

LLUSTRATED HISTORY LANDSCAPE DESIGN

Elizabeth Boults & Chip Sullivan

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ELIZABETH BOULTS and CHIP SULLIVAN



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To our parents, George and Florence Boults, and Mary Catherine Sullivan, and the memory of Charles Harvey Sullivan.

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Introduction

The constructed landscape embodies a vision of creative power. The gardens and landscapes of the past serve as an endless source of possibility and inspiration. Discovering how the elements of nature have been recombined in different times and places intrigues us. Our purpose in assembling a visual reference of historic landscapes is to provide to the reader a useful guide that captures our exuberance for landscape design.

We examine landscape history as designers, and through the language of design, which is drawing. Plans, sections, elevations, and perspectives are all useful in communicating form and spatial relationships. To this vocabulary we've added sequential drawings, to capture the dynamic experience of space.

As an art form, a designed landscape is a cultural product, representing the ideals and values of its creator, owner, or patron, and situated within a unique social, economic, and political environment. Studying landscape history can inspire contemporary designers, and help them position their work in relationship to present circumstances. Precedents can be rejected or translated into current idioms. Our experience in leading summer study-abroad programs has taught us the value of firsthand experience of historic sites. Observation and analysis (accomplished through drawing) can inform the design process and elevate the quality of one's work.

Our approach to the material outlined in this book is unique in its design focus, chronological organization, and visual orientation. Presenting landscape history chronologically enables the reader to make cross-cultural connections and to understand how common themes may manifest themselves at different times, and to appreciate design trends that are truly unique. The idea for the graphic format originated with Chip's "creative learning" comic series in *Landscape Architecture* magazine. Visual media dominates culture today. Images transmit ideas. We hope the pen-and-ink illustrations in this book provide an overview of landscape history and encourage people to investigate the landscape through the act of drawing.

The content of the book is organized by century. Each section begins with a pictograph—an idea-drawing that illustrates the important concepts of the time period—followed by an illustrative timeline of some significant events in world history. These provide a broad context in which to examine specific works. Representative examples of gardens and designed landscapes are grouped according to geographic region. Spaces are portrayed through the use of storyboards, case studies, and visual narratives. Sections conclude with summaries of design concepts, principles, and vocabularies, as well as lists of "neat stuff"—historic and contemporary works of art that illuminate a specific era. The first and last chapters depart from this format and are designed as visual chronologies—embellished timelines organized thematically.

Built landscapes tell stories; a picture is worth a thousand words. Our goal is to take the reader on a visual romp through the great garden spaces of the past. We hope our work inspires the reader to further explore the landscape and discover his or her own story.

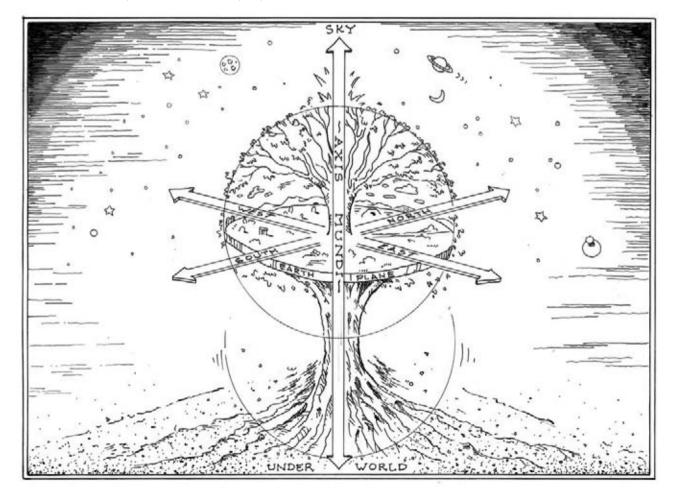


arly cultures attempted to re-create or express in their built landscapes the sacred meanings and spiritual significance of natural sites and phenomena. People altered the landscape to try to understand and/or honor the mysteries of nature. Early "landscape design" elaborated on humankind's intuitive impulse to dig and to mound. Our ancestors constructed earthworks, raised stones, and marked the ground, leaving traces of basic shapes and axial alignments. The purpose or function of many of these spaces is still conjecture.

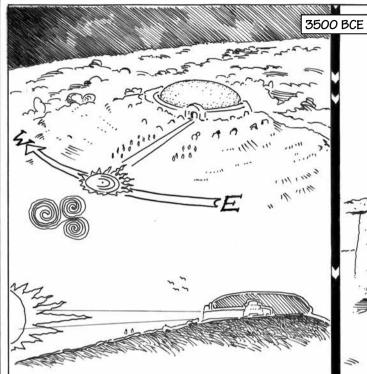
Cultural values shifted in later antiquity with the advent of philosophical systems based on a human being's capacity for deductive reasoning. People looked for rational explanations for nature's mysteries. The ancient Greeks respected nature as the sanctuary of the Gods, but equally valued the human domain. Their focus on the role of the individual in relationship to the larger community fostered democratic ideals that were revealed in architecture, in urban form, and in the consideration of the landscape as a place of civic responsibility.

The illustrative chronology presented in this chapter is organized thematically, as follows:

- Cosmological Landscapes characterizes prehistoric earthworks and patterns.
- Ancient Gardens describes early parks and villas.
- Landscape and Architecture illustrates temple grounds, buildings, and important site plans.
- Genius Loci depicts sacred landscape spaces.

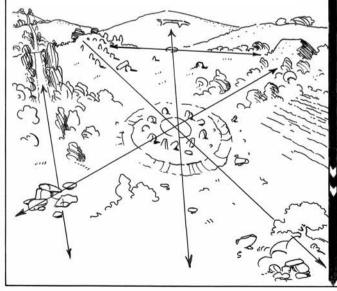


COSMOLOGICAL LANDSCAPES



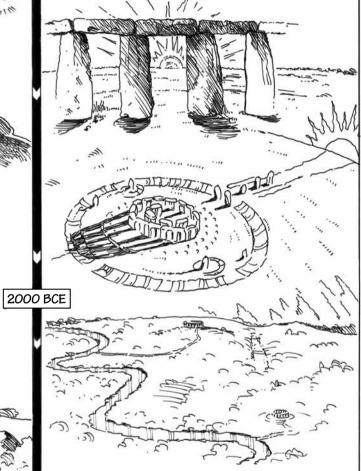
▶ 2950 BCE-1600 BCE

STONEHENGE, ENGLAND Built by different groups of people at different times, this particular site on the Salisbury plain in southwest England evolved from an earthen embankment, to a wooden structure, to the stone circles we recognize today. A circular ditch and bank (or "henge"), about 330 feet in diameter, marked the first phase of construction. Extant postholes within the circle indicate the position of a wooden structure from about 2600 BCE. The standing stones date from subsequent centuries. All the shapes open to the northeast, framing sunrise on the summer solstice.



NEW GRANGE, IRELAND

The circular passage tomb at New Grange is over 250 feet wide and contains three recessed chambers. On the winter solstice, the sun rises through a clerestory above the entryway, illuminating the central chamber. A curbstone carved with triple-spiral motifs marks the entryway.

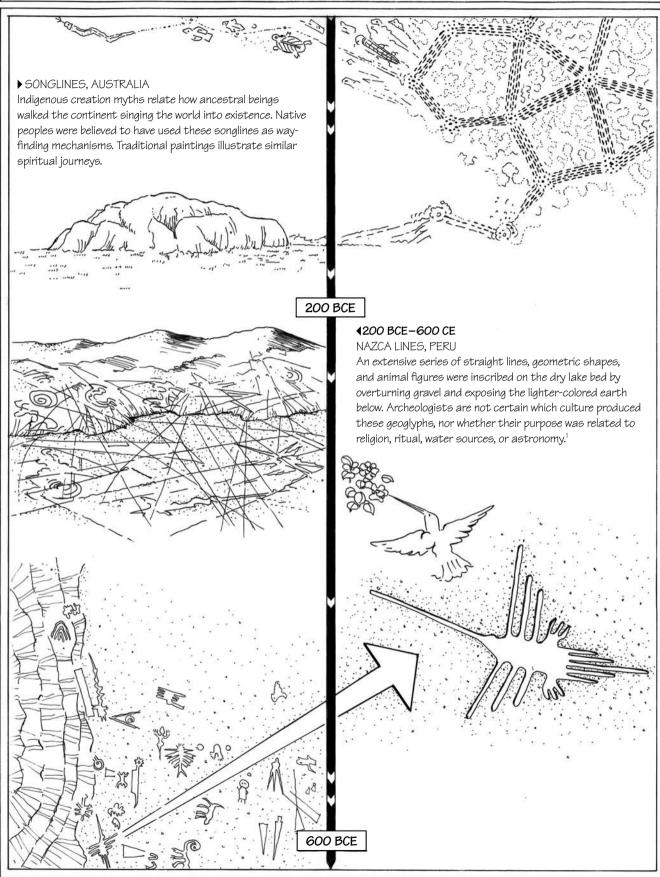


▲ Woodhenge, located about 2 miles from Stonehenge, was a timber circle of roughly the same diameter that marked a burial site dating from the Neolithic era. Sunrise on the summer solstice aligned with its entryway.

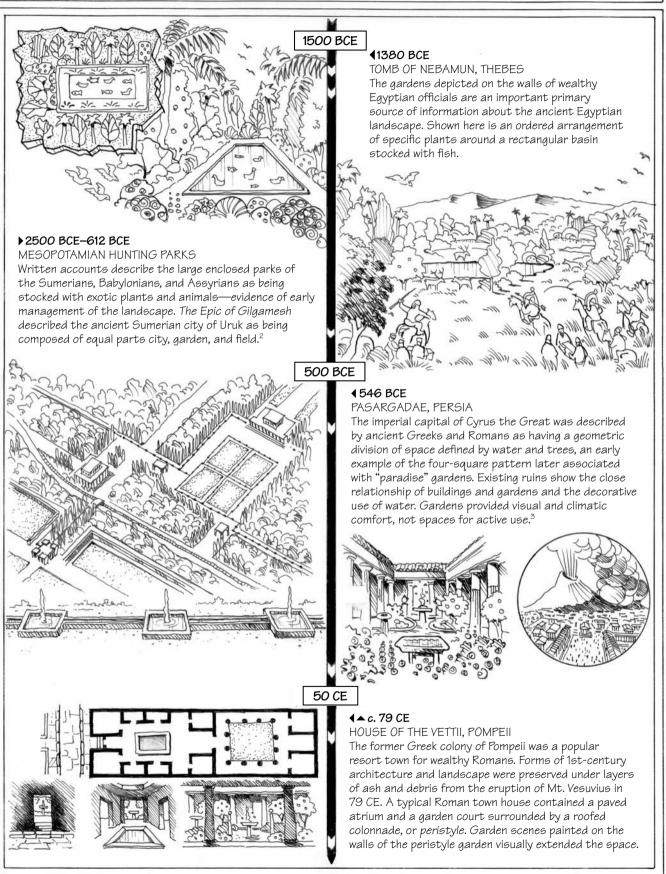
↓LEY LINES, ENGLAND

Some people believe that Great Britain and continental Europe are marked with a network of straight lines that connect geographic features and sacred sites through underlying paths of energy within the earth.

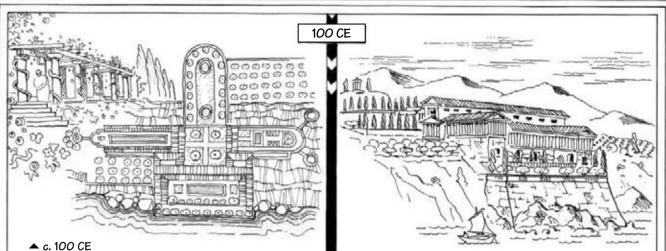
COSMOLOGICAL LANDSCAPES



ANCIENT GARDENS

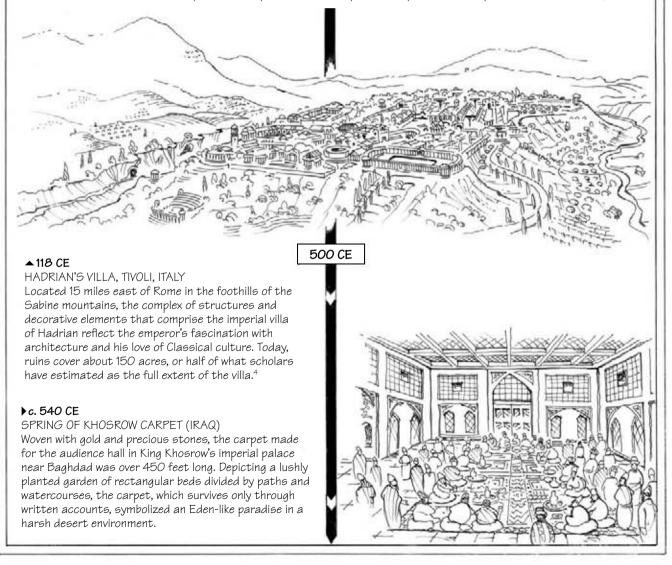


ANCIENT GARDENS

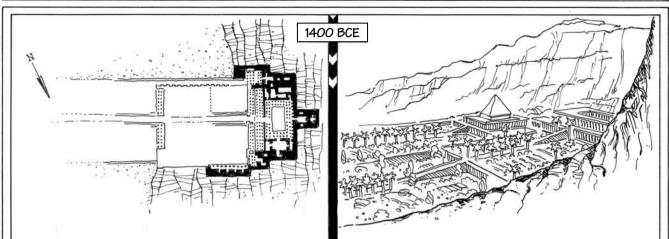


PLINY'S SEASIDE VILLA, NEAR ROME

In his numerous letters, Pliny the Younger (61–112 CE) recorded many aspects of his life and times, including detailed descriptions of his country houses and their relationship to the landscape. He planned the rooms of his *villa marittima* according to their functional and climatic requirements, and to take advantage of views. The architectural form of Pliny's villa, as well as its function as a place of escape from urban responsibility, particularly inspired Renaissance designers.



LANDSCAPE AND ARCHITECTURE



▲ 1400 BCE

MORTUARY TEMPLE OF HATSHEPSUT, DEIR EL-BAHRI, EGYPT Dramatically sited at the base of a cliff on the west bank of the Nile River, Queen Hatshepsut's tomb comprised a series of monumental terraces and colonnades symmetrically organized around a processional axis. Tomb paintings show frankincense and myrrh trees imported from Somalia; archeological evidence confirms the presence of exotic vegetation on the terraces.⁵



4460 BCE

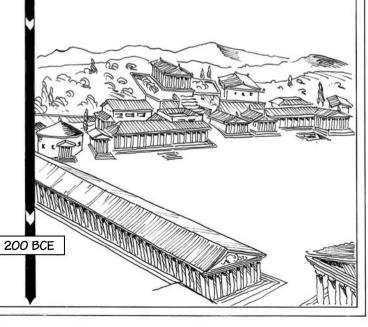
ACROPOLIS, ATHENS, GREECE

A sacred hilltop site since the early Neolithic period, the acropolis was once the location of a Mycenaean fortress. It remains symbolic of Classical Greek civilization and the architecture of democracy. Following the war with Persia, the Athenian statesman Pericles undertook a major campaign to restore the city and rebuild its temples. The Parthenon dates from this era and represents the Doric order—a proportioning system based on the length and width of the column style.⁶ The Panathenaic Way marked the route from the city gates to the acropolis.

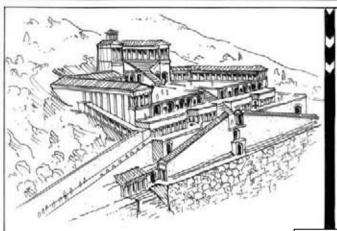
>200 BCE

ATHENIAN AGORA

The agora was the civic heart of Athens, where people gathered to conduct personal business and participate in municipal affairs. Tracing the use and development of this open space over the centuries frames an informative picture of Greek culture during the Archaic (c. 750–c. 480 BCE), Classical (c. 500–323 BCE), and Hellenistic (323–146 BCE) periods. The shaping of public space became more self-conscious.⁷



LANDSCAPE AND ARCHITECTURE



▼ **)** *c*. 100–225 CE

TEOTIHUACAN, MEXICO

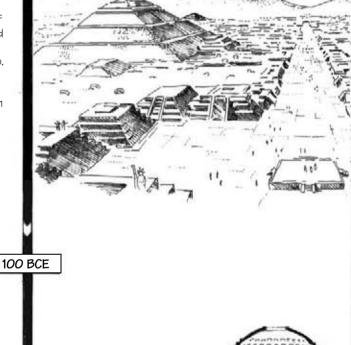
With a population of more than 100,000 people, Teotihuacan, the cultural center of Aztec civilization, was the largest city in the world during the late 2nd century. The Avenue of the Dead formed the main axis of the orthogonally planned city, which was oriented toward the cardinal directions. The Temple of the Moon was the northern terminus and echoed the shape of Cerro Gordo. The Aztecs sited the Pyramid of the Sun over a cave near the middle of the axis. The large sunken plaza, the *ciudadela*, was located across what is now the San Juan River at the southern terminus of the axis.

€82 BCE

TEMPLE OF FORTUNA PRIMIGENIA, PALESTRINA, ITALY This monumental piece of urban design combined Hellenistic principles of movement about an axis with Roman arch technology. The grand staircases, ramps, and arcaded terraces that gracefully negotiated the slope and culminated in an exedra influenced Italian Renaissance designers. The sanctuary was over 1,000 feet above sea level and visible from the Tyrrhenian Sea.







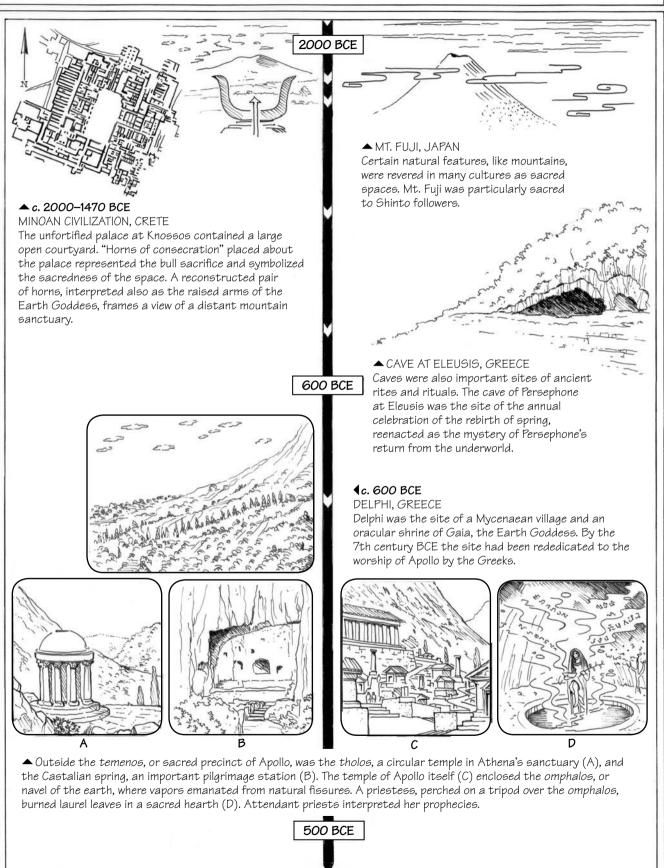


▲▶120 CE

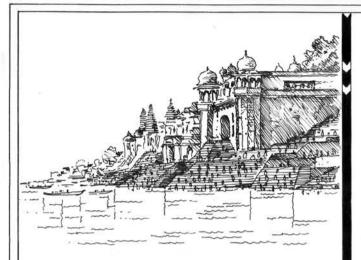
PANTHEON, ROME

Marcus Agrippa constructed a small temple on this site in 27 BCE. The current structure dates from the reign of Hadrian, and until the 15th century was the largest concrete dome ever built. The height of the dome equals its width; its proportions and construction methods were studied by Renaissance architects, particularly Brunelleschi, who designed an even larger dome for the cathedral in Florence. An opening in the center of the dome, the oculus, creates dramatic lighting and atmospheric effects.

GENIUS LOCI



GENIUS LOCI



▲ THE GANGES

More than 1,500 miles long, the Ganges River is believed to be the sacred river of salvation by Hindus. The riverside city of Varanasi became the capital of the Kashi kingdom in the 6^{th} century BCE and remains a particularly holy place of worship in northern India. The riverbank is lined with temples, shrines, and steps, called ghats.

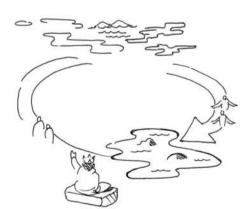


🔺 331 BCE

SIWA OASIS

Alexander the Great persevered through the Libyan desert by following birds to the western oasis, located in present day Egypt. The Siwa Oasis has been home to Berber tribespeople for hundreds of years, and was established as the site of the sacred oracle of Amun by the ancient Greeks. and a service of the service of the

▲ 563-483 BCE BODHI TREE, INDIA According to Buddhist tradition, Gautama Buddha received Enlightenment under a Bodhi tree. The tree was revered by Buddhists as a holy shrine and remains a sacred pilgrimage site.



▲ 219 BCE

300 BCE

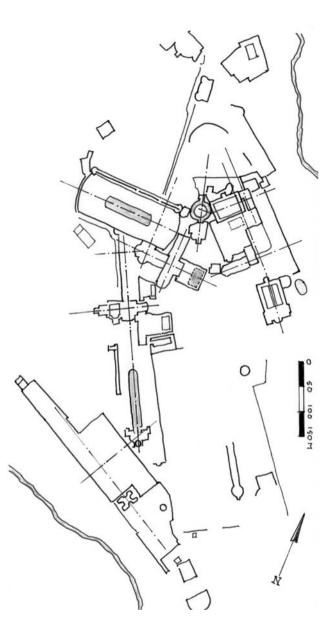
ISLANDS OF THE IMMORTALS (CHINA) Emperor Qin Shi Huangdi⁸ was obsessed with finding an elixir of eternal life. He sent an expedition to the Himalayas to locate the mountaintop dwellings of the mythical Immortals. The Immortals never materialized, but the idea of creating a simulation of their homeland was popularized in the Han dynasty. Within his imperial palace grounds, Emperor Wudi (141–86 BCE) built three artificial mountains in a lake, establishing the influential prototype of the lake-and-island garden.

CASE STUDY: Hadrian's Villa

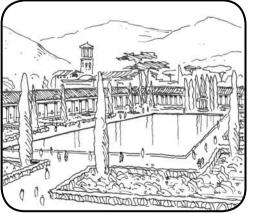
Hadrian (76–138 CE) collected ideas and treasures from places within his vast empire and reassembled them in his imperial estate near Rome. A Roman design vocabulary expressed foreign forms: the canopus (named after a branch of the Nile river) is a long rectangular canal, bordered by caryatids on one side and terminated at its southern end by an apsed nymphaeum (which possibly served as a dining room) and a semicircular colonnade at its northern end. The long stoa poekile (named for the painted stoa at Athens) provided a space to promenade year-round. The Vale of Tempe (a reference to the legendary forest at the foot of Mount Olympus), the Lyceum, and the Academy were other architectural elements of the villa that were inspired by Hadrian's interest in Greek culture.

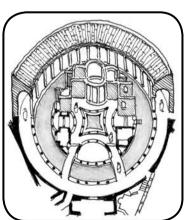
The charming "maritime theater" is a small, rounded apsidal structure on a round island surrounded by columns and a moat; its function is unknown. Baths, theaters, libraries, guest quarters, and peristyle gardens were interconnected and decorated with artworks.

Set on a prow of land between two rivers, the proximity to water was necessary for the extensive waterworks, fountains, pools, and basins at the villa. Building sites respected the natural contours of the land, while terraces took advantage of views. No organizing geometry unified the site plan, although each self-contained space was organized axially. The site was held together conceptually by its thematic associations.

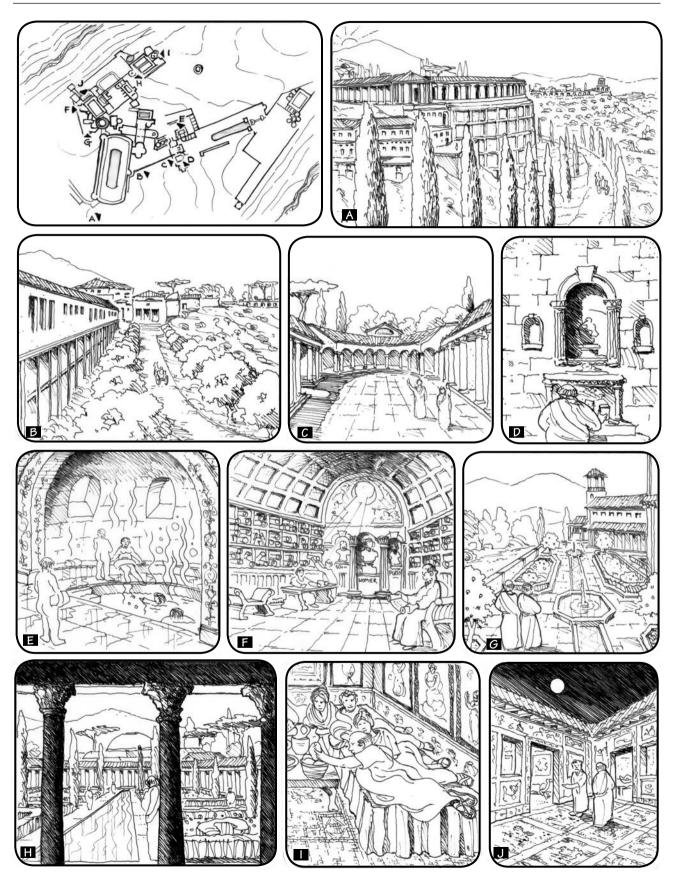








CASE STUDY: Hadrian's Villa

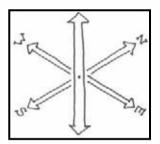


PREHISTORY TO 6th CENTURY/CONCLUSION

SUMMARY

Around 8,000 years ago, complex social systems began to emerge simultaneously in South and Central America, in Egypt and the Middle East, and in India and Asia.⁹ Early civilizations established similar ways of communicating with the sacred spirits inherent in nature. As cultures advanced and humans gained more control over the natural world, we organized the landscape for physical and spiritual comfort. The idea of the garden as a managed pleasure ground evolved from the simple enclosed hunting grounds of Europe and Asia. In ancient Greece and Rome, a new trust in human logic resulted in the substitution of anthropomorphic deities for nature spirits. Sacred structures soon replaced sacred landscapes.

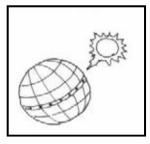
IMPORTANT CONCEPTS



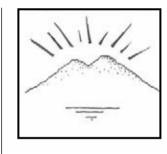
An AXIS MUNDI is a symbolic line that extends from the sky to the underworld with the earth at its center. Trees, mountains, pyramids, and earth mounds might all be considered axes mundi.



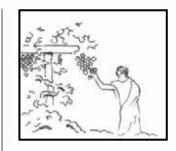
A POLIS is an ancient Greek city-state. The mountainous topography and island geography of Greece promoted the formation of independent city-states.



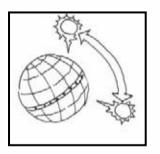
An EQUINOX is the day the sun crosses the equator, marking days and nights of equal length. The vernal (spring) equinox is March 20; the autumnal equinox is September 23.



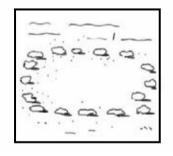
GENIUS LOCI refers to the unique spiritual force inherent in a place.



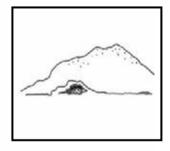
OTIUM is the Roman concept of leisure afforded by a natural setting. It is exemplified by the idea of a country villa.



A SOLSTICE is the furthest point the sun reaches in the sky. The summer solstice on June 21 is the longest day of the year; the winter solstice on December 21 is the shortest day of the year.



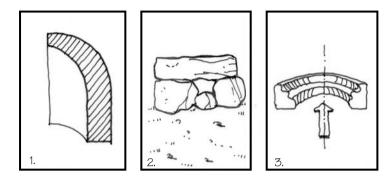
TEMENOS is the Greek word for a delimited sacred precinct.



TOPOS is Aristotle's philosophy of place as defined by specific natural features.

PREHISTORY TO 6th CENTURY/CONCLUSION

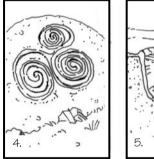
DESIGN VOCABULARY

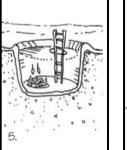


1. An APSE is a vaulted, semicircular recess in a building.

2. A DOLMEN is a stone grouping with a flat, horizontal stone on top. Dolmens were used as primitive graves.

3. An EXEDRA is a semicircular or concave shape terminating a space.

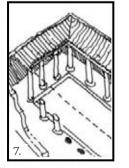




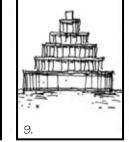
4. GEOGLYPHS are images inscribed on the earth.

5. A KIVA is a sunken or subterranean ceremonial room used in Puebloan cultures.

6. A MENHIR, or megalith, is an individual standing stone.







7. A PERISTYLE garden is a colonnaded courtyard; it was the informal, outdoor living space in a Roman town house.

8. A THOLOS is a circular temple.

9. A ZIGGURAT is a terraced pyramid form.

For further exploration

воокэ

300, a graphic novel by Frank Miller and Lynn Varley
DE ARCHITECTURA (TEN BOOKS ON ARCHITECTURE), by Vitruvius (27 BC)
EARTH'S CHILDREN, series by Jean Auel
I, CLAUDIUS, by Robert Graves
THE ILIAD AND THE ODYSSEY, by Homer
MEMOIRS OF HADRIAN, by Marguerite Yourcenar
NATURALIS HISTORIA (NATURAL HISTORY), by Pliny the Elder (23–79 CE)
POMPEII, by Robert Harris
SONGLINES, by Bruce Chatwin

FILMS

10,000 BC (2008) Alexander the Great (1956) Clan of the Cave Bear (1986) Cleopatra (1963) Gladiator (2000) Rome (HB0 TV series, 2005) Spartacus (1960) Troy (2004)

PAINTINGS AND SCULPTURE

Cave paintings at Lascaux (c. 30,000 BCE) Venus de Willendorf (sculpture, c. 20,000 BCE) Ram and Tree from Ur (Sumerian sculpture, c. 2600 BCE)

Minoan Snake Goddess (reliefs and sculptures, c. 1500 BCE)

Charioteer of Delphi (sculpture, c. 470 BCE) Victory of Samothrace (sculpture, 190 BCE) House of Livia (interior frescoes, c. 20 BCE) Marcus Aurelius (equestrian statue, 176 CE)

