For thousands of years, people have altered the meaning of space by reshaping nature. As an art form, these architectural landscape creations are stamped with societal imprints unique to their environment and place in time. Illustrated History of Landscape Design takes an optical sweep of the iconic landscapes constructed throughout the ages. Organized by century and geographic region, this highly visual reference uses hundreds of masterful pen-and-ink drawings to show how historical context and cultural connections can illuminate today’s design possibilities.

This guide includes:
- Storyboards, case studies, and visual narratives to portray spaces
- Plan, section, and elevation drawings of key spaces
- Summaries of design concepts, principles, and vocabularies
- Historic and contemporary works of art that illuminate a specific era
- Descriptions of how the landscape has been shaped over time in response to human need

Directing both students and practitioners along a visually stimulating timeline, Illustrated History of Landscape Design is a valuable educational tool as well as an endless source of inspiration.

Elizabeth Boults is a landscape architect and educator. She maintains an art-based practice in Berkeley, California, and teaches in the landscape architecture programs at University of California, Berkeley Extension, and University of California, Davis. Her subject areas include drawing, design, and history.

Chip Sullivan is a Professor of Landscape Architecture at the University of California, Berkeley. Author of several books, he is the recipient of the Rome Prize, among many other national and international awards. He currently writes an ongoing series of illustrated articles for Landscape Architecture magazine.
Illustrated History of Landscape Design
Illustrated History of Landscape Design

ELIZABETH BOULTS
and
CHIP SULLIVAN
To our parents,
George and Florence Boults,
and
Mary Catherine Sullivan,
and the memory of Charles Harvey Sullivan.
Contents

Introduction .......................................................... xi

PREHISTORY–6th CENTURY ........................................... 1
  Cosmological Landscapes  2
  Ancient Gardens  4
  Landscape and Architecture  6
  Genius Loci  8

6th–15th CENTURIES .................................................. 15
  Western Europe: Walled Minds, Walled Gardens  20
  Moorish Spain: An Indelible Influence  28
  China: Nature’s Splendor in a Garden  38
  Japan: In the Spirit of Nature  46

15th CENTURY .......................................................... 57
  Japan: Muromachi Era  61
  China: Ming Dynasty  65
  Central Asia: Timurid Garden Cities  66
  Italy: Curious Minds, Broadened Vistas  68

16th CENTURY .......................................................... 75
  Italy: The Rebirth of Rome  79
  Renaissance Gardens in France and England  93
  The Early Botanic Garden: An Encyclopedia of Plants  99
  Early Mughal Gardens: Persian Art Forms Travel East  100
  Japan: The Momoyama Era  101

17th CENTURY .......................................................... 107
  Japan: Edo Period  111
  The Mughal Empire: Sacred Symmetries  119
  Persian Gardens of Paradise  124
CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian Baroque Styles</td>
<td>127</td>
</tr>
<tr>
<td>The Flowering of the Dutch Landscape</td>
<td>133</td>
</tr>
<tr>
<td>English Gardens: A Restrained Mix of European Styles</td>
<td>134</td>
</tr>
<tr>
<td>French Classical Gardens: The Control of Nature</td>
<td>136</td>
</tr>
<tr>
<td>18th CENTURY</td>
<td>147</td>
</tr>
<tr>
<td>England: The Development of the Landscape Garden</td>
<td>151</td>
</tr>
<tr>
<td>The Landscape Garden in France</td>
<td>164</td>
</tr>
<tr>
<td>China: Qianlong’s Imprint</td>
<td>165</td>
</tr>
<tr>
<td>Early American Gardens: Homeland Traditions</td>
<td>171</td>
</tr>
<tr>
<td>19th CENTURY</td>
<td>177</td>
</tr>
<tr>
<td>England: The Victorians and Their Plants</td>
<td>181</td>
</tr>
<tr>
<td>France: Republics and Empires</td>
<td>186</td>
</tr>
<tr>
<td>Landscape Architecture in America</td>
<td>189</td>
</tr>
<tr>
<td>20th CENTURY</td>
<td>203</td>
</tr>
<tr>
<td>The Gilded Age: Extremes of Wealth and Poverty</td>
<td>207</td>
</tr>
<tr>
<td>The New Aesthetic of Modernism</td>
<td>211</td>
</tr>
<tr>
<td>Environmental Art: Nature as Medium</td>
<td>219</td>
</tr>
<tr>
<td>Artistic Trends in Landscape Design</td>
<td>220</td>
</tr>
<tr>
<td>Environmental and Ecological Design</td>
<td>222</td>
</tr>
<tr>
<td>Postmodern Landscapes</td>
<td>223</td>
</tr>
<tr>
<td>21st CENTURY</td>
<td>231</td>
</tr>
<tr>
<td>A Sustainable Earth: Ten Ideas</td>
<td>232</td>
</tr>
<tr>
<td>Endnotes</td>
<td>245</td>
</tr>
<tr>
<td>Bibliography</td>
<td>251</td>
</tr>
<tr>
<td>Index</td>
<td>255</td>
</tr>
</tbody>
</table>
This work would not be possible without the significant contributions of Tim Mollette-Parks. His input was critical throughout the entire project. Tim provided invaluable assistance in visualizing a poetic format that married word and image, and offered insightful comments on the text. His research on current work formed the basis of the final chapter.

A residency at the MacDowell Colony was absolutely essential to our completion of the manuscript. We very much appreciated the opportunity to work without distraction in a truly creative and inspiring environment.

Heartfelt thanks are due to professors Randy Hester, Joe McBride, and Marc Treib for their belief in our approach. We are indebted to Marc for his comments on the Japanese garden sections. We thank, too, Elizabeth Byrne and her staff at the College of Environmental Design library, who helped direct us to important sources within the extraordinary collection.

Elizabeth’s gratitude extends to Professor Heath Schenker, for first giving her the opportunity to teach landscape architecture history at the University of California, Davis; to Gerrie Robinson, whose commitment to teaching is admirable and whose moral support was constant; to her students, who enthusiastically embraced her approach to the subject; and to Pamela Cunningham, for expert wordsmithing. In addition, Elizabeth would like to acknowledge John Furlong, former director of the Radcliffe Seminars Landscape Design program, whose inspired teaching was instrumental in helping her discover her passion for landscape architecture.

Chip would like to thank the Department of Landscape Architecture and Environmental Planning at the University of California, Berkeley, for nurturing a place for creative expression; his students, who encourage and enrich his visual experimentations; and James Natalie, who provided valuable assistance at a crucial juncture. Additionally, the Beatrix Farrand Research Fund provided important research support for this project. Chip is also extremely thankful to Bill Thomson for publishing his comic strips in Landscape Architecture magazine, which set the gears in motion for this work. Finally, he would like to thank all the original artists of Mad magazine, who opened the door to a drawing life.
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.
Early 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.
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.

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.

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.
SONG_LINES, AUSTRALIA
Indigenous creation myths relate how ancestral beings walked the continent singing the world into existence. Native peoples were believed to have used these songlines as way-finding mechanisms. Traditional paintings illustrate similar spiritual journeys.

200 BCE – 600 CE
NAZCA LINES, PERU
An extensive series of straight lines, geometric shapes, and animal figures were inscribed on the dry lake bed by overturning gravel and exposing the lighter-colored earth below. Archeologists are not certain which culture produced these geoglyphs, nor whether their purpose was related to religion, ritual, water sources, or astronomy.
ANCIENT GARDENS

1380 BCE
TOMB OF NEBAMUN, THEBES
The gardens depicted on the walls of wealthy Egyptian officials are an important primary source of information about the ancient Egyptian landscape. Shown here is an ordered arrangement of specific plants around a rectangular basin stocked with fish.

2500 BCE–612 BCE
MESOPOTAMIAN HUNTING PARKS
Written accounts describe the large enclosed parks of the Sumerians, Babylonians, and Assyrians as being stocked with exotic plants and animals—evidence of early management of the landscape. The Epic of Gilgamesh described the ancient Sumerian city of Uruk as being composed of equal parts city, garden, and field.

500 BCE
PASARGADAE, PERSIA
The imperial capital of Cyrus the Great was described as having a geometric division of space defined by water and trees, an early example of the four-square pattern later associated with “paradise” gardens. Existing ruins show the close relationship of buildings and gardens and the decorative use of water. Gardens provided visual and climatic comfort, not spaces for active use.

c. 79 CE
HOUSE OF THE VETTII, POMPEII
The former Greek colony of Pompeii was a popular resort town for wealthy Romans. Forms of 1st-century architecture and landscape were preserved under layers of ash and debris from the eruption of Mt. Vesuvius in 79 CE. A typical Roman town house contained a paved atrium and a garden court surrounded by a roofed colonnade, or peristyle. Garden scenes painted on the walls of the peristyle garden visually extended the space.
Ancient Gardens

Spring of Khosrow Carpet (Iraq)
Woven with gold and precious stones, the carpet made for the audience hall in King Khosrow’s imperial palace near Baghdad was over 450 feet long. Depicting a lushly planted garden of rectangular beds divided by paths and watercourses, the carpet, which survives only through written accounts, symbolized an Eden-like paradise in a harsh desert environment.

Hadrian’s Villa, Tivoli, Italy
Located 15 miles east of Rome in the foothills of the Sabine mountains, the complex of structures and decorative elements that comprise the imperial villa of Hadrian reflect the emperor’s fascination with architecture and his love of Classical culture. Today, ruins cover about 150 acres, or half of what scholars have estimated as the full extent of the villa.

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.
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. The Panathenaic Way marked the route from the city gates to the acropolis.

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.
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.

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.

120 CE
PANTEON, 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.
The unfortified palace at Knossos contained a large open courtyard. "Horns of consecration" placed about the palace represented the bull sacrifice and symbolized the sacredness of the space. A reconstructed pair of horns, interpreted also as the raised arms of the Earth Goddess, frames a view of a distant mountain sanctuary.

Certain natural features, like mountains, were revered in many cultures as sacred spaces. Mt. Fuji was particularly sacred to Shinto followers.

Caves were also important sites of ancient rites and rituals. The cave of Persephone at Eleusis was the site of the annual celebration of the rebirth of spring, reenacted as the mystery of Persephone's return from the underworld.

Delphi was the site of a Mycenaean village and an oracular shrine of Gaia, the Earth Goddess. By the 7th century BCE the site had been rededicated to the worship of Apollo by the Greeks.

Outside the temenos, or sacred precinct of Apollo, was the tholos, a circular temple in Athena's sanctuary (A), and the Castalian spring, an important pilgrimage station (B). The temple of Apollo itself (C) enclosed the omphalos, or navel of the earth, where vapors emanated from natural fissures. A priestess, perched on a tripod over the omphalos, burned laurel leaves in a sacred hearth (D). Attendant priests interpreted her prophecies.
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.

Emperor Qin Shi Huangdi 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.

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 6th century BCE and remains a particularly holy place of worship in northern India. The riverbank is lined with temples, shrines, and steps, called ghats.

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.
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
**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. 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.
- **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.
- **A Polis** is an ancient Greek city-state. The mountainous topography and island geography of Greece promoted the formation of independent city-states.
- **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.
- **A Temenos** is the Greek word for a delimited sacred precinct.
- **Otium** is the Roman concept of leisure afforded by a natural setting. It is exemplified by the idea of a country villa.
- **Topos** is Aristotle's philosophy of place as defined by specific natural features.
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

BOOKS
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 (HBO 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)