derrida 1967.
51 Heidegger 1960: 27, 28, 34.
52 It should be mentioned here that around the same time (1962), Vincent Scully, professor of the History of Art in Architecture at Yale University, published a scholarly book, in which he attempted to show "that all important Greek sanctuaries grew up around open altars which were normally sited where they are because the place itself first suggested the presence of a divine being" (Scully 1964: 89). This contribution, although rarely cited today, was part of the academic discourse of the time.

53 Barletta 2001; Marconi 2007; Wilson Jones 2014; 2016. On wooden prototypes, see the observations in Hellner 2013 based on new evidence from Kalapodi.

54 Beschi 1986; Settis 1999, in particular pp. 23–24, on research on Roman copies from Greek originals, a field that emerged in the nineteenth century and has been considered paradigmatic. With regard to archaic Greek architecture, see Marconi (2012) on the paradigm of the typological approach that risks losing sight of local contexts.

55 Important overviews and handbooks include Gruben 2001; Barletta 2001; Hellmann 2002; 2006; Mertens 2006; Lippolis, Livadiotti, and Rocco 2007.

56 Gruben 2007: 215.

57 E.g., Wesenberg 1971; 1986; 2008; Gruben 2001; Hellmann 2002. Østby's (2017: 214) categorical, though unsubstantiated, statement that "Doric architecture in Selinous was an imported phenomenon" is emblematic in this regard. See also Mertens (2006: 132) on the "audacious" idea of a transfer of models from the colonies to homeland Greece.

58 Barletta 2001; Marconi 2007. The relation between Doric architecture and political and cultural identities is also discussed in Woodward 2012.

59 Höcker 1996: 68–79; Osborne 1996: 252–257. *Contra* Marconi (2007: 29–31) who argues that the monumental temples in the colonies were "far from being symptomatic of Greek communities under pressure from their non-Greek neighbors," while at the same time describing Western Greek temples as "signs of wealth, power, *and superiority*" (p. 31, my emphasis). The notion of superiority clearly evokes the colonial situation, although it might not result from an immediate menace or violent conflict. Since Marconi explicitly rules out the relation between colonialization and monumental architecture, the "superiority" characterizing the latter remains at the level of an abstract, ahistorical category.

60 Quoted in Diogenes Laertius I 33.

61 On microregions and connectivity in the Mediterranean see Horden, Purcell 2000; on the "invisible" geographies of the Mediterranean, Chambers 2008.

62 On the relation between sanctuaries and landscapes in ancient Greece see the edited volumes by Alcock and Osborne 1994; Cifani and Stoddart 2012. Further: de Polignac and Scheid 2010.

63 The controversial positions expressed in the edited volume by Schultz and von den Hoff (2009) underline the potential of architectural sculpture for future inquiry. See also Scott 2007.

64 Anderson 2002: i.

65 Wilson Jones 2002: 353; 2014: 177–188. See also Wilson Jones 2020 on the symbolic connection between Doric capitals and phialae.

66 Cook 1970; Klein 1991; Wilson Jones 2014: 199.

67 Gruben 2001: 26.

68 Ibid.

69 *Contra* Wesenberg 1986.

70 On the etymology of the word "metope" see *LSJ* s.v.

71 Marconi 2007.

72 Wilson Jones 2016.

73 Wilson Jones 2020.

74 For archaeology see, for example, Tilley 1990; Buccellati 2017. For the application of hermeneutics to architecture see Jones 2000; Snodgrass and Coyne 2006; Pérez Gómez 2016.

75 For a general introduction, see Malpas and Gander 2015.

76 Republished in *Assemblage* 10, December, 1989: 111–131.

77 Bruno 2003: 56.

78 A kinetic approach is somehow prefigured in the way eighteenth-century architects and travelers envisaged physical movement and "theatrical sequences" as a way of understanding ancient architecture: de Jong 2014: 109–169.

79 Hamilakis 2013; Kurapkat, Schneider, and Wulf-Rheidt 2014; Kristensen 2019.

80   Emerson 2018: 251.
81   Ibid., p. 253.
82   Mertens 2006: 139–149; Marconi 2007: 170–176.
83   The excavation data are still unpublished. A major remodeling of the entire plan has been hypothesized by Mertens (2019) based on the analysis of the stereobate.
84   Wilson Jones 2014: 191. This approach was partly anticipated by James J. Coulton's innovative and influential book *Greek Architects at Work* (1977).
85   See also Scahill 2017, who attempts to show that examples of early Doric architecture were tied to a Corinthian network. However, this model is contradicted by the evidence from sites such as Kalapodi, Athens, Tarentum, Metapontum, and Poseidonia.
86   Cf. Graham, Milligan, and Weingart 2016: 195–234.
87   Mertens 2006 : 95.
88   Marconi 2007 : 77–82.
89   Lippolis, Livadiotti, and Rocco 2007: 87.
90   Barletta 2001: 54–82; Kienast 2002; Hellner 2020.
91   Malkin 2011.
92   Gruben 2001: 121–127; Mertens 2006: 261–266.