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Architectural Practice and the Distinctiveness of Sacred Sites

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Summary

Sanctuaries are specific spaces of interaction for both individual and collective activities. For communities, they serve as places of self-assertion, with various underlying temporalities. Sanctuaries are determined by socio-political power structures and normative conditions, which manifest themselves in certain rules as regards access and behaviour. Rituals are an essential part of practices performed in sanctuaries, adapting themselves to the established cults. These sacral-ritual or secular demands have an impact upon the spatial configuration of cult places, often displayed through architectural configuration. While rituals are short-term events potentially liable to change, architecture has a durable quality, usually maintained. Architecture artificially retains formal spaces of agency, constitutes behaviour, perception and communication within a sanctuary. The tangible edificial composition of sanctuaries is the result of processes of construction and selectivity, in which either new architectural forms were developed or existing ones were chosen from the entity of all architectural forms, in order to meet the local requirements of a cult place. In this -often iconic- architecture the intrinsic logic (*Eigenlogik*) of places becomes evident, resulting in the distinctiveness of these places. In order to describe this distinctiveness, a heuristic approach is chosen by an exemplar investigation of the architectural practice at Dodona, Calydon and Thermos. In addition, the analysis of the differences between these places ought to be understood as a micro-historical contribution.

Περίληψη

Τα ιερά είναι ειδικοί χώροι διάδρασης τόσο ατομικά όσο και συλλογικά. Για τις κοινότητες σήμαιναν επίσης ένα χώρο αυτοπροβολής, αναλόγως των εκάστοτε συγκυριών. Τα ιερά προσδιορίζονται από δομές κοινωνικο-πολιτικής ισχύος και κανονιστικές συνθήκες, οι οποίες εκδηλώνονται με συγκεκριμένους κανόνες πρόσβασης και συμπεριφοράς. Οι τελετουργίες αποτελούν βασικό στοιχείο των ιερών, προσαρμοσμένες στις λατρείες που ασκούνται κατά τόπους. Αυτές οι ιερατικές-τελετουργικές ή κοσμικές απαιτήσεις έχουν επίδραση στη χωρική διαμόρφωση των τόπων λατρείας, όπως συχνά φαίνεται στην αρχιτεκτονική διαμόρφωση. Ενώ οι τελετουργίες είναι βραχυπρόθεσμα γεγονότα δυνητικά υποκείμενα σε αλλαγή, η αρχιτεκτονική έχει το χαρακτηριστικό της διάρκειας. Η αρχιτεκτονική τεχνητά συγκρατεί επίσημους χώρους δράσης και σχηματοποιεί τη συμπεριφορά, αντίληψη και επικοινωνία μέσα σε ένα ιερό. Η απτή, κτιριακή σύνθεση των ιερών είναι αποτέλεσμα επιλεκτικής διεργασίας και διαδικασιών δόμησης, όπου είτε νέες αρχιτεκτονικές μορφές αναπτύσσονταν είτε υπάρχουσες επιλέγονταν από το σύνολο, προκειμένου να εξυπηρετήσουν τις τοπικές ανάγκες ενός χώρου λατρείας. Σε αυτήν την -συχνά εμβληματική- αρχιτεκτονική αποτυπώνεται η εγγενής λογική των τόπων κι έχει ως αποτέλεσμα την μοναδικότητα αυτών. Προκειμένου να περιγράψουμε αυτήν τη μοναδικότητα, υιοθετούμε μία ευρετική μέθοδο προσέγγισης, κατά την οποία διερευνάμε παραδειγματικά την αρχιτεκτονική πρακτική σε Δωδώνη, Καλυδώνα και Θέρμο. Επιπρόσθετα, η ανάλυση των διαφορών αυτών των θέσεων μεταξύ τους θα μπορούσε να θεωρηθεί ως μια μικρή συνεισφορά στο ιστορικό σκέλος.

Key Words

Practice theory; Greece; rational choice; architecture; differences.

Sanctuaries are particular spaces of interaction, which can be architecturally comprehended. They exhibit a diverse complexity, resulting from the sacred-ritual and secular activities and their administration. Their existence and various emphases were each determined by the occasional requirements of the participants and the demands of the site. If a sanctuary was architecturally[1] developed, intangible beliefs were given a tangible form. This resulted in an intended permanence for a timeless and perpetual relationship to the deity. Furthermore, architecture fixed artificial and formal spaces of action and agency, and it constituted behaviour, perception and communication within the sanctuary. In addition, socio-political power structures and normative parameters were embedded in the architecture, and these were expressed, for example, in specific rules of behaviour and access.

The architectural design of sanctuaries, as a collective construction project, is the result of a selective process of pre-existing courses of action. The decision makers selected, out of the totality of the available architectural repertoire, precisely those building forms and means of design, which corresponded to the local requirements of the sanctuary. This selection process and the embedded results of the decision can be deduced from the built-up environment of an individual site, and they reflect the architectural practice. In these unique and distinctive

[1] On the building forms in sanctuaries, see Osborne 2015: 15.

sacred sites, the divinities accordingly fitted, via their *epitheta*, the respective local cult demands.

The analysis of the architectural practice is suitable, as a heuristic method, for the clarification of distinctiveness of this kind. The configuration of the buildings, their design, and their possible usage define the criteria of investigation. Dynamics and processes of transformation in the sanctuaries can be reconstructed in the architectural alterations, which are discernible in diachronic perspective. As a result, the distinctiveness of the site is defined, which is determined by its intrinsic logic. This contribution therefore focuses on the differences of the sites, and is aligned with micro-historical and regional studies.[2] As case studies, three sanctuaries on the western Greek mainland have been selected: the oracular sanctuary at Dodona (Epirus), the Laphrion at Calydon (Aetolia) and the federal sanctuary at Thermos (Aetolia).

Case studies

Dodona

At Dodona (TABLE 1), steeped in tradition, the oracle of Zeus existed since the 8th century BC;[3] here, an oak tree and birds played an essential role, bronze tripods[4] were dedicated,[5] and it managed for over 300 years without architectural structures.[6] The protection of the site by the construction of a wall around the acropolis (3.5 ha)[7] and the southern region (3.3 ha),[8] in the course of the 4th century BC, is considered to be the first architectural arrangement at Dodona; at this time perhaps colonnades on the inner side of the southern wall[9] were added (FIGURE 1a) and the building M was constructed.[10] Successive expansion occurred after the late 4th century (FIGURE 1b). In the east, *oikoi* (Γ, Z, Θ)[11] were erected, as well as the structure E1-1[12] with an *oikos* set up asymmetrically in a peristyle courtyard.[13] All buildings assumed, in the broadest sense, a cultic function. To the west, on the contrary, a functionally mixed quarter grew up, with the theatre, the *bouleuterion* (E2)[14] and building O-1[15] - with a large western room and peristyle. The prostyle edifices (A, Λ) probably followed in the 3rd century BC (FIGURE 2c). The complex E1-1 received a new architectural concept (E1-2) with a tetrastyle *prostylos*, whereby the *oikos* was now replaced by an axially centred prostyle edifice set up in the peristyle courtyard and accentuated by a propylon emphasizing the entrance similarly located on this axis[16]. The building O-1 was expanded (O-2: peristyle building) by the addition of two wings with rooms for banquets[17] and a porch, closed except for a central entrance with four columns (FIGURE 4). By these means, a new -hybrid- building type for gathering (west room) and banquets was created.

Further building activities are attested after the late 3rd century (FIGURE 2d). The stadium, as a new structure, extended the spectrum of functions to the west.[18] The southern porch of the building O-2 was connected with the new west stoa (O-3), which was accessed via three multi-stepped sets of stairs.[19] Presumably after 160 BC, the usage of building O-3 changed (FIGURES 3-4). The wings were removed, the west room was furnished with rows of steps, and the peristyle was enlarged (O-4). The west stoa probably no longer existed.

Judging by the building volumes, at Dodona more was invested in political-cultural structures,[20] the capacity of which clearly exceeded the number of the population (FIGURE 2).[21] The sacred architecture remained unpretentious and, apart from E1, evinced no decisive requirements for prestigious display. The open area to the south of the cult buildings is noteworthy,[22] as it

[2] Lang 2013; Mili 2015.
[3] Dieterle 2007: 169-234.
[4] Dieterle 2007: 363-382; Mylonopoulos 2006: 189-190.
[5] The reconstruction by Dakaris (1971: 42-45) with an oak surrounded by tripods cannot be proven. Dieterle 2007: 265; Emmerling 2012: 71-74. 263.
[6] Dieterle 2007: 169–234; Friese 2010: 136–141; Parke 1967: 1–128.
[7] On the population (Herodotos 2.55; Homer *Iliad* 2.750) and the acropolis, see Dakaris 1971: 72-74; Dieterle 2007: 151-153.
[8] The situation in the west is unclear. Dieterle 2007: 149-151.
[9] Carapanos 1878: pl. 3.
[10] A detailed archaeological evaluation of the excavation results (Emmerling 2012) contradicts the previous dating, based primarily on historical interpretations. At best, trends are describable. Archaeological evidence also lacks, with regard to the traditionally recorded destruction events (by the Aetolians in 219 BC, by the Romans in 168/167 BC).
[11] In spite of their uncertain dating (Emmerling 2012: 177-210), the buildings A, Γ, Z, Θ and Λ probably existed in the 3rd century. '*Oikos*' is used here as a collective term for multi-functional buildings of simple ground-plan, always in a cultic context. See Dyggve and Poulsen 1948: 20-26, 53-54, 288-289. On the term, see Hering 2015: 159-169.
[12] Indications that the building E1 should be identified as '*hiera oikia*' or 'Zeus temple' are ambiguous. Emmerling 2012: 65-69.
[13] According to Emmerling (2012: 23-176) there is no clear chronological evidence for the four-phase building sequence proposed by Dakaris (1971: 76-83). Equally, in my opinion, at least two different architectural concepts can be clearly distinguished, here E1-1 and E1-2.
[14] The identification of building E2 is based on an altar inscription (Zeus *Bouleus* and others) and tokens: Moustakis 2006: 110.
[15] Due to an oracular enquiry, Dakaris identified the building as a *prytaneion*, contradicting Emmerling 2012: 222-223 and Moustakis 2006: 110-111. There are also objections against its function as an archive, cf. archive buildings in western Greece: for Kallipolis (600 seals) see Pantos 1985; for Gitane (3000 seals) see Emmerling 2012: 225 and Kontorini 1999: 277-280.
[16] Dakaris 1971: 36-42; Emmerling 2012: 45–55.
[17] As ceramic drinking vessels and remains of meals confirm. Emmerling 2012: 226.
[18] Papapostolou (2014: 186) supposes a stadium outside Thermos. A stadium has been discovered in the sanctuary of Molykreion (lecture by N. Kaltsas 2013 in Messolonghi).
[19] Emmerling 2012: 214–216.
[20] According to Moustakis (2006: 115), this is evidence of the supra-regional importance of Dodona and the prestigious decision makers.
[21] Based on 0.5 m² per person, the capacity of the *bouleuterion* was *c.* 2800 people; of the theatre between 13,000 and 18,000 spectators; of the stadium at least 3000 people.
[22] Pending an evaluation of the geophysical investigation, which

Table 1 (based on Dakaris 1971)

	architectural description	date (estimated)	size (m)		surface (square meters)	type	columns	primary use	denotation / function (*= denotation uncertain)
Dodona	acropolis	2nd half 4th			3.5 ha	enclosure	(9 towers)	protection	
	south areal	not before 4th			3.3 ha	enclosure		protection	
	building M	after 390	min. 10.7	min. 17.3	min. 185	unclear		lodging?	
	E1 - *oikos*	not before late 4th	6.8	4.35	30	*oikos*		sacred	temple of Zeus*
	building O-1	end 4th - early 3rd	13.1	31.5	413	peristyle building		gathering	*prytaneion**
	west room		12	12	144				
	peristyle		17.1	12.5	214		4*5 doric		
	theatre	end 4th - early 3rd				theatre		cultural / contest	
	bouleuterion	end 4th - early 3rd	31.6	43.6	1378	hall	columns with 8 edges	assembly	*bouleuterion*
	with stoa	end 4th - early 3rd	31.6	49.2	1555	stoa		entrance	
	building Γ	after end 4th	9.82	9.35	92	*oikos*		sacred	temple of Dione*
	E1-1	after late 4th - before 274	19.2*20.78	/ 19.2* 26	400 / 500	*oikos* + percinct		sacred	temple of Zeus*
	oikos		6.8	4.35	30	*oikos*			
	precinct		19.2*20.78 /	19.2* 26	400 / 500	peristyl			
	building Λ	between early and end 3rd	4.7	8.5	40	*Prostylos*	4? doric	cultic	temple of Aphrodite*
	E1-2 *Prostylos*	late 3rd	14.4	7.1	102	*Prostylos*	4? doric	sacred	temple of Zeus*
	Propylon		7.1	5.18	37	propylon		access	
	building O-2	before end 3rd	32.5	31.5	1024	peristyle building	hybrid	banquette / gathering	
	theatre Phase 2: *skene*	end 3rd					theatre	cultural / contest	
	Stadion	after end 3rd	> 70 m	*c.* 60 m	> 4200	Stadion	stadion	cultural / contest	
	building O-3 (with western stoa)	end 3rd- early 2nd	32.5	31.5	1024		hybrid	banquette / gathering	
	west room		12	12	144				
	western stoa	end 3rd- early 2nd	79	10.5	830	stoa	14 (internal) 34 (external)	multifunctional	
	Building O-4	after 160?	14.4	7.1	102	peristyle building	4x7	gathering	
	Building Z	after archaic	6.25	10.3	64	*Prostylos*	4? doric	cultic	
	Building Θ	after 5th	6.35	9.85	63	*oikos*		cultic	temple of Themis*
	Building A	?	9.55	12.6	120	*oikos*		cultic	temple of Herakles*
	with *prostylos*	?	9.55	16.5	158	*Prostylos*	4? doric	cultic	

Figure 1. Dodona. A: before end of 4th century BC; B: after end of 4th century BC
(drawings: C. Herbrik, M. Pfaff after F. Lang, based on Dakaris 1971).

Figure 2. Dodona. C: 3rd century BC; D: after end of 3rd century BC
(drawing: C. Herbrik, M. Pfaff after F. Lang, based on Dakaris 1971).

offered a large space for activities.[23] Both phenomena might be connected with specific cultic requirements.

No symmetrical solution was chosen for the planning concept. Construction within the surrounding walls was laid out in a compact and circular fashion, and it was aligned with the natural gradient and the open areas. The spaces for activities were divided into a secular zone with the buildings for assembly and cultural activities in the west, and a sacred zone with cult buildings in the east (FIGURE 2c). In this manner the flow of visitors, particularly during major events, could be regulated. Personnel and spectators arrived at the stadium, theatre or *bouleuterion* from the south. Visitors and pilgrims reached the open area, which afforded space for large congregations of people and was perhaps necessary in connection with rituals, accessed via the east and south gates which were reinforced by towers. The entrances to the buildings could also have regulated access. Whereas, for example, the entrance to the *bouleuterion* with its Doric colonnade invited access, this was much more restricted at the peristyle building O-2, which although equally wide, had an east façade restricted to only five bays (FIGURES 2c and 4).

These spatial asymmetries were augmented by architectural diversity. By contrast to the compact architectural masses of the large secular buildings in the western area, with strong walls with vertical buttressing, in the east the structures were small-scale, with gables and peristyle colonnades. Therefore a diverse panorama of large and small buildings was created, offering open *vistas* to the east, which was structurally less dense. To the south visibility was hindered by the colonnades, and it was only allowed from the adjacent terraced steps with the detached buildings. The city-wall silhouette of the acropolis constituted, with its towers, an impressive background.

Thermos

The sanctuary of the Aetolian League lay in the large inland plain of Thermos (TABLE 2). The site, utilised ritually since the 11th century, acquired in the 8th century BC an enclosed open area, which served as a gathering place for collective ceremonial and ritual banquets. In the late 7th century BC this area was taken up by an elongated temple (25.4 x 4.7 m) containing twelve centrally placed columns,[24] most likely dedicated to Apollo *Thermios* (FIGURE 5a: building 1). In the 6th century the building 2 (for Artemis?) and building 3 (for Apollo *Lyseios*?) were erected.[25] The structures were not related to each other and they were oriented to the south.[26] The transformation of the enclosed open space into an architectural sacred realm, in which common beliefs and mythical origins were displayed and manifested, was the result of a fundamental change in significance, which Thermos had undergone in the context of Aetolia's segmented social organization. Whether Thermos already functioned as a federal sanctuary at that time is still unclear. The League is historically attested in the 5th century BC, at the latest.

Additional building activities, with the exception of a fountain (building 4) dating to the late 4th or early 3rd century (FIGURE 5b), are demonstrated - again, first in the 3rd century. The Archaic temple of Apollo *Thermios* (FIGURE 5c) received a *peristasis*, after a phase of repairs in the Classical period.[27] The building 2 was replaced by an *oikos* with a *pronaos* (vestibule, ante-chamber), and the building 3 by a prostyle edifice. To the south were constructed the largest stoas of western Greece. The southern *terminus* was defined by the so-called *bouleuterion* (7)[28] oriented to the north, the dating of which is still uncertain.[29] During this period of expansion, in addition to the sacred area in the north, a new secular zone was created in the south, as a further space for interaction.

A new concept regarding the construction of collective identity and the medialisation of the Aetolian League's power lay at the root of this overall configuration in the Hellenistic times. The immense size of the stoas (exceeding 165 m in length) is perhaps due to their function, according to Polybios (5.8.4-8) as an exhibition space where the Aetolians could effectively display thousands of objects (weapons, statues etc.).[30] Due to their parallel arrangement, a *c.* 2400 m^2 open area was created, in which monuments were set up.[31] The combination of porticoes and open space generated an adhesive force, which attracted people, and a specific perceptual space, which directed focus to the ostentatious presentation of weapons and monuments, while it also directed circulation.

Not only movement but also sight was controlled: the porticoes, due to their linear arrangement on the site, allowed view only to the temples to the north and the

detected structures in the southern part. Sarris 2005: 15-17; Souli *et al.* 2005: 87-88.

[23] The region to the south of the theatre, interpreted as an Agora, was not considered.

[24] Cf. *naoi* in Yria, Samos, Sparta and Paestum.

[25] These identifications are based on Papapostolou 2014.

[26] Additional ephemeral and undiscovered structures cannot be ruled out.

[27] Papapostolou 2010.

[28] Indirect evidence of the assembly hall exists in connection with the killing of more than 550 League delegates by the Romans (168/167 BC), according to Livy 45.28.7. Estimates of the number of delegates suggest up to 1500 individuals (Funke 2015: 110).

[29] Papapostolou 2014: 183. The porch (13.6 x 5.3 m) of the entrance was perhaps designed as a propylon.

[30] The weapons would have been spoils of war (Scholten 2000). See also Dodona, where Pyrrhus, for example, dedicated war booty (Emmerling 2012: 118-119, 236; Moustakis 2006: 132-134), a common practice also known from Delphi and Olympia.

[31] Papapostolou 2014: 174–183.

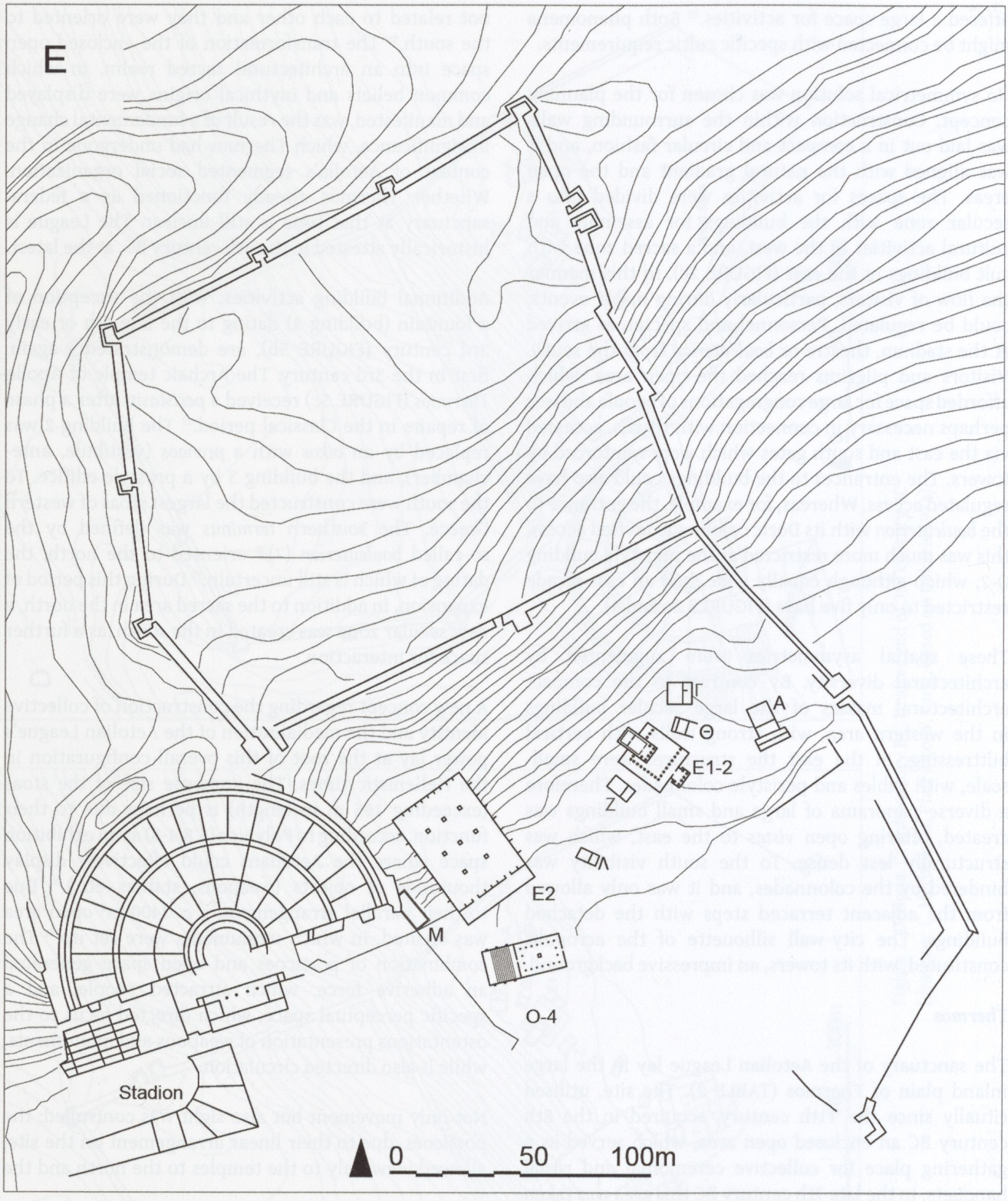

Figure 3. Dodona. E: 2nd century BC (drawing: C. Herbrik, M. Pfaff after F. Lang, based on Dakaris 1971).

bouleuterion to the south. In this axial system of *vistas*, the visitor functioned as a medium through which the diametrical locations of temples and the *bouleuterion* were associated as 'representatives' of the federal fields of activity: communal cult and assembly, as an important decision-making body.

Additional buildings can be presumed, because Polybios (5.8.4-8) mentions *oikoi* in the context of the partial destruction of Thermos by Philipp V (218 BC).[32] Here

[32] Twelve roofs are identified by means of roof terracottas; further investigation is awaited regarding their spatial-chronological distribution. Fiehn 1945: 2434; Papapostolou 2014: 227-229; van Buren 1973: 70-72; cf. also Dodona and Calydon.

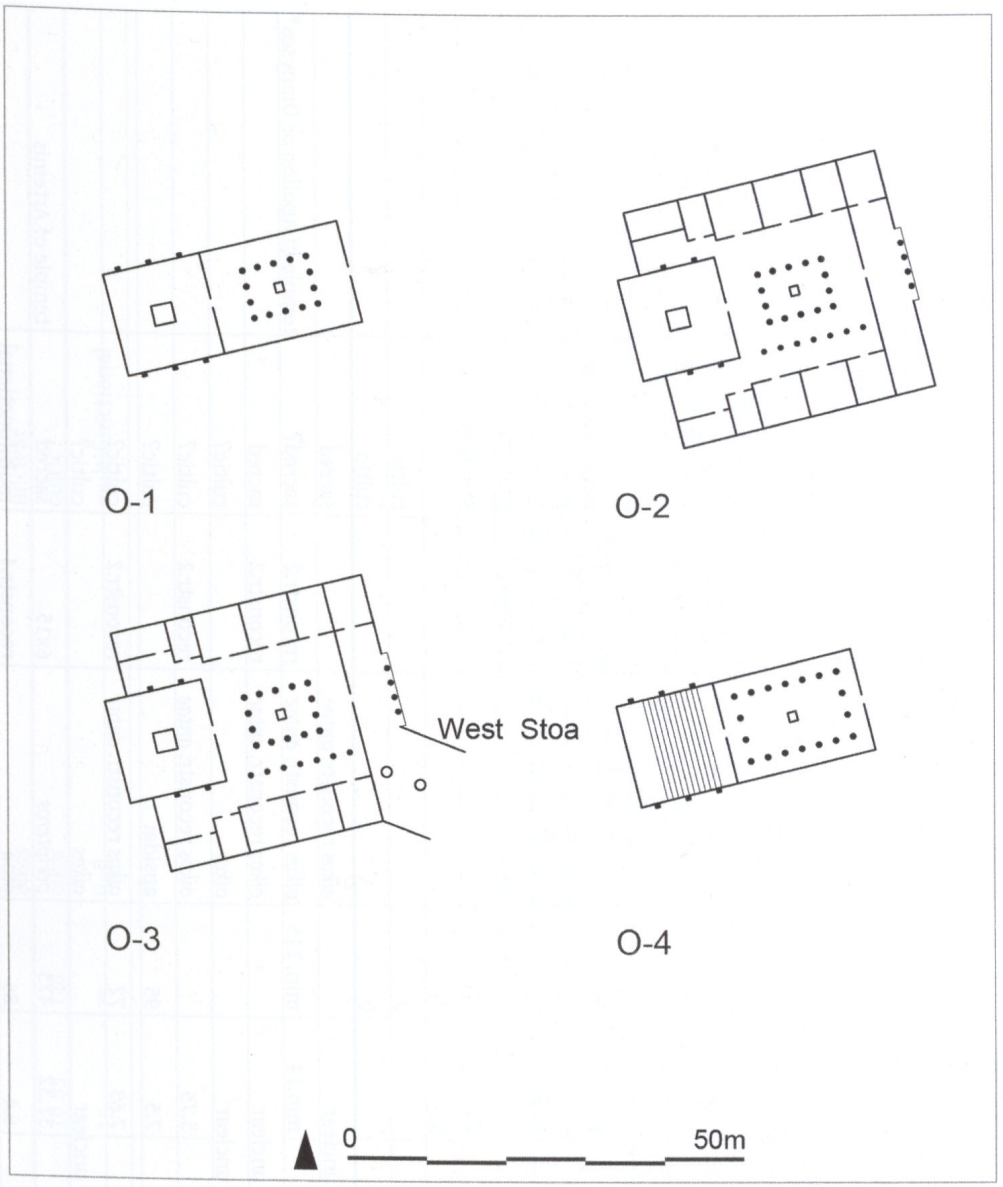

Figure 4. Dodona. Peristyle building O – four phases (drawing: M. Pfaff after F. Lang, based on Souli 2005).

foodstuffs[33] and valuable goods were stored, required for the *Thermika* during which the delegates of the Aetolian League and their guests convened annually for deliberation, voting, and also for markets and festivals.[34]

At the latest towards the end of the 3rd century, both stoas were destroyed. By contrast to the west stoa, the east portico was rebuilt[35] and provided with benches, which probably indicates a change in the purpose of this former exhibition space (FIGURE 5d).[36] Possibly in this phase the south stoa (8), which opens to the north, was erected. In addition, the terrain was surrounded by a wall (9) with towers, through which the site was now clearly defined (7.8 ha), and the previously unhindered access was now limited to two gates. Overall, these measures led to the dissolving of the linear arrangement and the staged axial *vistas*, whereas the military character, as well as the protective function, increased in importance.

Calydon

The situation in Calydon is utterly different (FIGURE 6; TABLE 2). Here, the sanctuary attributed to Artemis *Laphria* developed over an elongated hilly ridge in a number of increments; the *temenos* constituted the *terminus* of this site from the very beginning. During the Archaic period, *oikoi* (the buildings B1 and B2,[37] A[38], E)

[33] See Strabo (12.8.11) on the storing of crops and equipment in *oikoi*.
[34] Polybios 5.8; Funke 2013.
[35] Papapostolou 2014: 171.
[36] Chronology and the connection with the Macedonian or Roman destruction are vague. The east stoa was probably abandoned after 180 BC. Papapostolou 2014: 172-173.

[37] The building B2 covered B1 in the 6th century.
[38] Building A is interpreted as a temple of Apollo. Dietz 2011: 133; Dyggve and Poulsen 1948: 266, 295-300.

Table 2 (Thermos based on Papapostolou 2014; Calydon based on Dyggve and Poulsen 1948)

	architectural description	date (estimated)	size (m)		surface (square meters)	type	columns	primary use	denotation / function (*= denotation uncertain)
Thermos	building 1	late 7th	4.7	25.4	119	temple	12 internal	sacred	temple of Apollo *Thermios**
	reparation	5th							
	peristasis	3rd or 2nd	12.15	38.23	464	*peripteros*	5x15		
	building 2	6th	unclear			*oikos*		sacred	temple of Artemis*
	Prostylos	hellenistic	12.82	min. 6	min. 77	*Prostylos*	4 doric		
	building 3	6th	unclear			*oikos*		sacred	temple of Apollo *Lyseios**
	Prostylos	hellenistic	6.7	17.5	117	*Prostylos*	4		
	krene	late 4th – early 3rd						infrastructure	
	western stoa	3rd	164	13.5	2214		60 (external) 44 (internal)	multifunctional	
	destroyed	late 3rd							
	eastern stoa	3rd	173	13.5	2336		67 (external) 35 (internal)	multifunctional	
	repaired	first half 2nd		13.5	0				
	city wall	after 200 ?			7.8 ha	wall	(15 towers)	protection	
	bouleuterion	?	26	20	520			assembly	
	Propylon?		13.6	5.3	72				
	bathra	3rd (most middle 3rd c.)			0			cultic	
	altar of Angelochos	2nd half 2nd			0			cultic	
Calydon	building B1	end 7th	unclear			*oikos* reconstr. *antae*		sacred	
	building A	1st half 6th	min. 8.2	min.14	min. 115	*oikos* reconstr. *antae*	reconstr.2	sacred?	temple of Apollon or Dionysos*
	building B2	1st half 6th	unclear			*oikos* reconstr. *antae*	reconstr.2	sacred	
	buildings h. H. L	1st half 6th	unclear			*oikos*		cultic?	
	building E	1st half 6th	?	5.75		*oikos* reconstr. *antae*	reconstr.2	cultic?	
	building D	1st half 6th	12.6	7.5	95	apsidal		cultic?	
	building N	1st half 6th?	10.07	7.63	77	*oikos* reconstr. *antae*	reconstr.2	cultic?	
	building O	1st half 6th?	unclear			*oikos*		cultic?	
	building B3	early 4th	14.62	32.32	473	*peripteros*	6x15	sacred	temple of Artemis
	stoa F	early 4th	13.5	6.4	86	stoa	reconstr.4	multifunctional	
	propylon (C)	early 4th	min. 12.92	?	min 13	propylon	reconstr.2	access	
	altar? G	after early 4th	unclear			altar		sacred	
	temenos terrace	4th	28.3	10.3 high				multifunctional	
	building M. *peribolos*	after 400	unclear			*oikos* reconstr. *antae*	reconstr.2	cultic?	
	stair next to F	c. 300	1.5	----				access	

	architectural description	date (estimated)	size (m)		surface (square meters)	type	columns	primary use	denotation / function (*= denotation uncertain)
	stoa J and its terrace	3rd or 2nd	64	13.5	864	stoa	27 (external) 17 (internal)	multifunctional	
	building I	3rd or 2nd				*oikos*		unclear	
	building S	*c.* 200	11.34	10.55	120	*oikos*		cultic?	
	building K; terrace east side	hellenistic	min. 5	15	75	hall		multifunctional	

reconstructed as temples *in antis* stood here (zone 1), as did the apsidal building D (FIGURE 6a). At approximately 170 m to the north-east (zone III) additional *oikoi* (L, N) were built.[39] At the same time, a settlement, whose acropolis comprised an Archaic cult place, existed.[40]

In the early 4th century zone I was monumentalised (FIGURE 6b). The building B2 was replaced by a peripteral temple (B3, the so-called temple of Artemis), which -due to its scale- required a bastion-like terrace 10.3 m tall. Thereby a 6 m wide, paved space was gained around the new temple. On the opposite side, the *oikoi* D and E disappeared, with a portico (F) now standing on the border of the terrace. Building A continued to exist and, in front of it, a large altar (G) was probably erected. A wall with an inset propylon (C) now surrounded this area (4300 m²).[41] With these alterations the sacred zone was clearly defined and brought up to date with contemporary architectural structures. In front of and around the temple open areas were gained, offering space for ritual activities. The entrance was prominently signalled by the propylon, whereby the previously unhindered access was made more difficult. The peripteral temple and terrace wall became landmarks with corresponding long-distance effect upon the landscape and down to the coast. In zone III, building L was replaced by building M, and building O was added.[42] Simultaneously, the *polis* of Calydon invested in the city-wall and a theatre with rectangular *koilon*, which was laid out to the east below the hill.[43]

The final phase of the Laphrion expansion occurred during the Hellenistic period (FIGURE 6c), affecting zone II, which until that time had remained open: the hill was extended by means of an artificial terrace into a large plateau (4600 m²). The *risalit-exedra* stoa (J) dominated this plateau. At a distance of 4 m, building K was erected[44] and building I arose near the propylon (C). In zone III, three further *oikoi* were constructed, which -except for building S- functioned as tomb buildings (P, Q, R).[45]

Via this successive development, differing architectural arrangements of diverse density and spatial relations were created. To the visitor arriving from the west gate, the temple of Artemis announced itself as the concluding point. The visitor crossed through an open zone with solitary *oikoi* -in addition to tomb buildings-

[39] Most of the buildings are dated by their roof terracottas. The oldest ones belong to the late 7th century BC.
[40] Dietz 2011: 239–240.
[41] Dyggve and Poulsen 1948: 26-59.
[42] Dyggve and Poulsen 1948: 79-81.
[43] Dietz 2011: 65-76; Vikatou *et al.* 2014. A functional association with the Laphrion site, for example during the *Laphria* Games, requires clarification.
[44] Perhaps its entrance situation was similar to that of the building O-2 in Dodona.
[45] Dyggve and Poulsen 1948: 70-78, 84-86.

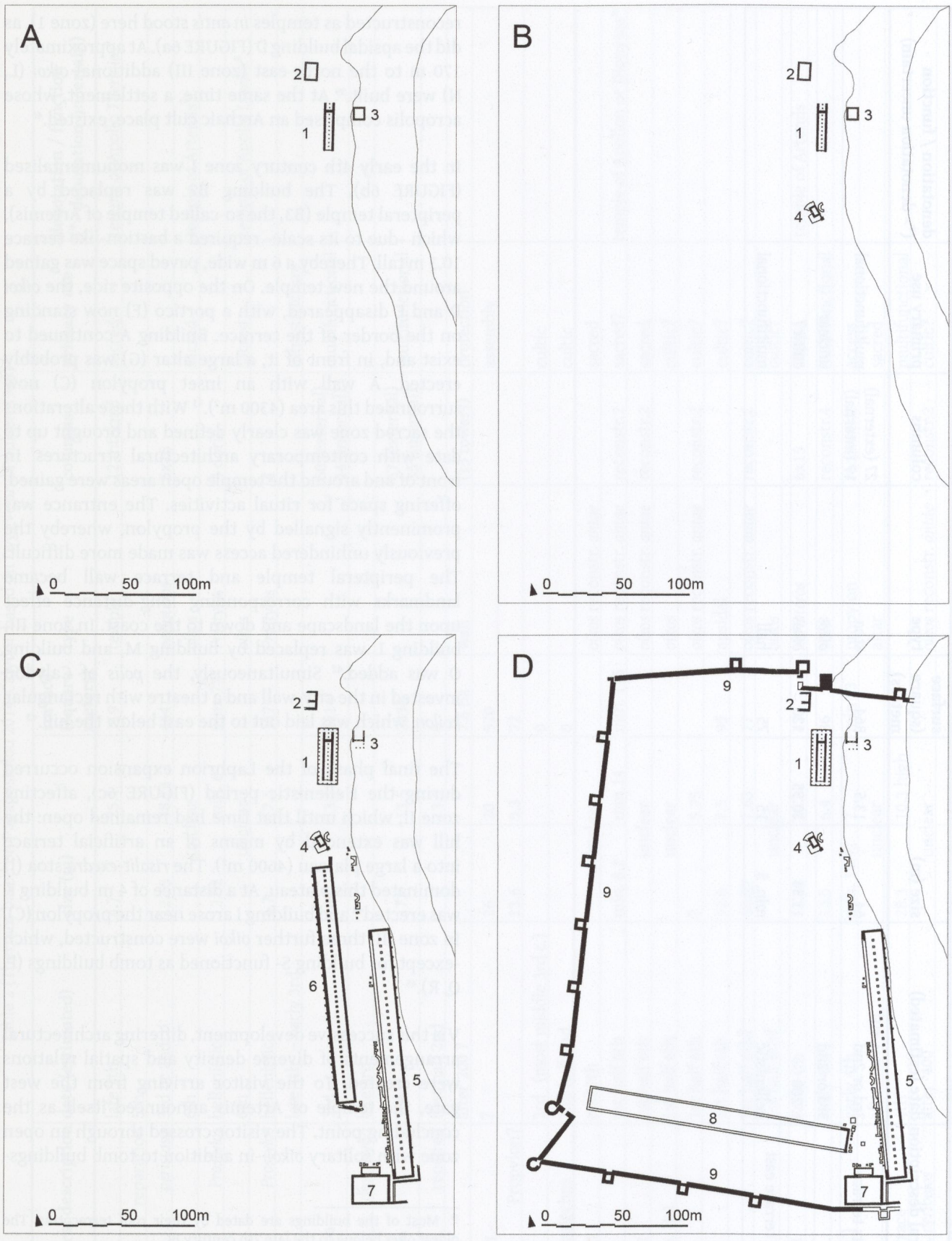

Figure 5. Thermos. A: 6th century BC; B: late 4th or early 3rd century BC; C: 3rd century BC; D: after end of 3rd century BC (drawings: C. Herbrik, M. Pfaff after F. Lang, based on Papapostolou 2014).

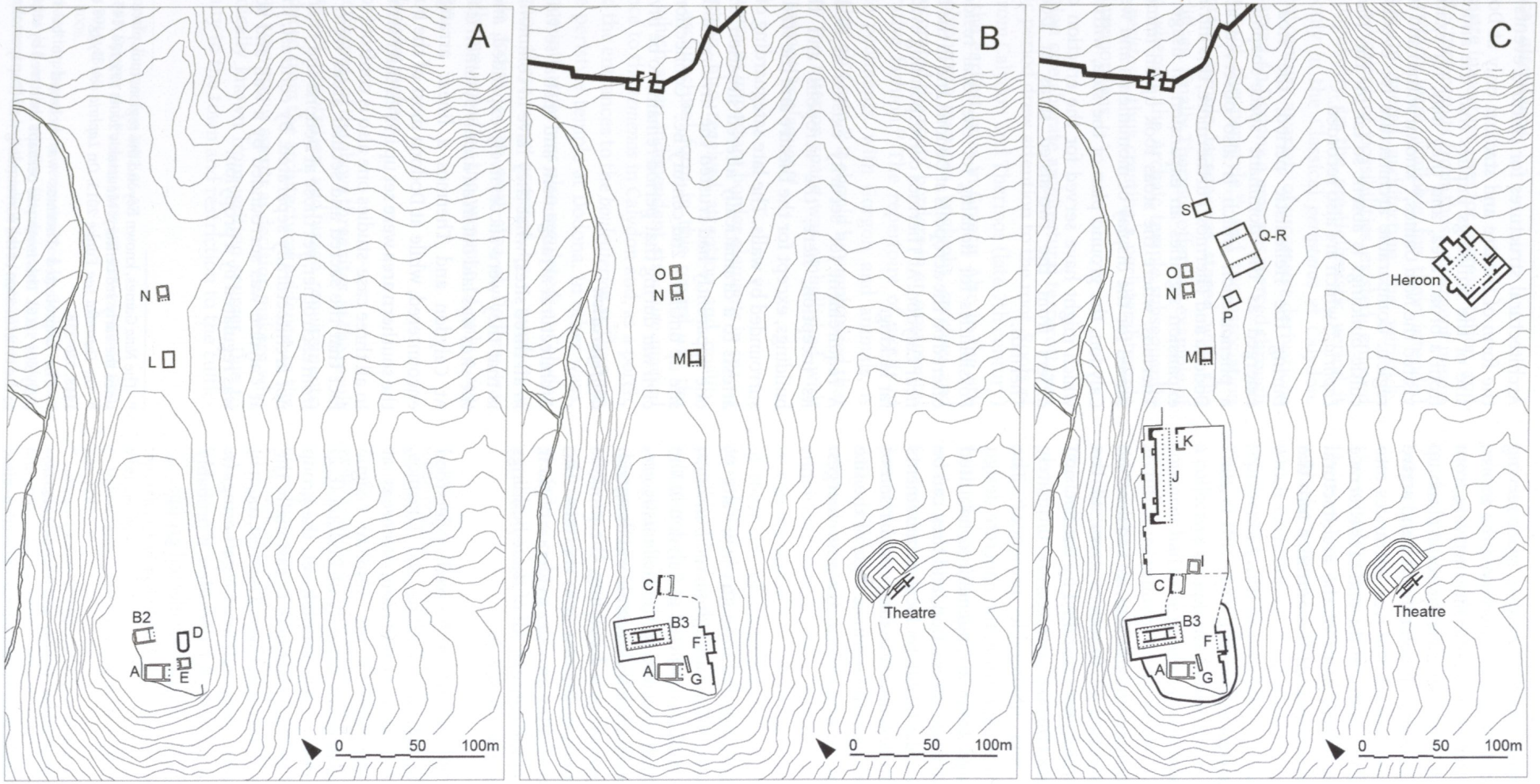

Figure 6. Calydon. A: 6th century BC; B: 4th century BC; C: Hellenistic (drawings: C. Herbrik, M. Pfaff after F. Lang, based on Dyggve and Poulsen 1948).

and arrived via a ramp at the large open space serving as the secular zone. Stoas J and K narrowed the access, which thereby could be regulated.[46] Alternatively, from the surrounding environment a visitor could climb up the steps of the retaining wall behind stoa J and arrive at the terrace either through the rear entrances into stoa J or directly to the south. At the end of the terrace and as a concluding focal point of the architectural staging, the propylon signalled the entrance into the sacred zone.

Architectural practice

Choice and selection

By analysing the architectural practice, we can describe the intentional selection of functions from all the available choices which were installed by the decision makers -substantiated through architecture- ultimately as a permanent and unalterable presence.[47] The available architectural repertoire, the concrete design of the buildings and their arrangement constituted the spaces of activity and interaction, and they can be defined as precise adaptation to local requirements in all three case-studies. In a revealing comparison of the concrete furnishings, the intrinsic logic of the site becomes evident, out of which distinctiveness emerges.

Fields of usage

Religious activities are attested through the worship of multiple divinities, as well as through sacred buildings. Peripteral temples were constructed at Calydon in the Classical period and at Thermos in the Hellenistic era. In Dodona, by contrast, a peristyle temple was designed. As an additional type of sacred building, the prostyle edifices emerged only in Dodona and Thermos. The presence of *oikoi* in all sites provides evidence of their universal usage in cultic context. All of these buildings are distinguished by their longevity.

The political field of activity can be well understood in the assembly buildings at Dodona and Thermos, yet this aspect is absent at Calydon. Whereas at Thermos *c.* 1500 delegates of the Aetolian League could be accommodated, the capacity at Dodona (E 2) is considerably larger (*c.* 2800 people); yet, the group of users cannot be precisely defined. Occasionally the Epirote League would have met there. The west room in building O at Dodona was also suitable for gatherings (*c.* 250 people) and, due to its exposed position, it probably accommodated official meetings of selected groups.

Architectural structures for cultural events existed in the form of theatre and stadium only at Dodona. The size of the buildings implies that the audience came from a broad area, and they may, for example, have visited the *Naia* Games,[48] known within and beyond the region. Comparable architecture for events near the cultic buildings is absent so far for the *Thermika* and *Laphria*,[49] which are also recorded.

During the Hellenistic period, the stoa generally emerged as the dominant space-shaping element, a phenomenon which is also observed at Calydon, Dodona and Thermos. Furthermore, this infrastructural expansion signifies an expansion in usage, which at Thermos, where the stoas took up an immense area, served for the display of monuments and weapons. At Calydon, the ground plan of the stoa, with its *exedrae* which might have served for the erection of statues, differs from the two-aisled stoas at Dodona and Thermos.

Possibilities for housing for the local residents were offered on the acropolis at Dodona and in the town lying near Calydon. At Thermos corresponding evidence is so far lacking.

A requirement for security existed at Dodona from its inception; here, the acropolis and the public buildings, except for the theatre and the stadium, were surrounded by walls. The late safeguarding of Thermos attests to a dramatically altered situation, in so far as one apparently had trusted the invulnerability of the site up until the 2nd century BC.[50] Connection with the civil war during that period remains to be investigated.

Configuration

Architectural arrangement and spatial setting differed in all three sites; what they have in common, however, is that they were successively expanded, and none of the sites was laid out in an axially symmetrical concept. At Calydon and Thermos a linear arrangement is encountered, while at Dodona most of the buildings in the southern area were set up in a circular arrangement. In all three case-studies one also is confronted with the fact that the sacred and secular areas were separated from each other, yet those at Dodona and Thermos were not architecturally separated. By contrast, the *temenos* at Calydon was surrounded by a wall and access to it was regulated by a propylon.

[46] A gateway probably existed here. Dyggve and Poulsen 1948: 285-287.

[47] Permanent and unalterable is here intended in a prospective sense.

[48] The *Naia* Games, known beyond the region, took place at the latest since the early 3rd century: Moustakis 2006: 125-126, 145-149.

[49] On *Thermika* see Funke 2013. On *Laphria* see Dyggve and Poulsen 1948: 336-338.

[50] The unprotected Thermos was believed to be invulnerable (Polybios 5.8.6). This myth was perhaps shattered by attacks, leading to the construction of the surrounding wall (Papapostolou 2014: 158).

Performance - attendance

Sanctuaries are important sites for representation, and their architecture results from those divergent means of design, which were available for their intended performance. In sacred architecture the peristyle, for which a variety of possibilities existed, enjoyed a certain popularity. In the pre-Hellenistic period it appeared only in the Classical *peripteros* at Calydon. After the 3rd century, a variety of successive derivations can be observed. In Dodona a *prostylos* pierced through the *peristasis* of the peristyle,[51] and the association of a peripteral temple façade was staged with the prostyle edifices. Finally Thermos offers an example of conversion whereby the Archaic temple subsequently received a *peristasis*, thus creating a peripteral temple of unusual proportions.

The invention of elaborate architectural terracottas in the Archaic period drew attention to the roof. Roofs of this type from Calydon and Thermos (late 7th century) belong to the earliest ones in Greece. Also in the 6th century polychrome metopes, triglyphs, *antefixes* and *acroteria* decorated the roofs' borders in an ornamental and decorative fashion.[52] The repertoire of motifs of the temple pediments, with Gorgon and animals, is similar to that on Corfu.[53] It should be emphasised that at Thermos the interior space was embellished with figurative terracotta plaques.[54]

Entrance areas, as important border elements in spaces for interaction, also received attention and quality. A specific architectural form in this regard was the propylon, which as an independent structure marked the entrance to the *temenos* in Calydon and, as a porch, it signalled the entrances to the *bouleuterion* at Thermos and to the peristyle temple at Dodona. In other ways, the entrance into stoas was also regulated: at Calydon and Thermos these were accessed by a number of steps, while access to the west stoa at Dodona was intentionally prevented by the presence of only a few sets of steps.

Agents – decision makers

The distinctiveness of the above three sites, as the result of processes of negotiation and usage requirements, can be deduced from the architectural evidence. In the background are various agents as decision makers, who are sporadically known from written sources. Due to its proximity to the town and restriction to the cultic-sacred sphere, responsibility for Laphrion lay with the *polis* of Calydon. Whether or not the expansion of the town and the *polis*-sanctuary in the early 4th century can be associated with autonomy from the Aetolian League, calls for further investigation.[55]

The initial preconditions in the federal sanctuary at Thermos are fundamentally different. Decisions lay with the heterarchically organised Aetolian League, in which each one of the individual member states was represented with its own identity, rights and interests. Thus, at this site which bestowed and secured identity, a collective acceptance between individual and federal concerns had to be produced, which was stabilised in an architecture reduced to the essential requirements. At the zenith of the League's power in the 3rd century, the architecture for unrestricted attendance dominated. The architecture of security and protection decays, perhaps as a reaction to Aetolia being shaken by civil conflicts.[56]

With the architectural shaping of Dodona, new, co-evolutionary fields of usage were created: residence, festivals, games, assembly. At the same time, Dodona preserved its significance, also beyond the events of daily politics,[57] as an oracle which received supra-regional -although in the majority individual- oracular enquiries,[58] whereby the sphere of personal religion is comprehensible.[59] From the concurrent presence of the fields of usage listed here, the heterogeneity of the interest groups, who collectively had to perform at Dodona, becomes evident. The continuous building activities and the oracle, as well as individual engagements in building investments,[60] suggest that the responsibility for the architectural decisions should not be limited to one group of agents or to supra-regional constellations of power. The architecture of assembly at the sites suited the convening of a variety of agents extremely well, and the Epirote League, as well as

[51] Cf. Megalopolis, Emmerling 2012: 85-87.

[52] Barletta 1983; Dyggve and Poulsen 1948: 287–288; van Buren 1973; Wilson Jones 2014: 33-63.

[53] Antonetti 2006.

[54] These terracotta plaques were reconstructed by Gerhild Hübner not as metopes but in the interior (Papapostolou 2014: 206-209). Compare the reconstruction in Kalapodi (Wilson Jones 2014: 44).

[55] Insightful is the probably politically motivated genealogical reinterpretation in the 5th century BC, whereby Aitolos, the son of the Calydonian king Oineus, venerated as a hero at Thermos, was now introduced as the son of the Elian king Endymion (Funke 2015: 81).

[56] Livy 41.25; Polybios 30.11. Further plundering and destruction in western Greece during the 3rd and 2nd centuries BC was caused by the Celtic raids, internal struggles, piracy, the Roman civil war and many other events. None of these events can be securely demonstrated in the archaeological evidence of the three case studies.

[57] The Aetolian *strategos* Dorimachos devastated (also?) cult buildings at Dodona in 219 BC (Diodoros 26.7; Polybios 4.67.3). On their destruction Philip V based his campaign of revenge against Thermos (218 and 206 BC). In 168/167 BC Roman excesses of violence swept over Epirus (Livy 45.34.1-6; Polybios 30.15; Strabo 7.7.3; Scholten 2000: 222-224, 229-233). The sources are silent about Dodona and the archaeological-historical material provides evidence of activities after 160 BC.

[58] Dakaris *et al.* 1999; Dakaris *et al.* 2013; Lhôte 2006; Moustakis 2006: 121–124.

[59] In sanctuaries of regions with segmented social structure other concepts than the *polis* religion model were applied. Eidinow 2011; Mili 2015: 6-16; Sourvinou-Inwood 1990; Sourvinou-Inwood 2000.

[60] On architectural donations see Moustakis 2006: 128.

the Molossian king Pyrrhus, were certainly active at Dodona in the late 4th and 3rd century, until they lost power in the course of the 3rd century.[61] Yet, the alterations in the architectural practice over more than 300 years suggest that here a former natural sanctuary was transformed into a town.

The distinctiveness of the sanctuaries resulted from the intrinsic logic of the individual sites. This was based on a relational framework of processes of negotiation and usage requirements, with the participation of a variety of decision makers, occasionally acting concurrently; this distinctiveness expressed itself via the divergent architectural practice, in spite of the similar building forms.

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