I. FIRST LANDSCAPES

1. **Paleolithic Period (500,000-8000 BC)**
   About 35,000-70,000 years ago creative explosion occurs
   Cave paintings in Europe and Africa
   - Examples of cave paintings at Lascaux, France 35,000 years old
   - Considered ‘biological art’—lack geometry and contained simple curved lines
   Culture & society-Homo-erectus or homo-sapien.
   - Nomadic
   - People are hunters

2. **Neolithic Period (around 8000-4000 BC)**
   (+/- 4,000 years after the glacier which shaped our New England landscape) Culture-
   influenced by first agricultural practices
   Settlements/Village beginnings
   - Round, oriented to take advantage of sun
   - Raw materials influence village form (image = Catalhoyuk, Turkey)
   - Settlement in fertile valley
   Landscape
   - Largely ceremonial, large mounds with stone markers/perhaps burial grounds

3. **Bronze Age (around 4000 – 2000 BC)**
   Named for advancements in metallurgy
   Climate changes, deserts form, forests emerge
   Culture
   - Egypt and Mesopotamia become heart of civilization and culture in part due to the presence of fertile land
   - Migration to the favorable Mediterranean climate
   - Europe still behind – in the Stone Age
   Landscape
   - Period of geometric patterns
   - Development of megaliths (Examples)

**Menec Alignment  Carnac, Brittany**
Menhirs = single stones
Dolmens = burial ground

**Stonehenge (circa 1500 BC)**
Post & lintel construction = circular sanctuary
Believed to be a celestial clock predicting lunar eclipses
Construction tied to ancient India, believed to be engineered by an ancient civil engineer and astronomer.
Used Pythagorean theory (centuries before Pythagoras was born) to place forms.
II. ANCIENT WORLD (About 2000 BC—500AD)

1. Culture
   - Overcrowded cities evolve
   - Many overcrowded cities fail
   - Experiments with various forms of government emerge
   - Extensive public works system is established
     - Concrete emerges
     - The arch emerges

2. Landscape
   - Physical remains are of utmost importance to grasp past accomplishments
     - Gardens, parks, site design are recorded through written and verbal descriptions, no permanent vestiges remain
     - Architecture remains in the form of walls & buildings

III. ANCIENT EGYPT

1. Environment
   - The Nile river forms in equatorial lakes of central Africa and is joined by seasonal waters of East Africa. Ancient Egypt laid along the rest of its course as a linear civilization.
   - The Nile valley was highly productive due to the summer rise of over 20 feet with its annual replenishment of soil and through irrigation control.
   - At peak runoff the Nile carries 8 cubic yards of soil per second.
   - In Upper Egypt, the valley is bounded by granite cliffs - in central Egypt the valley is bounded by limestone cliffs and the lower valley is flat. To each side of the valley is desert.
   - The original natural vegetation is the palm, sycamore (Ficus sycomores), fig, vines, reeds and lotus. The sky is open and there is no forest.

2. Social History
   - In pre-history, Nomads settled along the Nile to escape the desert and became agriculturalists.
   - As in Mesopotamia, the family unit was too small to regulate the vast irrigation network and river authorities were formed.
   - A central government formed and by 3,200 BC, the Pharaoh emerged as sole owner of all Egypt, ruling an aristocratic society with a strong military and a powerful priesthood.

3. Site Design Characteristics
   - Axial schemes, Tombs & Temples relate to pyramids through the use of strong sight lines.
   - Terracing structures into the cliff
   - Walled in courts/gardens along the Nile form microclimates for plants and users within the walls
Examples:

**Temple of Queen Hatshepsut** (mortuary temple)
@Deir-el-Bahari
- **First important figure of a woman -Queen Hatshepsut.**
- During her reign she greatly advanced Egypt in a material sense and erected a splendid memorial to herself and her deeds.
- Courtyards on raised terraces w/ strong axis
- Stone ramps leading to final court—mortuary chapel
- Central processional = response to the observed 2 points, eye searches for the 3rd center point
- All buildings had to be on high ground because of the flooding of the Nile. Many temples had been built on terraces or on top of pillared corridors.
- Panoramic views from ramps and terraces
- Noted for building to site relationship
- Physical remains still evident

**Theban Court of Amenhotep III**
- Plan found as a mural painting in the tomb of a high official (mural painting) Recreational/country residence
- Canal entry connected to Nile Enclosed with mud walls strong internal focus
- - Oasis with protection from the desert elements
  - Heavily planted with trees to make the space attractive and functional for human uses
  - Ponds serve both functional and aesthetic purposes
- Layout = geometric/ bilateral symmetry, not overly creative but comfortable (left hand reflects right hand).
- Irrigation channels

**Hanging Gardens**
7th Century BC Babylon
- No remains only writings
  - One early account of the Hanging Gardens of Babylon, written about 50 BC, describes it as being 100 feet square and built up on tiers with a series of vaults to bear the weight. The uppermost vault was 75 feet high and was on the same level as the city walls. The roofs were constructed of stone beams, overlain with reeds, thick tar, burned bricks and a layer of lead to prevent soil moisture from penetrating the roofs.
- Exotic Plants
- Terraced rooftop gardens
IV. ANCIENT GREECE

1. Environment Social History
   - Consisted of the mainland & the Aegean archipelago of islands
   - Mountainous and scrubby w/ temperate climate
   - The sea encouraged navigation.

2. Social History
   - City as a space starts here.
   - City = campus of public spaces, building and monuments.
     – Agora = city center
   - Greek clarity of thought gave birth to science, mathematics and philosophy.
   - The first Olympic games were held during the Mycenean culture in 776 BC.

Two contrasting philosophies emerge around 400 BC
   - The Epicurean - started by a physicist named Epicuris
   - The Stoics - This sect was started by Zeno who taught from a porch or Stoa... thus the name Stoics.

3. Early Greek Landscapes
   Temples, Agora, Academy & Peristyle:
   - Temple: structure was repeated over and over
   - seeking perfection of a single form. Temple Site Considerations:
     - Harmony with site.
     - Relationship to the site both from seeing out and being seen.
     - Light and Topography.
     - Genius Loci = ‘Spirit of Place’ The recognition and expression of the spirit of particular places. (...think Acropolis)
     - Genius Loci ‘Spirit of Place’
   - Agora:
     - Noted for civic and religious activity.
     - Early layout was informal, later Hellenistic period it became more rectangular.
     - Temple present.
     - No physical remains of plants it has been noted that Plane Trees were planted in the Agora for shade (still used in urban centers today).
     - Early Agora
     – Forerunner to the US College Campus
• Private homes = Peristyle Home
  – Peristyle = unroofed
  – Paved courtyard w/ living space surrounding the Peristyle.
  – Views to plants in the peristyle.
  – Internal focus
  – Influenced Romans.

4. Late Hellenistic Landscape

• Attitude towards nature & beauty erodes
• Taken over by Persian/eastern influences
  – Bathing pools
  – Artificial waterfalls
  – Artificial aquariums

» City Planning
  – Hippodamus credited with Planning Miletus (in Asia Minor) and Pirene, first planned cities.
  – Elements:
    • Simple grid applied to hill/sloping site
    • Rigid plan ignored topography.
    • Streets w/ uniform dimensions
    • Standardized block arrangement
    • A block was set aside for Agora and Temple
V. ANCIENT ROME- 509 BC to (Roman Empire Falls) 475 AD

1. Environment & Social History
   - Etruscans from Asia Minor (Turkey) settle in Central Italy
   - Settle along shores of Tiber River.
   - Rome grew over 7 gently rolling hills.
   - Hellenistic styles become Roman Styles
   - Romans = attached to countryside and dominate the landscape through agricultural & engineering practices, parks and cities.
   - Romans = directed to pursuits of the world, their focus was on politics, engineering, farming and architecture.

2. Significant Achievements
   Engineering
   - Aqueduct = artificial man-made channel to transport water from one point to another
   - Roadway construction
   - Pozzolana = concrete
   Architecture
   - Arch
   - Colesium (50,000 Capacity Stadium for Spectators)
   Planning
   - Influenced by Greeks/ order/grid
   - Urban Design - Forum

3. Landscape Form
   - Formal, rectilinear layout favored for streets & public spaces
   - Standard layout in military towns was grid -- imposed by central authority throughout the Roman Empire.
   - Public urban space = Peristyle with axis = Forum.
     - Forum = Urban Center
     - Rectangular layout.
     - Strong axis.
     - Use of Peristyle.
   - Roman Domus = single family home w/ colonnaded rectilinear court = Atrium.
   - Villa gardens = planted in formal layouts, topiary common, lawns, shrubs & extensive groves of trees, porticos.
   - Landscaped parks & sports arenas common in cities.
   - Parks
4. Examples of Villa Gardens

Hadrian’s Villa, Rome

- Spaniard emperor/traveler. Villa is the largest ever.
- Oldest garden with significant remains for reconstruction. Located in Tivoli.
- Garden is a collection of spaces and recreates monuments which had most impressed Emperor Hadrian during his 8 years of travel throughout the Roman Empire.
- The garden = complex of internal spaces bearing no relationship to one another and little to the surrounding landscape.
- Most notable design feature is the strong sight lines which tie the site together thru circulation.
- Noted as an influential landscape of ancient times to later Renaissance.
- Significant Elements:
  - Painted portico
  - Canopus = Egyptian town w/ false shops
  - Piazza d’Oro
  - Natatorium = baths

Emperor Nero’s Garden

- 3000’ long porticoes
- ‘Circus’
- Obliterated communities for construction
- Remains are minimal

Roman Domus

- Typical small urban house with interior courts and gardens
- Greek influences from Peristyle.
VI. MEDIEVAL PERIOD (Middle Ages)

1. Background
   » 5th to 15th century
   » Rural & Urban expansion in Europe
   » Transition between old world and new world
   » Dominated by Christianity
   » Resulted from fall of Roman Empire (460 AD)
     – Lack of agriculture
     – Mismanagement of the empire
     – Lead pipes

2. Social/Cultural -- Early Middle Ages
   • Wandering people, no roots
   • Castle kingdoms w/ protection from outside world –wall emerges
   • Monasteries
   • Marauding bands of regional outlaws
   • Age of chivalry (Knight’s code of ethics to protect family and the king)

3. Late Middle Ages
   • People settle into trade patterns
   • Cities & nations are formed
   • Church shifts from rural monastery to urban cathedral
   • Walls loosen, people move beyond the central city beyond the wall

Aside: During the same period, knowledge, scholarship & response to civilization is centered in Constantinople -East meets West- Cities of Islam spread culture and continue to develop and advance (Baghdad, Cordova etc.)

4. Landscape
   • 5th – 11th century significant landscape development is influenced by the need for survival.
   • 11th century on = rapid colonization
     - Natural landscape of Europe is permanently altered by human settlements (ag. Practices.)
     - Only forests set aside for hunting purposes are preserved.
   • Prosperous towns
     - related to trade routes
     - defensible locations = hill tops & river banks
   • Gardens = place of retreat

5. Landscape Form
   • Landscape = organic (emotional rather than intellectual)
     - Established the aesthetic basis for asymmetrical composition based on human proportions.
     - Inspired romantic landscape of the 18th –19th century
6. Examples of Medieval Landscapes

**Monastery Landscape**
» Central area = peristyle/cloister w/ strong internal focus
  – Influenced development of walled in cities and fortresses

**Urban Landscape**
» Medieval town
  – High density settlement
  – Sited in inaccessible areas
    » Walls, moats, towers = physical barriers for protection.
    » Private homes – relate to uneven topography.

7. Medieval town/city Elements --
**Example (San Gimignano)**
• Wall = strongest single element
• Gate= place of gathering, merchants
  – Equivalent to the strip
• Street = narrow & irregular, curving=
  curiosity/ intensively human
  – Street to building proportions = human at scale
• Tower = symbol of power
• Piazza = city center, organic development.
• Focal Point = fountain & church
  – Public meeting place
  – Arsenal

8. Medieval Town/City’s impact on open space & community development
• 12-13 centuries = rise of guilds / guild of gardeners
• Increased interest in beauty of towns
  – civic pride
  – business interest in markets
  – fairs
• Highly developed civic consciousness led to piazzas (city squares)

9. Piazza Examples:

**Piazza del Campo, Siena**
» Focal point of town
» Drainage area / wasteland
» All streets lead to the piazza
» Explosion of space as one enters
» Rhythm upward spiral w/ tower at terminus
» Palio
**Piazza San Marco, Venice (St. Mark’s)**

» Grew from the porch of the Cathedral San Marco

» Originally an outdoor meat market

» 2 phases of development show painful decisions

» Later development in Renaissance placed final touches, which made San Marco the most famous outdoor spaces -- ever.

**Final Note:**

- *Universities begin at Bologna, 1100, Paris 1150 and Cambridge 1229.*
  - All grew out of the monastic cloister
  - Courtyard form

- *Final period of medieval city = overcrowded, overgrown and unsanitary.*

- *Every major city in Europe: London, Paris, Rome, Bologna, etc.*

**VII. MOORISH CONTRIBUTION**

1. **Social**

» Expansion of Islam, 7th – 15th century AD

» Moors - Muslim sect overrun southern Mediterranean coast (N. Africa)

» Moors = Muslims of mixed Berber & Arab decent

» 711 AD settle in Spain in Cordova and Granada

» Introduce new methods of agriculture & irrigation & a new wealth thru commerce

» 13th century Moors invaded by Christians

» 15th century Granada lost to the Christians

2. **Environment**

» Moors develop a distinct & highly defined design aesthetic

» Palaces = important & luxurious

» Muslim concept of garden = image of paradise

» Muslim art = produced highly abstract patterns as contrasted with Christian art.

» Persian rug design
  - Avenue of trees
  - Central focus
  - Channels

» Persian garden design
  - Influenced by desert
  - Private

» Courtyards & gardens feature water in various forms
  - Still
  - Moving
  - Irrigation Channels

» Water related to heritage

» Distinctly different than any other garden style in Spain or Europe

» Highly architectural spaces--courts/patios

» Water is the most critical element
» Water Qualities
  – Movement
  – Sound
  – Reflection
  – Functional/ ablution tank
» Water Structures
  – Basin
  – Fountain
  – Channel
» Use of Light (and dark)

3. Examples of Moorish Gardens in Granada, Spain (Alhambra & Generalife)

**Alhambra, Granada, Spain circa 1250**
» Delicate composition of introverted spaces
» Rectangular courts surrounded by thin columns, rich lace work / Arabesque
» Complexity which defies description
  – Colored tile = rich not gaudy
  – Scale = very human
  – Bldg to site relationship = geomorphic
  – Water = most precious & valuable design element
  – Light & Color = attracts viewers from one court to another
» Examples of Courts

- **Court of the Myrtles**
  » Court of Ablution
  » Myrtles = dominant plant (Myrtus communis) white flowering broadleaved evergreen
  » Movement in pool is created by fountain/basins
  » Visual interest created through reflections
    – Mirror image created by water near surface of walkway
  » Eerie feeling = visual weightlessness

- **Court of the Lions**
  • Named after fountain with lions
  • Filled with visual activity
  • Delicate columns of carved alabaster
  • Narrow channels
  • Blue tile
  • Bronze lion fountain
  • Enriched with orange trees
**Generalife circa 1350, Granada, Spain**

» Summer Palace Gardens – pleasure/retreat
» Extroverted garden because the patios provided view out into the landscape
» More strength in water use here due to availability and siting along hillside
» Playful use of water because this was a palace which was solely used for enjoyment
» Garden is sited with a strong sensitivity towards contours and has a subtle landscape influence.

- **Court of the Canal**
  • Entrance to Mosque / Ablution tank
  • Formal use of active fountains.
  • Broke with tradition, did not have the cross river (4 rivers of life).

- **Patio de los Cypresses**
  • secluded garden of the harem.
  • freeform use of water
  • very playful
  • U-shaped canal defines the space
  • Water Steps
  • edged with water in the balustrades
  • also w/ fountains in the center
4. Eastern Expansion of Islam to India:

Social History
» Mughuls
» Nomadic race of the Mongols emerge in early 13 century
» Mongols who adopted the Muslim faith
» Settled in Agra, Delhi and Kashmir, India

Landscape
» Arid with extensive mountains

Typical Persian Palace Garden Elements
• Extensive in area
• Rural location
• Sited on hillside with mountain as background
• Gardens are terraced
• Water ties design together and follows the main garden axis
• Layout is geometric with pool at base of garden
• Garden structure interrupts view at base of garden, acts as a terminus
  – dramatic enframent
  – borrowed landscape

Examples
Taj Mahal Agra, India (1630)
• Noted mausoleum
• Eastern variation of Islamic style (from Persia)
• Surprising similarity between the Alhambra Style and Taj Mahal
• Quality of weightlessness
• Shimmering reflection from pool creates a dreamlike surrealism
• Elegance of white marble = translucence
• 4 rivers of life exist here, creating 4 gardens
• Strong contrast of white marble against dark foliage and blue sky
VIII. RENAISSANCE

1. Social History
   - Begins in Florence, Italy
   - New attitude towards nature - curiosity
   - Man turns outward to nature
   - Painting of St. Francis of Assisi by Giotto: ‘Lecturing to the birds’
   - Painting of St Francis: ‘Exorcism of the Demons at Arrezzo’
   - Growth of cities outside of the wall
   - Curiosity to life outside of the wall
   - Travels and exploration
     - Marco Polo
     - Christopher Columbus
   - Reappearance of classical design concepts and forms
   - Origins of perspective illustration.
   - Beginning of modern science
   - Gunpowder developed
   - New ideas spread by the invention and use of movable type
   - Re-emergence of garden as an art form
     - Greatest gardens in all of history are created
   - Cities are improved upon

2. Renaissance People (Individuals who achieve excellence in a variety of fields)
   - Michelangelo Buonarroti (sculptor, painter, architect, poet, scientist)
   - Leonardo da Vinci (sculptor, artist, architect, engineer and scientist)
   - Raphael (Painter, architect)
   - Donatello (Painter, sculptor, architect)
   - Andre le Notre (garden designer, horticulturist, artist)

3. Renaissance Timeline
   - 15th Century begins in Italy
   - 16th Century France
   - 17th Century England

IX. ITALIAN RENAISSANCE

1. General
   - Produced 2 major Design Forms of outdoor space
     - Piazza – urban space
     - Villa gardens – home of the ruling royalty
   - Piazza Components:
     - Visual articulation of urban structure
     - ie: vistas, axis and focal points
     - Play on Perspective
     - Topographic variations
     - Extensive sculpture and fountains in urban space
Villa Garden Components:
- Rectilinear, axial garden plan
- Rigid axis, dominant focal points
- Vast scale
- Strong relationship between building and garden
- Varied use of water features
  - Still & moving fountains, cascades and pools
- Topographic variations, use of levels (terraces)
- Architectural elements important to garden
  - Bridge, pergola, balustrades, terrace walls
- Geometric control of plant materials
  - Clipped hedges, topiary/pollarding (sever annual repruning)
- Complex garden elements evolve
  - i.e: sculpture, giardino segreto, grotto, theatre, fountains

Note: more discussion on Italian Renaissance Gardens later.

2. Piazza Design Characteristics
- Originated from Medieval Piazza sites
- Clearer & refined design intentions
- Adjusted building facades & building heights = sense of uniformity
  - Repetition of design elements-columns
  - Overall efforts resulted in ordered vs. Medieval organic growth.
- Play on Perspective to make spaces appear larger or smaller
  - Key points of access to a piazza yielded unique spatial effects based on perspective principles
- Sculpture/Fountains introduced as focal elements
- Mix of old & new
- Topography is used to emphasize focal elements

3. Piazza Examples

Piazza Del Campo-Siena circa 1262–1300
- Discussed previously in Medieval Europe.
- Renaissance elements evolve:
  - Symmetry in paving,
  - Uniformity in building facades
  - And amphitheatre created by topography inspired Renaissance designers.

Campidoglio- Rome circa 1537
- Designer: Michelangelo
- Restoration design of the Capitoline Hill
- Formerly Medieval
- Monumentalizing Ancient Rome
- Most imposing civic center ever
- Model for others to follow
- 3 Phases of Development

Design Elements
- Perspective
  - Building appears closer as one enters the space
  - Steps widen to compensate for steepness
Paving gives a feeling of roundness to the rectangular space.
- Central focal element/Marcus Aurelius equestrian sculpture
  - Paving emphasizes central focus.
  - Topography reinforces this emphasis

**St. Peters- Piazza di San Pietro-Rome**
- Designer: Bernini circa 1650’s
- 3 areas
  - Retta (right)
  - Obliqua (elliptical)
  - Rustitucci
  - Obliqua
  - 2 ftns
  - Obelisk from Nero’s circus.
- Play on perspective in the Piazza Retta makes the space tight and appear closer to the viewer

**Piazza San Marco-Venice Circa 830-1500’s**
- One of the most significant spaces in the world
- 'L’- shaped, difficult shape to tie together in terms of space.
  - Feeling of continuity throughout both legs
  - Piazzetta = area w/ 2 obelisks
  - Campanile (bell tower) acts as a fulcrum – pivot point which fuses the 2 spaces together.
  - Cathedral = terminal focus of attention.
- Area between the Campanile, clock tower and flag poies in front or San marco (cathedral) ties both legs together.
- Paving breaks up space

**4. Italian Villa Gardens (1400-1600)**

**Design Characteristics**
- Hillside site – rugged terrain, panoramic view, upland climate = cooler
- Building and garden respond to the rugged terrain
- 3-4 immense terraces / giant steps embracing the area.
  - Lower = gateway garden
  - Second = house or casino *English gardens evolve here.
  - Third & forth = Bosque, secluded woodland retreat.

**Building to landscape Relationship** Building
- dominated main #2 terrace Main terrace
- dominated others
- From the building, dramatic views up and down the slope
- Plans were Axial – termini = architectural features ie. Fountain or sculpture
- Major axis going uphill across the terraces (early examples lack this). with building architecture: Buildings did not necessarily align with main axis, Shady walks, sculpture, steps, ramps, grottoes & pools, and parterres.
Garden Themes
- Water
- Sculpture
- Movement from natural woodland bosquet to formal man-made landscape

Aside: one problem with th earlier designs was that they tended to compromise formality to fit topography

5. Written Landscape Guidelines
- Re Aedificata (to reiterate) by Leon Battista Alberti
- Landscape planning for Renaissance Villas
- Derived from ancient Roman site planning methods
- ...from 10 volumes of site planning theories written by the Romans (1ad)
- entitled de Architectura
- Re aedificata contents:
  o Considered the relationship between house & garden integration of interior and exterior space
  o Soil & drainage conditions – soils most suitable for development are defined
  o Site orientation relative to sun
  o Horizontal (bearing angle)
  o Vertical (angle of altitude)
  o Site orientation relative to prevailing winds
  o Winter protection
  o Summer cooling
  o Visual considerations of blending the villa into the hillside
  o Materials to be local / indigenous
  o Availability of water.

Common Garden Terms
- Pergola: open vine clad roof or shaded passage
- Pavilion: structure for refreshments
- Water organ: water filling cavities to create a vacuum when released. Water wheel drives the key board.
- Parterre: decorative garden plot outlined with miniature hedging – clipped, internal areas w/ color
- Pollarding: severe repeat pruning of trees.
- Aviary: large netting enclosure for birds
- Gardino Segreto: secret garden, place where private discussions occurred.

6. Examples of Renaissance Villa Gardens
Villa Medici at Fiesole (early 1450’s), Florence
Designer Michelozzo
- Garden is typical of the early Renaissance
- Terrace walls exceed 40’ (medieval influence)
- Extensive system of ramps leading from one terrace to the other. Later Renaissance consisted of elaborate stairway connections
- Ramps are covered
- Hillside location/ good relationship to topography
- Excellent site selection for building to site relationship
- Stability thru linking architecture with terrain (cut & fill balance) Villa doesn’t dominate the landscape
- Excellent views across Florence--100 years before others
Villa d’Este (1550’s) Tivoli
Designer Oliveri
- Located on 5 huge terraces
- Oriented to take advantage of the Sabine Mountains
- Unique because it is cut into the topography in 2 different directions
- River Aniene was diverted to supply Water features
- Main theme is Water
- Bathing, theater grotto, canals, fountains, gallery of 100 fountains, water organ = bird sounds + more
- Enchanting character influenced by the effects of time, over growth of vegetation, lots of moss
- Very ornate and detailed in every aspect

Villa Lante (1560’s) Bagnaia
Designer Vignola
- Quintessental Italian Renaissance Garden
- Preserved in an unchanged character
- Water progression down hill is from freedom (natural) to subjugation of water in the lower terrace (controlled)
- Entrance is from a medieval town to the lower garden terrace, which contains a large pool, sculpture, urns and fountains. (This terrace is called the ‘water parterre’.)
- The second terrace contains the residence (2- casinos) which is split in ½ by the garden which runs thru it

(late Italian Renaissance)
Boboli Gardens, Florence
Located on a steep slope behind the Pitti Palace.
- Extensive excavation took place to create the terraces.
- Natural Amphitheater later addition. Original designer missed this opportunity.
- Extensive use of sculpture thru out.
- Water feature at the upper terrace contains statue of Oceanus (god of the sea).
- Planting very formal.
- Architecture tied to landscape

Villa Madama, Rome
Designer Raphael
- Designed for Pope Clemente VII
- Burned before completion by the pope’s political enemies
- Design:
  - Series of interrelated spaces threaded along sight lines.
  - Excellent example of ‘spatial sequencing’.
  - Noted for strong symmetry
  - Excellent integration of indoor & outdoor spaces.
**Villa Belvedere, Rome**
Designer Bramante
- Garden provided access from the papal residence to the papal offices. Covered walks provided good protection from the weather.
- Excellent view from the upper terrace.
- Space was used for festivals and other pomp events. Strong use of parterre & controlled planting.

**Aside:**
- Papal Garden
- Located adjacent to the Belvedere
- Garden of the Vatican City

**Villa Rotunda, Vicenza (very late Renaissance)**
Designer Palladio
- Palladio influenced our present federal architectural style
- Columns w/ dome central piece called the Rotunda.
- Classical Architecture integrated into a more naturalistic landscape. Terraces are eliminated.
- Architecture stands aloof.
- The villa marks the end on an era and opens up to new concepts—The English Landscape Gardening School.

**X. FRENCH RENAISSANCE**

1. **Environment**
- Paris Basin—Seine and Loire Valleys
- Much flat water and gentle topography
- Focus on Paris is characteristic of French life
- Natural Vegetation = Abundant hardwood forests
- Shape of gardens carved out of existing woodlands

2. **Social History**
Charles VIII (introduces France to Renaissance)
- invades Italy in1495
- experiences the effects of the Italian Renaissance
- discovers a civilization which was advanced of their own
Francis I invites Italian artists to Amboise (1515-1547)
Cardinal Richelieu comes to power 1585-1642 under Louis XIII
- he promotes national security
- ruthlessly establishes a total monarchy

Louis XIV 1661-1715
- expands French influence abroad
- encourages arts & science at home
- creates grand landscape of Versailles
French Revolution 1789
- resulted from vast expenses imposed the gov’t to manage international influence & luxuries at home
- taxation = nobility & church were exempt
3. Philosophy
- French civilization as expressed by the monarchy = materialism.
- There was less passion towards meaning & expression
- The focus was on who had the greatest & most valuable toys...

4. The Garden Landscape
Early Renaissance influenced largely by Medieval practices.
- Castle Walls
- Moats
- Internal focus – compartment gardens
  *Later Renaissance*
- Large scale projects = expressed power of the
  Totally organized space, the garden = a dominant art form
  Garden is no longer a mere extension of the house
- Garden & house are part of the total landscape composition-no longer compartments but a totally organized space
- Garden = expansion of Italian Renaissance design principles on flatter terrain
- Formal: strong symmetry between garden and house, hedges & trees clipped to control plant form
- Sculpture & fountains / works of art
  - Provide rhythm
  - Punctuate space
- **Science of Optics** is used to direct the eye and keep it from roaming
  - 100% location = apparent revelation of the entire chateau...at a glance
  - Illusion created thru perspective
  - Scale of the landscape is expanded from the house
  - Feeling of being in a heroic landscape of the gods

Early Gardens of the French Renaissance

**Amboise** is redesigned
- 1498 after French invade Italy, Charles VIII brings Italian gardeners to Castle/Chateau Amboise
- First French Chateau with signs of Italian influences
- Enlarged walls at the medieval castle to allow for the garden
- Axis and parterres present.

**Blois** – Home of Louis XII
- Further refinement of Amboise
- Medieval Compartmentation of the landscape
- Blois gardens indicate a growing admiration for the Renaissance landscape
- Main garden is trellised (Romanesque Peristyle) maintaining a strong internal focus
- Analogous to the early Medieval cloister
- Each garden was self centered and maintained an internal focus
Refinement of the French Renaissance Chateau Garden

**Chenoceaux** home of financier Thomas Bohier

- ...Then home to Francis I,
- ...Then home to Henry II, his wife (Catherine dei Medici) and his mistress (Diane de Poitiers) -1559
- Chateau & Garden = located along the River Cher
- Garden = placed on a sizable rectangular plinth (base/foundation) lifted on sturdy walls
- Tree-lined approach to arrival terrace
- No clearly developed relationship between chateau and garden

**Anet** 1550, home of Diane de Poitiers...

- First sense of spatial structure worked its way into a persistent medieval tradition
  - Height in cloister development /strong bilateral symmetry
  - Building & garden relationship
  - 2 fountains, no other vertical relief
- Early medieval shape angling around in several directions at edges
- Moat still surrounds entire site
- France reaching a point of greater wealth and political power

**Later Gardens of the French Renaissance**

- Advancements in garden art under the reign of Francois I (Late French Renaissance -- Late 1600’s)
- France reaching a point of greater wealth and political power

**Fountaine bleau**

- Set the precedence for later gardens
- Haphazard patchwork layout of gardens, water features etc
- Evolution of the **Grand** French Garden Design

**Dampierre**

- Castle surrounded by low-lying swamp land
- Swamp converted to garden water feature
- Water feature was a theatrical area for mock naval battles.

**5. Renaissance Chateau**

- Became a year round home rather than the summer retreat of the Italian Renaissance.
- Kings found it safer to live outside of Paris
- Topography of Chateau garden vs Villa garden
  - Chateau = flat
  - Villa = steep
• Water
  o French found it easier to maintain still water rather than cascades

• Views
  o were established by removing existing vegetation
  o Terraces existed, less frequent & less height
    o French develop the garden as a place to be seen-- horizontally

• Parterre = fr. bed/flowers
  o Emerges from Italy as an element to be viewed from the elevated walks
  o An arrangement of subdivisions
  o Compartiment de Broderie = a parterre treated as a whole unit
  o Further development of the parterre influence by Claude Mollet
    (text = ‘le Theatre des Plans et Jardinages’)
    o Perfect symmetry
    o Use of lavender, thyme, mint & boxwood
    o Boxwood was the best & easiest to shape
    o Trees only fastigiated in 4 corners & center
    o Later no trees

This space intentionally blank for notes:
**Andre Le Notre Garden Designer** (regarded as the greatest garden designer of the 17th century)
- Father = Chief Gardener at Tulleries
- Grandfather = under gardener at Tulleries
- This genius did not spring from uncultivated ground...

**Chateau Examples:**

**6. Vaux le Vicomte 1654-1661**

LeNotre = age 37
- Architect = le Vau
- Interior Designer – le Brun
- Owner = Pierre Fouquet (Finance Minister)
- Purchased 3 villages in the vicinity of Melun, Fr. and razed them ...because they were in the way (3000 acres = 10 URI campuses)
- Employed 18000 laborers at one time to do the work

![Vaux le Vicomte plan + image](image)

**Design Characteristics of Vaux le Vicomte**
- Not meant to culture man rather it was a pleasure garden for large outdoor parties (fetes)
- Garden offered no seclusion
- Entire garden = visible at a glance
- The vista garden begins here
- Detail was limited
- The major purpose was to stun the visitor
- Woods to either side of the parterres to frame view
- Woods served as a background for the fountains or statuary
- Woods contained hidden gardens along the main axis. (This was a descendant of the Gardino Segreto)
- Moat = re-creation of the Medieval tradition
- Canal = interpretation of French tradition (reflective element)
- House = central accent

**Louis XIV and Vaux**
- Louis XIV did not attend the first Fete at Vaux
- Outraged about comments on its magnificence, Louis XIV proposed that Fouquet have another Fete...with the assumption that the magnificent garden would have been turned over to the King
- Unwilling to relinquish the garden, Fouquet was imprisoned a month later where he lived in total seclusion for his remaining 19 years
- Louis XIV eventually took the entire court of artists, writers (those whose reputations were made at Vaux to his modest court at Versailles)
7. Versailles (begun 1661)
- Home of Louis XIV
- After witnessing the perfection of French style at Vaux, free from Italian influence, Louis XIV had appropriated LeNotre, LeVau and Lebrun
- The culmination of LeNotre’s work
- Exceeding Vaux and other previous working in scale and magnificence. Originally a family Hunting Lodge, built by Louis XII
- LeNotre brought in 1200 trees from Vaux and sculpture
- **Scale of Work**
  - 4000 acres of garden (greater than 10 URI
  - Campuses in area) Palace frontage 1/3 mile long
  - Palace enlarged to accommodate more than 1000 people Grand Canal over 1 mile long with 98 miles of fountain piping **Design:** (Refer back to Design of Vaux plus the following) Patte’ d’oie—Goose Foot
  - Grande Allee’—Enframed Vista with controlled views outward
  - Water canal and Swiss Lake
  - Everyone must be seen, garden was to be viewed as a whole from the house. Proportions disciplined
  - Mirrors of water pools
  - Fine architectural composition-refined finishes, not coarse like Italian
  - Refinement of parterre art—lighter and more delicate
  - Flowers become more profuse.
  - Extensive pruning/shaping of trees and shrubs

8. Chantilly 1670
- Owner: Grand Conde` (french general)
- Louis XIV provided him with a place of rest
- Conde` preserved the existing triangular shaped chateau
- Chateau is not central to the garden like Vaux & Versailles
- LeNotre laid out the gardens in a fanwise pattern from the chateau making it the center point
- Beauty of gardens derived from the abundance of water works
- Fountains created by diverting a spring and river (la Notte) with the assistance of a Dutch hydraulics engineer
- Considered by Le Notre to be his masterpiece
- Considered to be the most beautiful marriage between Art and Nature
XI. RENAISSANCE GARDEN ART:

1. Germany & Austria
   - Influences
     - Dutch Artists
     - LeNotre
   - Contributions
     - Writing on design theory
     - Development of Horticultural Science/Botanical Garden
     - Hydraulic Garden Devices
     - Topiary work to extremes

2. Holland
   - Influences
     - Renaissance garden miniaturized to ‘Pleasure Yard’.
     - Flower Cultivation
   - A garden of things without spaces—ie:
     - Living tree houses
   - Fish ponds
     - Gazebos
   - Contributions
     - Serpentine brickwall
     - Gazebo development
     - Calirvoyee—iron grill in wall at the end of an allee’
     - Sundials & silver balls
XII. ENGLAND 1550-1800

1. **Social History**
   - Dissolution of monasteries and break with Catholicism 1500’s—Henry VIII divorces his wife Catherine and excommunicated from the church 1536.
   - Henry VIII took over Hampton Ct., Introduces Renaissance mid (1500s), until this point few signs of the Renaissance are present in England.
   - 16th-17th century new wealth, parliament and monarchy are dissolved = political unrest
   - 16th-17th century, laws of science are established by Galileo (Italy), Newton (England).

2. **17th Century**
   - Modern philosophy founded (Descartes, France—‘I think, therefore I am’ – affirms our individual existence)
   - War with France
   - Elizabeth – flower lover, est. country living tradition—Elizabethan period...
   - Italian & French gardeners imported, gardens are walled extensions of the house, rich in flowers.
   - Charles II Imports Versailles gardeners to acquire LeNotre’s principles.

3. **Landscape**
   - As was the case in Italy and France, Renaissance ideas had to fit the English landscape.
   - English landscape differed greatly from French & Italian
     - No long vistas
     - Consisted of rolling hills & meadows
     - Mostly open loosely vegetated
     - No real extensive (long) vistas (French).
     - Good opportunity to use more of the landscape as part of a garden.
     - Maritime Climate is cooler and damper.

4. **Examples of English Gardens of the 17th century**
   *(France leads in garden design and Horticultural practices at this time)*

**Hampton Court (1699)**
- Tudor Palace
- Laid out as a Versailles type garden
- Lacks the existing forest
- Lacks the charm detail and le Notre’s hand
- Not conceived as a whole. They were more a succession of parts, each attractive in themselves, but without any interrelationship to each other
- Elements:
  - Circular geometric pond garden.
  - Raised Bed—from Romans, necessary to protect flower beds from careless horsemen, pedestrians and animals
  - Labyrinth, or maze
  - Knot Gardens/parterres, designed by the sons of Claude Mollet
**Montecute (late 17th century)**
- Tudor Garden design
- More formal garden Italian influence
- Much color
- Terraces extend building to garden, tie spaces with sight line

**Hatfield House (late 17th century)**
- Bit more elaborate than Montecute
- Parterres & elevated viewing areas
- Mixed Italian and French influences

5. Examples of Gardens 18th Century

Social History:
- England sees the restoration of the Royal family, the monarchy and parliament.
- Surge in development of country homes
- French formal design becomes the fashion initially
- Seeds are sown for design revolution from formal design to informal design during this period

**Bramham Park (early 18th Century)**
- Early experiment w/ building / garden integration
- Residence not aligned with garden
- French Influences:
  - Flat water & T-canal
  - Parterre & Tall hedges
  - Allee’ poorly related to central focus of the design
- This period garden gave the impression of piecemeal growth, even when they were conceived as a single landscape.

XIII. THE MODERN WORLD

(Late 18th Century Gardens: the English Revolution—or Informal or Romantic period)

1. Period of Revolutions
- Social Political Industrial
- Landscape
- **English Landscape Gardening School** emerges.
2. Events which influence formal to informal change:

a. Critical essayists writing against formalism state:
   - ‘Nature abhors the straight line’ Addison & Steele
   - ‘Nature and art should imitate each other’ Kent
   - ‘The waving line is the way to beauty’ Hogarth
   - ‘Chinese conceal their art, laugh at plantations of the west... Italian gardens in neglect show a pleasing natural quality’ Addison

b. Travel & reflection
   - Visits to China—asymmetrical design experience
   - ‘Grand Tour’ of ancient Greek and Roman sites

c. 17th century romantic painters
   - Claude Lorraine
   - Nicholas Poussin
   - Salvadore Rosa

d. Other events:
   - Queen Anne declared a dislike for the smell of boxwood (leads to a major reduction in parterre gardens)
   - Palladio’s work generates renewed interest in western classicism England
   - emerging as a major world power needs its own ‘national style’ Increase in scientific endeavors ‘age of enlightenment’

3. Landscape design & nature
   - Natural informality to replace rigid societal orders of the ruling class (opposed the monarchy).
   - Landscape design becomes sympathetic to nature but is not grounded in ecological principle. Nature = assymetry = beauty in nature.

4. Design characteristics
   - Gardens appear to be part of the total natural/cultural landscape
     - Strive to create natural bucolic/pastoral scenery
     - Elimination of fences and walls with the HA-HA—
     - Sheep & cows appear to roam freely
     - Landscape components = meadows, ponds trees = deep association with land and tradition of country living.
     - Literary attitude towards nature (no relationship to the true science of the natural world)
     - Individual views = beautiful like paintings—lack spatial organization
     - Represents an effort to more picturesque
     - Abundance of romantic fakery--trophyism ie
       - Ancient ruins of castles and temples
       - Tombs to imaginary heros
       - Hermitages-hermits employed to reside in caves
       - Grottoes
       - Dead trees
       - Chinese pagodas
5. Leaders of the Garden Movement in England

**William Kent**
- Painter with an interest in pictorial composition
- Introduced the concept of gentle disorder
- Work is characterized by aimless winding paths, lakes with small waterfalls, dead trees ...to give an air of truth to the scene
- Open lawn

**Lancelot ‘Capability’ Brown**
- Follower of Hogarth’s theory on the curving line
- Used the ‘Belt’, a winding path around the perimeter of the property
- Noted for his artificial lakes and winding watercourses
- Nickname ‘Capability’ he would always state ‘The garden has Capabilities’
- Garden shifts to park, the park is closer to nature

**Humphrey Repton** (defended Brown’s work)
- Slowed down the rate of formal garden destruction
- Professor of landscape gardening
- Worked with both disciplines of landscape painting and landscape gardening
- Wrote extensively on ‘how to do it’ –Red Books
- 3 basic rules:
  - display beauty, hide defects
  - hide boundaries
  - feature art-decayed & organic aging

**Henry Hoare**
- Painter – garden designer
- Recognized for one significant work: **Stourhead**, his home/garden.

6. Garden Undressed vs Garden Dressed
2 schools of romanticism
Content vs Form
- content = undressed/picturesque involving the intricacies of nature
- Form = dressed/influenced by architectural form & working with clumping trees
- (advocates of the dressed = Kent & Brown)

7. Garden Examples
**Stowe**
3 designers-3 periods
a. **Bridgeman**
- Layout =Straight + wobbly lines
- Use of Ha-Ha to break the boundary of organized spaces
b. **Kent**
- Removal of all geometric lines noted in Bridgeman’s plan
- Open lawn, winding paths, natural edge to water features emerge w/ gentle disorder...
c. **Brown**
- removal of rectilinearity/ garden layout becomes curvilinear
  - Brown Lake
  - Brown Belt
Blenheim
- Late 1700’s one of Brown’s most accomplished works
- Preserved some formality
- Motheaten allee’ is employed
- Brown lake creates a perfect setting for the VanBrugh Bridge
- Striking pictorial compositions of pastoral romantic scenery due to Brown’s unusual ability to compose Photos provide living proof of this today

Stourhead
- Late 18th century
- Designed by Henry Hoare
- Design theme = mythological allegory of Greek elements
- Picturesque images of temples, bridges and plantings as one walks around the central lake.

XIV. JAPAN (aside: we will return after this overview of Japan)

1. Environment
» 3 main islands - about 1,000 miles long and 150 miles wide (size of California)
» Bordered on the west by the Sea of Japan and Korea, to the east by the Pacific Ocean.
» The landscape is varied but small in scale.
  – There is a central spine of mountains and valleys with Mt. Fuji the highest.
» 1/8 of the land is cultivated, mostly rice, but the major food staple is fish.
» The climate is humid but varies from North to South.
  – Mountains influence climate. West = Moist, East = Drier

2. Social History
• Mongolians, probably from Korea
  – Society was aristocratic.
  – The Emperor was considered divine.
• Japan was culturally overwhelmed by China during the Ancient period (5th -12th centuries) and especially by the introduction of Buddhism in 550 AD.
• Shogun ruled from the 8th - 15th century
  – It was a feudal period similar to Medieval Europe only longer and with more artistic expression than Europe.
3. Philosophy

- Basic religion was Shinto
- Concerned with the elements of the universe as a whole possibly due to the dominance of the sea and sky.
- Buddhism and Taoism were introduced from China and blended with Shintoism.
- All of the sects of Buddhism impacted the Japanese environment, but none as much as Zen.

4. Architecture and Landscape

- Cannot separate architecture and landscape. One is so much a part of the other

5. Garden Landscapes

Zen Buddhism

- Influences secular landscape gardens
- Meditative in nature

Basic Elements

Symbolic Agriculture

- Land & water
- Efficiency / compact

Simplicity in all things

Distortion of scale

- use of elements in the foreground which distort scale and help extend the site

Sense of timelessness / Design must appear eternal

- Use only materials which will not destroy timeless character (stone-rock appear eternal)
- Stone = natural sculpture, an element of beauty and art
- Stone pathways tie a design together, keep users on the trail
- Stone was to Japan what trees were to England
- Contrast yin/yang

6. Garden types

- **Tea garden** = picture garden, fixed viewing position
- **Stroll garden** = garden for viewing from specific locations
- **Zen garden** = dry garden

7. Examples: 14th – 16th centuries: MUROMACHI

Golden Pavilion & Landscape

- One of the most celebrated buildings/landscape in Japan
- Purpose: it enshrines Buddha’s ashes
- Contemplative / Static Garden
- Building sits on a large pond, ½ in water ½ on land
- Pond mirrors the building and surrounding
- landscape/makes it appear larger Vistas from the building and exaggerate the sense of distance across the water Composition creates an impression of an untouched natural area.
Silver Pavilion & Landscape
- Similar to Golden Pavilion but oddities:
  - Expansive raked sand area
  - Contradicts the tradition of harmony with nature. This garden is not to be viewed from one point but rather unveiled from many points. It became the forerunner to the Stroll Garden.
  - Building is a temple.

Katsura Imperial Palace at Kyoto
- 17th-19th centuries EDO
- Stroll Garden (picture garden) evolves.— Katsura
  - Imperial Palace at Koyoto Nature turned almost completely upon itself to give a sense of boundlessness. A picture garden with stone pathways leading to various view points.
- Other elements:
  - Strong internal focus
  - Tea pavilion = religion
  - Moss garden = timlessness
  - Stone bridge = crossing time
  - Laver = cleanliness
  - Lantern = focal point / ceremonial
  - Stone path = time line

Ryoan-ji
- Dry Garden = Zen Garden.
- Ryoanji means Peaceful Dragon Temple
  - Dragon = symbol of energy in the earth
- Philosophy
  - The Zen garden linked mind and universe.
  - Focus was on the spirit of things & ignores form...the Geode & the Red Chili Pepper
- Static garden for mindful contemplation
- Landscape = high level of abstraction and simplicity
  - Garden represents infinity
  - Pond is eliminated and substituted with raked sand
  - Rigid placement of boulders = mountain tops or islands in the sea
  - Little color, monochromatic
  - Interpretation of garden left to the beholder
Aside: Tea Garden
- The **Tea ceremony** evolved through the practice of Zen
- Tea was consumed to maintain extended periods of wakefulness and concentration
- Tea use became ceremonial
- Tea House = A room detached from the house connected by a path
- Tea garden emerges as a path to the tea house
- Concerned with movement and transition (physical and psychological)
- Transition from formal at entrance to informal at the tea house.
- Placement of stepping stones caused pedestrian to view each step and then look up to see a new vista or garden feature
- Garden takes the visitor into a feeling of euphoria
- Special elements:
  - **Sabi** = organic aging – moss on rock, rust (…to do nothing is to do something)
  - **Wabi** = rustic solitude – bucolic scheme, loneliness
  - **Yugen** = mystery— use of water to float buildings.

XV. 19th CENTURY ENGLAND

1. Gardens & Parks (eclectic)
- Most landscape development focused on Urban City Parks
- Design based on previous English gardening principles
- Park movement grew out of upper class reformer’s demands for better living conditions...parks were an easier solution to employment problems rather than shorter work days
- The park emerges as a place for all
- Royal Gardens were engulfed by public use. First visitation, ultimately through precedent of use
- Utopian movement: residential blocks with common open space and park grounds
- Birth of city planning & zoning (rise of utopian schemes)
- Purpose was to mitigate problems which grew out of the Industrial Revolution.
- City Planning:
  - Regents Park 1830,
    - Designer: John Nash
    - Land zoned for park & residential
    - Real Estate venture, open space increased value of homes
  - **Industrial City**—Emerges as a result of the Industrial Revolution
    - Overcrowded
    - Dirty
    - Disease ridden
    - **...Leads to the Rise of the 'Utopian City'**
      - Retained green space
      - Limited population
      - Separated residential from industrial land uses
      - Public ownership of the land
      - Paved the way for modern day city planning concepts.
2. Examples of Public Parks & Planned Cities

**Victoria Park: 1840s**
- Designer Pennethorne
- The modern world’s first public park
- Gardenesque Style
  - Formless and emphasized horticultural virtues of plants rather attempting
  - Plants are viewed as soldiers in the landscape.
  - Shotgun appearance of plantings
  - Very unnatural
  - Lacked spatial organization
  - Overdone
- Poor example of design for such a milestone

**Birkenhead Park: 1840s**
- Designer Joseph Paxton
- Landscape Gardening School Style (Brown and Repton)
  - Curving lines emphasized in roadway layout
  - Lack of spotty planting
  - Strong sense of spatial definition created by extensive plantings
  - Lakes are weak, too linear
  - Development along main carriage drive makes it difficult to determine where park really begins

**Note:** Critique of the above parks should take a back seat, what is most important is the fact that they actually came to exist for the common/working class in response to a growing need for the working urban population to connect with nature—close to home.

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XVI. AMERICAN ORIGINS

1. Colonial America - 18th Century:
   - Landscape reflects cultural background of early settlers
   - Renaissance England, late Renaissance France
   - Religious beliefs—Puritans, Quakers
   - Landscape development strongly influenced by
     - Climate (north vs south)
     - Geology (stone walls)
   - Expression of new freedom
   - Early settlements in a village/farm layout
   - Village Commons w/ residence, narrow & deep lots
     town w/ church & steeple
   - Symbol of democracy – each town member shared the common
   - Common pasture land
   - Farms surrounded the common
   - Scattered farms become separate kingdoms
   - Survival = key consideration, no time for aesthetics
   - Home simple, often adjacent to or attached to out buildings
   - Around home & out buildings = functional use areas / yards
     - Door yard- arrival wood cutting, butchering, large trees & shade
     - Barn yard- enclosed for animals
     - Drying yard- enclosed for protection from animals
   - Term yard today can be traced back to door yard

2. Colonial New England Gardens = 2 types
   a. Functional
      - Vegetable crops/ good soil, good sun walled, formal layout (reflects European heritage)
      - Formal layout = most efficient
   b. Aesthetic
      - Flower – later development (18th cty)
      - Life becomes less of a struggle for survival—more leisure time to create gardens.
      - Gardens located at the front entry of the house w/ walk, usually enclosed with a fence for protection and formally laid out.

3. Colonial Southern Plantations
   - Symmetrical layout, house garden & landscape
   - Spanish & French influences
   - Plantations = more expansive due to favorable climate and slave supported culture.
   - More lavish & elaborate than north
   - Less enclosed with a strong outward focus
   - Porticoes and verandas = front of house

4. 18 – 19th Century
   National Landscape Style Evolves
   - Washington Influenced by English Landscape Gardening School
   - Jefferson (landscape of security and contemplation)
   - L'Enfant (French monumental grandeur/design of the US Capitol)
   - Andrew Jackson Downing (earliest US LA/gardenesque style)
   - Frederick Law Olmsted (landscape of temporary escape from urban conditions)
5. **Examples (18th century):**

**Mt. Vernon**
- Washington
- Originally formal and squared, grounds are reshaped to reflect a more naturalistic style
- Large bowling green space formed with serpentine avenues along the edges
- Large trees along edges for enframement.
- Early American Estates = imitation of their English predecessors of the late 1700’s and early 1800s

**Monticello** Thomas Jefferson's home
- Palladian
- Bldgs & Gardens terraced into sloping hillside
- Village for slave workers integrated into hillside

6. **Planning (18th century): Philadelphia**
- Wm. Penn
- Typified right angle streets paved w/ brick and Belgian block
- Houses of brick
- White leaded paint on trim
- Use of false facades to maintain a unified street line

**University of VA.**
- Jefferson
- Palladian Vernacular
- Bldgs & courts terraced into hill side.

7. **Planning (late 18th Century, Early 19th Century)**

**Washington D.C.**
- Designed by Pierre L’Enfant
- French Grand style
- Buildings & roads have a very human scale
- Radial Grid with nodes
- Tree lined boulevards

8. **Key Individuals Influencing the 19th Century Landscape Development**

**Joseph Loudon – horticulturist**
- Worked with symmetry (when necessary) and natural configuration for majority of landscape
- Spokesman for Gardenesque School in US
- Largely responsible for introducing flower beds into the landscape
Bernard McMahon- published first book on Horticulture in US 1830
- The American Gardener’s Calendar
- Site planning for the American Home landscape.
- Place building on higher ground for better health
- Grass lawn in front of the residence-sense of community
- Locate plantings along property lines

Edwin Beard Budding & John Ferrabee Invent the lawn mower 1830
- Prior to this, lawn was a meadow and required grazing animals and scythe
- Lawnmower permitted lawn to become part of everyone’s residential site
- Lawn mower brought back a sense of formality to the garden.

Andrew Jackson Downing- popularized writings of Loudon & McMahon. Mid 1800’s
- Architect who became involved with garden design
- Wrote extensively on landscape gardening
- America’s first Landscape Designer
- Catered to the elite
- Design work characterized by naturalistic & gardenesque approach:
  - Worked w/ architect Calvert Vaux who later became Central Park, NY architect. Died in a boating accident on the Hudson 1852
- Relied upon principles introduced by Loudon, McMahon & Downing but became more ornate.
  - Intricately patterned flower beds
  - Wrought iron fence designs
  - Water fountains
  - Victorian gardens were an experiment in appearance and an expression of the new wealth.
  - Expansion of trade to Orient & growth of the Nursery Industry introduced a new palate of plant material
  - 2 elements of Victorian Gardens:
    - Carpet bedding: -- intricate geometric pattern on a slightly mounded ground plane to make the composition more visible
    - Foundation Planting – driven by the gravity air furnace & building cellars, to make excavation minimal for basement foundations were taller (3’-4’), Plants placed to reduce impact.

XVII. AGE OF OLMSTED

1. Fredrick Law Olmsted
- Son of a Connecticut Farmer
- Wrote: Walks and Talks of an American Farmer in England – 1852
- Traveled extensively throughout Europe
- Olmsted wrote extensively about setting aside open space...
  - ‘...saving a piece of nature for all to enjoy and find mindful relaxation for generations to come.
  - (considered the burgeoning population of cities)
2. Works:

Olmsted & Central Park

- 1857 Olmsted appointed superintendent of Central Park, NYC
- Several months after his appointment, he entered a design competition with Calvert Vaux for the design of Central Park
- In April 1858 –33 plans were submitted, Olmsted and Vaux’s plan #33 the ‘Greensward Plan’ won.
- Olmsted had a run in with the chief engineer of the park who also submitted a design...
- ...In May 1858 the posts of superintendent and chief engineer were abolished and a new position ‘Architect in Chief of Central Park was created (for Olmsted)... Civil War slowed down work
- Olmsted takes a leave of absence to work in Washington, DC for the Red Cross
- Much corruption w/ NYC Politicians.
- Eventually in May 1863 Olmsted & Vaux submit a letter of resignation on the park project—Signed ‘Olmsted & Vaux Landscape Architects’

Design Elements of the Greensward Plan:

- Below Grade transverse roads at regular intervals to provide for movement within the city
- Transverse roads with no apparent grade change (this provided for a comfortable and safe separation of vehicles and pedestrians)
- Boundary planting and walkway (Brown Belt) provided a visual sound buffer from the city & inward pastoral focus.
- Vistas & Views of natural scenery –a relief from the rigid city grid
- Grand Avenue—‘allee’-mall for strolling
- Long winding carriage paths provide a source of delight & pleasure.
- Bridal trails
- Pedestrian walkways – up & around various grade changes for the pleasure of casual strollers
- Parade ground – room for marching troops
- Playgrounds for active play
- Lakes for boating, vistas and ice skating in the winter
- Flower gardens & arboretum for those who wish to acquaint themselves with trees, shrubs & flowers
**Olmsted & Prospect Park**

- 1865—Olmsted & Vaux asked to design a new park in Brooklyn—

**Prospect Park**—considered to be superior to Central Park

- Superior due to:
  - Lack of political corruption experienced in Central Park
  - Easy workable site unlike Central Park w/ rock, steep terrain and thin soil cover.
  - Central Pond does not divide the park like the reservoirs in Central Park
  - Prospect park did not have to follow the ‘Grid’

**Olmsted in Boston**

- Public Park system established 25 years after Central Park
- Fens = Marshlands of the Back Bay area was his first major project. The Metropolitan Parks System of Boston began here
- From the Boston Public Garden& Commons to Back Bay to Jamaica Park to the Arnold Arboretum to Franklin Park this string of open spaces was affectionately called by locals the **Emerald Necklace** which was connected by parkways.
- Established his permanent home and office in Brookline

**Columbian Exposition 1893**

- To celebrate the 400th anniversary of Columbus discovering America. Display of industrial progress & Art of countries throughout the world Olmsted involved with site planning and design of the Expo.
- Developed a uniform architectural style, color building heights and linked lakes & ponds with the Expo.
- Opportunity for design professional to pool ideas through a collaborative effort between landscape architects, engineers and architects.
- Olmsted consulted with Burnham & Root Architects
- American Academy in Rome was established as a result of this joint collaboration in 1894
- Jackson park was selected to be the Expo site.
- 1 year from concept to construction
- Buildings were temporary and constructed of a fibrous building material and plaster called Staff.
  It was applied to a metal mesh which covered the skeleton of the structure
- Classical architecture was selected and reflected 50 years of eclecticism in the US
- Result of The Columbian Exposition of 1893 was that it aroused a new attitude amongst the public as to what design could do for the American town and city. Triggered the McMillian Commission to revive the L’Enfant plan for Washington DC. Malls, roads and comfortable proportions.
- Olmsted and 10 other individuals founded the ASLA in 1899. Amongst the first membership was Beatrix Jones-Farrand
- FLO Jr. established the first academic program in Landscape Architecture at Harvard in 1900.

**Riverside, Ill. 1869: Suburban Development**
- Designed by FLO
- Centered around a railroad station
- Site sensitive design
- Curved roadway network
- Openspace preserved where least suitable for development
- Rectangular house lots Feeling of organization
- Real estate venture
- First example of employing a LA to master plan for a total community design—real estate subdivision project

**XVIII. 20th & 21st Centuries**

1. **Beaux Arts Period: 1900-1930**
   - First period of University training
   - Period of large residential country places elaborately designed and furnished
   - Landscape architecture becomes a profession which services the wealthy during this period.
   - Fletcher Steele & Beatrix Jones Farrand
   - Beaux Arts ends abruptly with the Great Depression in 1929.
2. **Parks Phase: 1915-1940**

- National Park Service formed: now the largest single employer of landscape architects.
- 1921 Stephen Mather, head of the NPS lead efforts to organize state park systems:
- 1920’s Jones Beach on Long Island developed by Robert Moses in response to the motorcar.
- 1933 the C.C.C. (Civilian Conservation Corps) under the guidance of the NPS undertook park construction at every level from coast to coast.
- 1936-1943 WPA
- C.C.C. & W.P.A. driven by:
  - Beaux Arts design for city parks
  - Ecological understanding for naturalistic parks
  - Historic preservation/working with historical sites
  - Rehabilitating old city parks

3. **Planning Influences: 1945-1980**

- Post World War II environmental awareness developed along with affluence, leisure and recreational expansion.
- The Olmsted concept of Urban and Regional Planning matures
  - Riverside, effects of the Columbian Expo, the Emerald Necklace.
- City Planning taught as a curriculum at Harvard
- Around mid 1950 physical planning engaged the profession of landscape architecture:
  - Site Planning
  - Recreational Planning
  - Community, Urban & City Planning
  - Regional planning

4. **Modern Landscape Design**

- As an art historical term, "modern" refers to a period dating from roughly the 1860s through the 1980s
- Used to describe the style and the ideology of art & design produced during that era.
- "Modernism" can be thought of as referring to the philosophy of modern art.

5. **Modernists in Landscape Architecture**

**Frank Lloyd Wright**

- Architect
- **Approached design as an evolution of building and landscape together**
- **Design included replication or reinforcement of natural landscape features.**

**A.E. Bye**

- Frank Lloyd Wright was his mentor.
- Philosophy: *To create effectively, the landscape architect must work outdoors to ‘feel’ each rock and stone, the trees and vines, sand and earth, the sky and water, reflecting light and shadow, the mist, the snow and ice, the rain, the wind and the odors and the noises that are all about us.*
- Bye’s work reinforces and replicates natural landscapes. (...artful, abstract and natural.)
**Thomas Church**
- Educated at U.C. Berkley
- First western landscape architect to break with the eastern U.S. traditions
- Called "the last great traditional designer and the first great modern designer",
- Based his design work on climatic, landscape, and lifestyle characteristics unique to California and the West.
- Church viewed the garden as a logical extension of the house, with one extending naturally into the other.
- Church's designs focused on small gardens, and the need to reduce maintenance while providing privacy and beauty.
- The central axis of a garden was abandoned for a multiplicity of view points.

**Dan Kiley**
- From Chatham Vermont...
- Philosophy: design work responded to the social and economic realities of the Twentieth Century.
- 1936 attended Harvard Graduate School of Design, regarded as a radical type because of his rejection of the Beaux Arts Movement
- Applied Walter Gropius’ (modern radical architect) approaches to landscape architecture.
- Opened his eyes to the worlds beyond the western hemisphere.
- Tangible order: Line, Grid, Circle and Square

**Roberto Burle Marx**
- Roberto Burle Marx is internationally known as one of the most important landscape architects of the 20th century.
- Besides being a landscape designer he was also a remarkable painter, sculptor, singer, and jewelry designer, with a sensibility that is shown throughout his work.
- Burle Marx resided in Rio de Janeiro for most of his life.
- He studied painting in Berlin - Germany, where he was often seen at the Dahlem Botanic Garden's greenhouses. In this garden he noticed for the first time the beauty of the tropical plants and the Brazilian flora. His designs reflect his diverse background in art and science.

**Harvey Fite - Sculptor**
- Life long project was a landform sculpture 'Opus 40’
- Opus 40 was a 40 year project which began in 1939 and ended in 1978 as a result of Fite's untimely death.
- Fite was a professor of sculpture at Bard College.
- Site was a bluestone Quarry in Saugerties, New York.
- Opus 40 was originally planned as an exhibit area for his granite sculpture.
- He began his work by building ramps to pedestals and ultimately realized his work in fact was a sculpture.

**Ian McHarg: Design with Nature**
- Text on landscape planning which revolutionized landscape site planning
- Precursor to **Sustainability** in the Modern World.
- Author **Ian McHarg**
- McHarg's philosophy quoted in *Design With Nature*, in which he laid forth the argument that "form must follow more than just function; it must also respect the natural environment in which it is placed."
- Professed the overlay method to process large amount of design information.
6. Vest Pocket Parks

- Mid-1970s
- Responded to the need for small urban parks in the urban landscape
- A small space which serve both a popular meeting ground and a place for relaxation and calm.
- 2 examples: Paley Park & Greenacre Park

[Images of Paley Park and Greenacre Park plans]

7. Post Modernism

- Postmodernism is a complicated term, or set of ideas, it emerged in the mid-1980s.
- Postmodernism is hard to define, because it is a concept that appears in a wide variety of disciplines or areas of study, including art, architecture, music, film, literature, sociology, communications, fashion, and technology.
- Its basic premise is eclecticism.