Hellenistic architecture
Hellenism
the Empire of Alexander
map of the Ancient World in 323 BC
the breakup of Alexander’s empire
map of the Ancient World on the death of Alexander, 301 BC
detail from McEvedy, Atlas of Ancient History, p 61
the expansion of Hellenism

T B L Webster, *Hellenistic Art* (London 1967 [1966]), p 221
Shrine of the Double-headed Eagle, Taxila, Pakistan, C2nd BC-ADC 2\textsuperscript{nd}

Prof Yunsheng Huang, University of Virginia
capital from Kausambi, northern India, C3rd BC

terms

‘Hellenic’ means Greek

‘Hellenistic’ refers to the expansion of Greek culture following the conquests of Alexander the Great, and to the opulent style of art and architecture associated with this
sarcophagus of a ruler of Sidon ('Alexander Sarcophagus'), after 330 BC

Webster, *Hellenistic Art*, p 45
bronze krater from Dherveni (10 k north-east of Salonika), c 320 BC

Webster, *Hellenistic Art*, p 21
PRIENE

in western Asia Minor (modern Turkey)
large natural acropolis
grid layout as promoted by Hippodamus of Miletus

important Hellenistic structures

Temple of Athena Polias, 335 onwards
Theatre, late C4th & C2nd
Ekklesiasterion or Bouleterion, c 200
view of Priene

Miles Lewis
Priene: plan plan as in the late C4th BC, and detail

T Wiegand & H Schrader, Priene, 1904
Priene, reconstructed view by A Zippelius

theatre, Priene, c 300 BC, modified C2nd BC

Miles Lewis
theatre, Priene

plan as in c 300 BC

theatre, Priene, reconstructed view after the work of the C2nd

T Wiegand & H Schrader, *Priene* (1904)
theatre, Priene: earlier and later form of skena, reconstructed

theatre, Priene: the proskenion as it remains today

Miles Lewis
Ekklesiasterion or Bouleterion, Priene, c 200 B
view & plan
Miles Lewis; Robertson, *Greek and Roman Architecture*, p 177
Ekklesiasterion or Bouleterion, Priene, c 200 BC
plan & view

Robertson, *Greek and Roman Architecture*, p 177; Miles Lewis
Ekklesiasterion or Bouleterion, Priene, c 200 B plan & view

Robertson, *Greek and Roman Architecture*, p 177; Miles Lewis

these pillars don’t exist: there is more seating behind this line and the rear wall is further back

wrongly located
Ekklesiasterion, Priene: reconstruction view
Scranton, *Greek Architecture*, fig 96
Ekklesiasterion, Priene: reconstruction view

Scranton, *Greek Architecture*, fig 96

door impossible
In this position
there should be more stepped seating
behind the line of the rear pillars
Temple of Athena Polias, Priene, by Pytheos, dedicated 334 BC

Miles Lewis
development of the Corinthian
small metal lamps &c C5th

interior end column, Temple of Apollo Epikourios, Bassai late C5th

special columns at Delphi, Tegea, Epidauros, c 400-345

small scale exterior use: Monument of Lysicrates, Athens, 334 BC

as a full-scale order, Temple of Zeus Olbius, Uzunçaburc, c 300 BC
Bassai
the first full Corinthian capital
reconstruction interior
Von Hallerstein’s drawing of the capital;
and as reconstructed

Coulton, *Greek Architects at Work*, p 48
Robertson, *Greek and Roman Architecture*, pl 140
Smith, *Classical Architecture*, p 50
early Corinthian capitals in special locations

- top left: from the Tholos, Delphi, c 400
- bottom left: the Temple of Athena Alea, Tegea, by Skopas, c 355
- above: Tholos, Sanctuary of Aiskulapios, Epidauros, by Polykleitos the younger, c 345 [restored]

Scranton, *Greek Architecture*, plates 73, 74
Greece, Ministry of Culture
the Corinthian order used externally

Monument of Lysicrates, Athens, 334 BC.

Stuart & Revett, *Antiquities of Athens*, I (1762), ch IV, pt 3
evolution of the Corinthian capital

clockwise:
Bassai, 430-400
Tegea, c 355
Epidauros, c 345
Bouleterion, Miletus, 175-164

Smith, *Classical Architecture*, p 75
map of Cilicia, showing Diocaesarea (Uzunçaburc)

Hellenistic carving at Diocaesarea

Keil & Wilhelm, *Monumentae Asia Minoris*, III, tafel 1

Miles Lewis
the first full-scale use of the Corinthian Temple of Zeus Olbius, Uzunçaburc, c 300 BC
Temple of Zeus
Olbius, Uzunçaburc,
c 300 BC

Corinthian capital
reconstructed column & capital

Miles Lewis
Keil & Wilhelm, *Monumentae Asia Minoris*, III, 47
Temple of Zeus Olympeion, Athens, 174 BC - AD 130
view from the north & plan

Miles Lewis
Scranton, Greek Architecture, pl 68
Temple of Zeus Olympeion, Athens
detail of the entablature

Miles Lewis
THE GIANT TEMPLES

Zeus Olympeion
Athens

Apollo Didyma
Miletus

Cybele
Sardis

Artemis
Aphesus
Temple of Apollo, Didyma, archaic temple, 560-550 BC: plan

H Knackfuss. *Didyma I, Die Baubeschreibung* (3 vols 1942); 3, 1940
Temple of Apollo, Didyma, archaic temple, 560-550 BC, Hellenistic Temple, 332 BC-C2nd AD

plans
lion from the sacred way

H Knackfuss. Didyma I, Die Baubeschreibung (3 vols 1942); 3, 1940; Miles Lewis
Didyma, map showing the 20 km processional way from Miletus, and the sea route to the marble quarries

Lothar Haselberger, 'The Construction Plans for the Temple of Apollo at Didyma', *Scientific American*, CCLIII, 6 (December 1985), p 116
Temple of Apollo, Didyma, from above
Stierlin, *Monuments de l’Antiquité*, no page
Temple of Apollo, Didyma, as it may have been when building ceased reconstruction by George Niemann

H Knackfuß. *Didyma I, Die Baubeschreibung* (3 vols 1942), 1940
Temple of Apollo, Didyma: cutaway reconstruction view from above

Temple of Apollo, Didyma, north end

Miles Lewis
Temple of Apollo, Didyma
plan and sections

MUAS 17,070
Temple of Apollo, Didyma

the *adyton* or inner courtyard

the foundations of the *naiscos*, mid-C3rd, allegedly by Paionios of Ephesus and Daphnis of Miletus, containing the source of the sulphurous spring

Miles Lewis
Temple of Apollo, Didyma
reconstruction of the diagrams inscribed on
the adyton wall
(red squares indicate the location of the
photographs)

Lothar Haselberger, 'The Construction Plans for the
Temple of Apollo at Didyma', Scientific American,
CCLIII, 6 (December 1985), p 120
Temple of Apollo, Didyma
The base of the naos or cella wall, externally

Miles Lewis
Temple of Apollo, Didyma

the three standing columns in red
those known to have been built, in black;
those probably built, in grey

Haselberger, 'Temple of Apollo', p 117
Temple of Apollo, Didyma, column base of Asiatic type
Miles Lewis
Temple of Apollo, Didyma, column bases
Asiatic, modified Asiatic with palmette & anthemion, key pattern & panelled
Miles Lewis
Temple of Apollo, Didyma, detail of lintel

Miles Lewis
Temple of Apollo, Didyma

Ionic capital

Zoomorphic corner capital with bulls; heads and busts

Miles Lewis
Temple of Apollo, Didyma, Medusa head from the frieze

Miles Lewis
Pergamon
Monument on a round base, Pergamon, after 230 BC, commemorating the victory of Attalos I over the Gauls.

Plan, with the Temple of Trajan, Theatre, Temple of Athena, Great Altar.

Webster, *Hellenistic Art*, p 93
Great Altar of Zeus, Pergamon, 200-150 BC
reconstruction and plan

Druckerei Mahnert GmbH
Scranton, *Greek Architecture*, pl 100
Altar of Zeus, in the Pergamon Museum, Berlin: view & detail
Cimok, *Pergamum* p 35; David Saunders
detail of the Pergamon altar relief
Staatliche Museen zu Berlin
prostyle temples at Pergamon, plans

Deionises, C2nd
Upper Agora, c 150-100
Hera Basileia, n d
Asklepios, c 150-100
Middle Gymnasium, c 150-100

Akurgal, *Ancient Civilizations*, p 89
Propylaea of the Sanctuary of Athena Polias, Pergamon, C3rd BC: as reconstructed at the Pergamon Museum, East Berlin

Fatih Cimok, *Pergamum* (Istanbul 2001 [1993]), p 27
room behind the Stoa of Athena, Pergamon, early C2nd B
detail of the entablature
Lyttelton, *Baroque Architecture in Classical Antiquity*, p 93
the tomb of king Mausolus of Caria
‘Mausoleum’
at Halicarnassos, by Pytheos, after 353 BC
one of the seven wonders of the world

known, mainly from the description of Pliny the Elder, to have had

- a high base
- a pteron of thirty-six Ionic columns (9 x 11)
- a stepped pyramid
- a chariot group on top
one of the horses of the quadriga group of the Mausoleum of Halicarnassus, c 350 BC

British Museum GR 1857.12-20.238-9
Mausoleum at Halicarnassos
conjecturally restored by L S Bernier, and the British Museum

Hector d'Espouy, *Fragments d'Architecture Antique d'après les Relevés & Restaurations des Anciens Pensionnaires de l'Académie de France à Rome* (2 folios of loose plates, Paris 1905), II; British Museum GR 113, © 1975
the new Hellenistic monumentality

the Mausoleum at Halicarnassos

Monument at Dougga, Tunisia, ?C2nd BC

Miles Lewis
the new Hellenistic monumentality
the Mausoleum at Halicarnassos
Monument at Dougga, Tunisia, ?C2nd BC
Miles Lewis

Temple of Mentuhotep, Deir el Bahari, Egypt, c 2,100 BC: reconstruction
MUAS 9,931
the arch problem
a reminder of classical principles

**trabeation**

a beam or entablature is carried on circular columns

**arcuation**

an arch is a hole cut in a wall, and is therefore carried on pieces of wall – rectangular piers - *not* on columns
Propylaea, Athens, by Mnescicles, 437-432 BC from the inside

Lewis, *Architectura*, p 64
the arch problem

where there is wider intercolumniation on the axis
how should the entablature reflect this?

you cannot insert an arch carried on columns

(a) the arch on an entablature
but an arch in the pediment, on top of the entablature, is not carried on columns, but is a hole in the wall above, which is grammatically acceptable

(b) the bent-up entablature
alternatively, if you bend the entablature up into an arch shape, and continue the entablature mouldings rather than show wedge-shaped voussoirs, you can pretend that it is not really an arch, but a distorted entablature
(a) the arch on an entablature

temple at Termessus, Pisidia, Turkey, AD C2nd

Robertson, *Greek and Roman Architecture*, p 228
an embarrassing error in grammar

Lower Gymnasium, Priene, c 100 BC

(b) the bent-up entablature

Temple of Hadrian, Ephesus, AD c 117-125
View & reconstruction

Miles Lewis
Ramage, Roman Art, p 221
Temple of Dushara at Si, or Seea, Syria, AD late C1st

curved entablature (segmental)

arched (semicircular)

broken backward & broken forward

concave
the ressaut: Library of Hadrian, Athens, AD 131-2

Lewis, Architectura, p 175
EGYPT

Temple of Dakka, Nubia: MUAS 11,510
Temple at Kôm Ombo, north of Aswan, 145 BC - AD 14

MUAS 14367, 14,365
Temple at Kôm Ombo

MUAS 14,366, 14365
Tomb 1 of the Necropolis at Moustapha Pasha, Alexandria, C3rd BC: south side

Miles Lewis
Tomb 1, Moustapha Pasha: plan, elevation & views

A Adriani, *Annuaire de Musée Gréco-Romain* [Alexandria], 1933-5
Miles Lewis
Tomb 1, Moustapha Pasha: detail

Miles Lewis
Hypogeum 2 of the Necropolis of Anfoushy, Alexandria, mid-C2nd BC

Miles Lewis
Hypogeum 2 of the Necropolis of Anfoushy
detail & view

A Adriani, *Annuaire de Musée Gréco-Romain* [Alexandria], 1949-50 Miles Lewis
segmental pediments in Alexandria

Thiersch's Hypogeum 2, Gabbari, from Marsa Matruh, now in the Greco-Roman Museum,

Palazzo delle Colonne, Ptolemais, Libya, probably late Hellenistic plan & reconstruction

Palazzo delle Colonne, Ptolemais
reconstruction of the upper north side of the great peristyle

Lyttelton, *Baroque Architecture in Classical Antiquity*, p 54
'Baroque' pediments of the Hellenistic period
McKenzie, Architecture of Alexandria and Egypt, 91
Palazzo delle Colonne, Ptolemais
zoomorphic capital from the room west of the smaller oecus

Temple of Apollo, Didyma
Zoomorphic corner capital

Miles Lewis
Symposium tent of Ptolemy II at Alexandria, c 275-270 BC

Webster, *Hellenistic Art*, p 67
fragment of the Nile Mosaic from Palestrina.
Altesmuseum, Berlin
Villa of Publius Fannius Synistor, Boscoreale, c 20 BC: cubiculum with frescoes as reconstructed at the Metropolitan museum, New York

Webster, *Hellenistic Art*, p 137
fresco of Macedonia and Syria from the villa at Boscoreale, copied from an original of 270 BC

Webster, *Hellenistic Art*, p 40
Villa of Publius Fannius Synistor, Boscoreale: detail of a panel from the rear wall of the cubiculum, showing a pergola, mid-late-C1st BC

Villa of Publius: detail of the fresco in the cubiculum, showing comic scenery

Webster, *Hellenistic Art*, p 133
Villa of Publius: view of the corner of the cubiculum

Webster, *Hellenistic Art*, p 135
Villa of Publius Synistor, Boscoreale, panel from Cubiculum M, now in the Metropolitan Museum of Art, New York

Villa of Oplontis, Torre Annunziata, frescoes of room 15
Casa Vetii, Pompeii: Apollo conquering the python, before AD 79
House of the Labyrinth, Pompeii: fresco in the Corinthian oecus

Lyttelton, Baroque Architecture in Classical Antiquity, pl 16
Tomb of the Caetennii, under St Peter’s, Rome, mid-C2nd, diagram of the interior seen from below

Petra
Jordan
the Khasne, Petra
MUAS

frescoes from the House of the Labyrinth, Pompeii & the Villa of Publius, Boscoreale
Petra: view of the rock-cut tombs
MUAS
Nabatean Temple, Petra: reconstruction drawing of the rear wall, showing stucco decoration
Lyttelton, *Baroque Architecture in Classical Antiquity*, pl 87
'Palace Tomb', Petra, late AD C1st, detail

Lyttelton, *Baroque Architecture in Classical Antiquity*, pl 86
Nabatean Gate, Bosra, Syria, & detail of a capital

Miles Lewis
the Nabatean settlement of Hegra, Saudi Arabia
Ali Ibrahim Al-Ghabban et al [eds], Roads of Arabia: Archaeology and History of the Kingdom of Saudi Arabia (Somogy Art Publishers, Paris 2010), p 289
tombs at Hegra

Al-Ghabban, Roads of Arabia, pp 294, 34
capitals at Hegra

Nabatean capital found in Tayma, TA 975

Nabatean ionic capital, AD C1st? (not found in situ)

Al-Ghabban, *Roads of Arabia*, pp 236, 307
elephant-headed ionic capitals, from Petra Great Temple: Petra Museum

Miles Lewis
an elephant volute from the Great Temple, Petra
Miles Lewis
Marble Court, Sardis, AD 211-212, reconstruction

South Market Gate, Miletus, c 160 BC (now in Berlin)

Ramage, Roman Art, p 275
detail of the South Market Gate, Miletus propylon of the Sebasteion, Aphrodisias, AD C1st, reconstruction
McKenzie, Architecture of Alexandria and Egypt, pp 114, 113
Library of Celsus, Ephesus, AD c 110, reconstructed
Miles Lewis