



A COLLECTION OF ESSAYS ON LANDSCAPE ARCHITECTURE

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by Elizabeth Barlow Rogers.

(and other sources as noted)

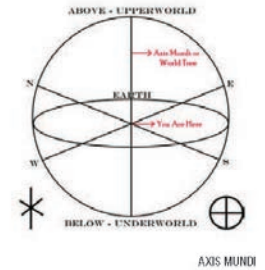
EGYPT AND OTHER ANCIENT CIVILIZATIONS

Ancient peoples were connected to the Earth in a way that most modern people don't understand. They felt they were part of the natural world, and that it was something to be revered, not controlled or dominated. Perhaps this was because they were so vulnerable to the constant dangers surrounding them. Their survival depended on how well they could predict the seasons, the sun and moon cycles and animal migrations. They had to be completely

in tune with the plants, animals, the wind, the clouds and the stars. So, just as a newborn baby does not see their self as an individual separate from their mother until they are much older, the ancient people did not see themselves as separate from Mother Earth. They hadn't yet developed an understanding of the universe and their place in it beyond their own observations. Because so much about the world and the universe was unknown to them, they developed other ways to make

sense of their place in the cosmos, and answer the questions; "who are we, where are we, and why are we?"

In the search for the answers to these questions came the invention of myth and ritual. The Earth, the underworld and the sky (or cosmos) were places where humans couldn't go, which put them in the realm of the mystic. The 'axis mundi' was an invisible line that connected all these places together. The east-west and north-south axis aligned and oriented the earth plane where humans dwelled. Land forming, structures, and later, villages were built. The sites were chosen intentionally, and some were considered sacred. They were associated with religious ceremonies, gatherings or burials. From the cave paintings at Lascaux, France to the carefully arranged monoliths at Stonehenge, they were also a way of communicating across generations, a way of



sharing ideas before the development of the written word.

When humans first starting cultivating crops and domesticating animals, it changed everything. Instead of following the migratory herds, they were able to stay put and build permanent shelters. Society became more complex, and a hierarchy was formed with religion at the center. The Earth Mother was a central theme, and anthropomorphic deities that



AN ARTIST'S RENDERING OF AN ANCIENT MESOPOTAMIAN ZIGGURAT.

represented elements such as air or water were worshipped. The relative abundance of food allowed for the distribution of labor, with some working on land forming, or building structures like temples and shrines. Villages grew bigger and eventually cities were planned and built. The Egyptian's, (possibly the most well-

known of all the ancient civilizations), worshipped Re, the sun god. Known for their monumental pyramids, they also built obelisks, tall structures that look like a vertical spear, a shape that was later borrowed and repeated by other cultures in the future. Along with the Assyrians, Sumerians and Babylonians, they also had gardens planted

with trees for shade, fruit and flowers. Originally, the landforms or structures were built in harmony with the land. Interestingly, many of these places were created with similar intentions, and in similar ways across the globe, even though the societies were not known to each other. The author attributes this to Carl Jung's theory of 'the collective unconscious', which holds that people share similar experiences despite never having met, and therefore are all connected, or tied to each other with an imaginary, cosmic

thread. From the Mississippian mound builders to the ancient Greeks, they all chose sites that were fertile and had access to water. Those considered sacred tended to be in similar topography across different societies, usually near a river or underground spring, or in a valley region. They might also be sited on an elevated area such as a plateau, or a mound might be built up out of earth or stone to resemble a mountain or hill. Ziggurats, pyramids and Hindu temples were mountain-like in form. Being



GALAGANATHA TEMPLE, AXIS MUNDI EMBODIED WITHIN A MOUNTAIN-LIKE STRUCTURE, PASTTADAKAL, KARNATAKA INDIA, BUILT CIRCA 750 AD.

either up high (as if on a mountain) or underground in a cave (as in the earth's belly or womb) were two ways of getting closer to or bridging the gap between the earth and spiritual world. The ancient Greeks (Minoans) had both sacred caves and places

instinct, or a feeling that it was the right place. When you visit these sites today, if you are sensitive to it, you will feel an energy, (that sense of sacred) that some places hold for humans. I can only imagine what it may have been like to be at Stonehenge for a



AN OVERVIEW OF THE PALACE OF KARNAK AND REMAINING OBELISKS, PHOTOGRAPHED BY THÉODORE DEVEREA, EGYPT, 1895.

upon hilltops where they would make offerings either to the spirit deities above or below.

I think these sites were chosen on

solstice gathering or to stand on top of a ziggurat and look out across the land, feeling content that I am part of it all, even without not knowing what



KARNAK TEMPLE COMPLEX ON THE NILE RIVER, EGYPT PHOTOGRAPHED IN 1914.



CAHOKIA MOUND SITE, NEAR THE MISSISSIPPI RIVER, SOUTHERN ILLINOIS. PAINTED BY WILLIAM R. JOSEPHINGER.

was beyond the horizon. It's a shame that we as humans have lost touch with that sense of belonging to the natural world. Hopefully, we will arc back in that direction, because especially in a modern world, I believe it's intrin-

sic to human health, happiness and well-being. In contemporary terms, landscape architecture has a role in this regard.



THE GREEK THEATER OF IERAPETRA IN THE TAURUS MOUNTAINS, ANATOLIA

The Classical World Greeks and Romans in the Golden Age

The Ancient Greeks and The Roman civilization that followed laid out the foundation for western civilization as we know it today and some believe birthed modernism. Unlike other cultures before them who viewed the natural world as a mysterious place, they valued rational thought and philosophy. Their focus was on the human experience in nature, slightly elevated above it all, in a humanist type of view. This was evident in their art, and in various aspects of

their culture from religion to politics to city planning. Still, they retained a great respect for nature as sacred within the construct of aesthetic appreciation and as something to be studied. They sought to harmonize with nature in ways it would enhance the human experience.

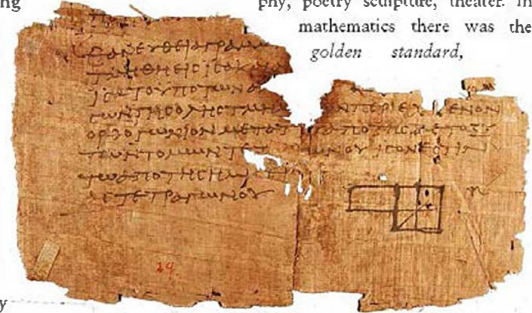
The Greek theaters, for example were sited on hillsides to blend in and elevate both the experience of the performances that took place there, and to enhance

the landscape itself. It was as if the theater was meant to be a decorative pearl placed on a string of mountains. Additionally, everything was made in human scale. The

surrounding geography of Greece may have helped inform this decision. They were situated near the sea amongst rocky hillsides. The soils

philosophy, and other leisure activities. They organized cities for community living with agoras, or public plazas, where people could meet and exchange ideas. This rich culture gave us philosophy, poetry sculpture, theater. In

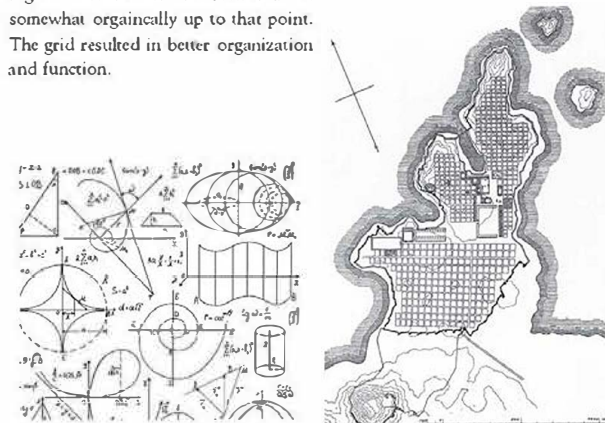
mathematics there was the golden standard,



and climate were ideal for orchards which required less maintenance than other crops. Limestone from the hills was an excellent building material. Everything was plentiful. This allowed time for the Greeks to pursue art,

a mathematical ratio which can be observed in nature and is often used in art and design as a means of achieving balance and harmony. Notable Greeks of this time include Euclid who was a Greek teacher, known

as the father of Geometry. Hippodamus was also a mathematician as well as an urban planner who designed cities on a grid. Greek cities had been laid out somewhat organically up to that point. The grid resulted in better organization and function.



OPPOSITE PAGE A FRAGMENT OF A TEXT WRITTEN BY EUCLID. (THIS PAGE, FROM LEFT TO RIGHT) A DIAGRAM SHOWING EXAMPLES OF EUCLIDIAN GEOMETRY AND A DIAGRAM OF THE CITY PLAN OF MILETUS, GREECE, DESIGNED BY HIPPODAMUS, USING A GRID PLAN FOR ORDER AND REGULARITY.



A VIEW OF ATHENS, GREECE WITH THE ACROPOLIS IN THE FOREGROUND.



THE ROMAN FORUM, ITALY. NOTE THE CONTRAST IN SCALE FROM THE IMAGE OF THE ACROPOLIS ABOVE, WHICH IS MORE HUMAN SCALE. THE MONUMENTAL SCALE OF THE FORUM REFLECTS THE POWER OF THE ROMAN EMPIRE.

The Romans, whose civilization peaked later than the Greeks, would have studied Greek achievements or at least been aware of them, and so be influenced by them. Their political structure was a republic with a central ruler (ultimately transitioning into an empire) not a democracy like the Greeks. This meant projects could be organized and commenced faster and on a larger scale. An emphasis of the theatrical emerged as a means of displaying the power of the empire as it expanded its reach. Rome was the center of the empire and roads were built connecting to all beyond the city. The invention of or discovery of the recipe for concrete made it possible for large scale projects like aqueducts that provided running water from sources mile away. Sewers and even insula, or multi-level apartment buildings made dense urban living possible. Cities conformed to the topography of the site, with stairs and ramps built to help navigate the terrain,

contributing to the uniqueness of each place. There was a hierarchy in the way cities were planned and built relying on a central axis rather than a grid. Both the Greeks and Romans spent time in nature outside of their cities. For the Greeks this was the Chora, the area outside of the town, which was viewed as a spiritual or sacred place. There were shrines and oracles there. The site as well as specific trees were considered sacred. The Romans were less connected to nature but did go out into the landscape to simply appreciate the beauty. They built grand Villa's in multiple styles. They had many rooms, walled gardens and peristyle courtyards. They could be expansive, like Hadrian's Villa which had temples with Doric columns dramatically situated in the landscape. Running water, fountains, pools and canals were all part of the garden design. Some canals were impressively lined with columns and sculptures. This would be where the

wealthy and powerful came to relax and socialize. The author mentioned several times how the servants would float banquet dishes down the canals for the guests. Who wouldn't enjoy attending a banquet designed in such a way to delight all your senses?

they may not have even been allowed to attend the theater. Additionally, both the Greeks and Romans both owned slaves which is immoral. Somehow, they were able to use philosophy to justify this, but it was wrong. Oh, but what they built!

Although the golden age was relatively brief in length, it was an incredibly prolific time and still holds influence on our lives today. It's nice to know we can still bask in their glow considering (according to Lance Morrow of the Wall Street Journal) currently in the year 2021 (Morrow, 2021), we are living in the golden age of stupidity. I personally would rather live in the golden age of ancient times, but there is one caveat, women did not lead lives as richly as men did. They were not treated as equals, instead their behavior was scrutinized and legislated. They weren't allowed own property, participate in politics, or athletic events. It is believed



ABOVE: THE ROMANS CONSTRUCTED BUILDINGS AND STRUCTURES USING CONCRETE INCLUDING THE PONT-DU-GARD AQUEDUCT, WHICH CARRIED WATER OVER 15 MILES FROM UZÈS TO NÎMES, IN SOUTHERN FRANCE.

Nature as Muse The Gardens of China and Japan

As in the west, gardens in Asia were related to the spiritual and religious beliefs that existed in the cultures of the people who made them. However, unlike western religion where paradise is somewhere else than Earth, like heaven above, in both China and Japan they believed the spiritual world exists here on Earth. In Taoist China, this is referred to as "qi, an energy that flows through everything in nature, from the

rocks to plants to the wind. Therefore, when you were in a garden, you might feel immersed in the spirit of the place (like *genius loci* in the classical world) and contemplate your place in the flow of things, feeling at one with the qi.

CHINA

China was an advanced civilization with an imperial form of government. The

invention of movable type allowed for book making and the ease of the exchange of ideas. They prized education and the arts. In this culture, the nobility were primarily the ones who created gardens. Others without birth rank could through education rise to positions of government and a higher social standing. In this social class, painting, calligraphy, poetry and garden making were highly valued pursuits. Early paintings reflect the Chinese landscape, which is known for its uniquely stunning mountain formations. These paintings represented humans as very small or insignificant in the landscape. Popular paintings influenced later garden design as those who saw them would attempt to emulate the compositions and the atmospheric effect seen in them. The retired government officials who mostly made up the nobility class would often devote most of their time to practicing garden design (along with the art of calligraphy, poetry, and painting).

Natural rocks were used in the gardens to represent mountains. They were very highly valued and as though they were sculpture, and selected for their uniqueness of color, character and 'qi'. The leisure class enjoyed gathering in the gardens, sometimes playing a drinking game that involved competitive poetry writing, (which sounds like great fun.) This game elevated the importance of water in the garden, as a means of floating drinks to guests. Plants were important as well, and used symbolically, such as pines to represent longevity, or lotus for purity. In addition to rocks, water and trees, there are 14 other elements in a Chinese garden, that when used together create 'a harmonious whole'. One of these elements is 'Jie Jing', or 'borrowed scenery,' in which the view of a mountain or a neighboring field would be considered in the garden composition. Another was *feng shui*, which includes a set of guidelines for choosing a site or geomancy, the

positioning or arrangement within the site to best harness qi and a harmonious whole. Line, form and composition were valued higher than color. With so much to consider, it's not surprising that how-to manuals were written, such as "The Craft of Gardens", by Ji Cheng, which is still in print today.

JAPAN

Japan is an island nation close to China geographically. There is a long history of contact between the two and they influenced each other greatly. Japanese gardens reflect many of the elements in Chinese gardens, but the Japanese refined and simplified the concepts and adapted them to their culture and setting as an island nation. Some say they made them better. There were both "Paradise Gardens" and "Zen Gardens", temples and of course, teahouses. Imperial Japan was a closed society with limited trade. Rituals developed specific to

region. The desire to find meaning, a place in the world, 'know thyself' and the world you live in and understand the connection were central in the culture. Rituals like tea ceremonies were an act of appreciation and humility. Gardens were perfect in their imperfections. The touch of man was visible but lightly so. Everything in the garden would be constructed to look natural, but slightly better. I read of pines having needles removed delicately every season by hand, one a time in order to achieve the perfect form or structure. The most important design elements were, use of stones, pathways and stairways, trees, lanterns washing basins, and fences walls and gates. Each object would be considered and then designed carefully down to the last detail. The placement in the overall composition was always thought of. Unlike in China where rocks symbolized mountains, in Japan they represented islands. At Ryōan-ji is the famous 'kare sansui' dry garden of large

rocks and raked stones. A minimalist arrangement creates a perfect composition from any angle viewed. Although there are many expansive temple gardens with large manmade lakes, bridge, impressive walls and gates, there are also many smaller gardens in Japan. In the *Machiya*, townhomes of the tradesmen or working class were miniature sized versions. The enclosed spaces would offer a chance for centering and contemplation. Expansive views weren't necessary, just care and appreciation.

China and Japan both shared similar beliefs across various religions; the concept of a spirit that is running through everything. The landscape and geography of each country shaped the garden design in specific ways. In China the gardens were larger, more open and related to the mountains. In Japan, the gardens were more enclosed, smaller and related to the sea. In each,

stones were elevated to a status of art or sculpture. Japan refined everything to its essence. In a way, it's very modern and easy to understand. On the other hand, western culture is traditionally a 'more is more' culture, which makes it harder for some to see why the Japanese exercised so much restraint in some areas. When they could have added more, they reduced and edited instead. I think this is extremely difficult to do, and other artists might agree. It takes skill and sophistication (and sometimes struggle) to design something complex and make it look effortless and beautiful. This may be why westerners look to Asian art, and especially Japanese art and design for answers. They are the masters.



RYŪAN-JI KYŌTO, JAPAN



EXTENSION OF ALHAMBRA,
GRANADA, SPAIN

4

The Gardens of Islam

As with all gardens before the modern era, Islamic Gardens show us that the two most significant influences on their creation, design, purpose, and usage are the religious beliefs of the people who made them and the geography (including topography, and climate) of where those people lived. The geography in the Islamic world made life challenging, but the religious beliefs compensated for that with the promise of an afterlife of comfort and content. As Islam spread

from the Arabian Peninsula across a vast area, including the Middle East, India, Northern Africa and portions of Spain and the Iberian Peninsula, the scarcity of water was a common thread. The people in each of those regions had specific ways of coping with the hot, arid conditions and in some cases rugged terrain. As someone who has lived in a desert environment, I know firsthand how precious water is, especially during a drought. Without it, life becomes impossible. In desert regions, sometimes



FROM LEFT: DETAIL OF FOUNTAIN AND IRRIGATION CHANNELS AND OVERVIEW OF COURTYARD, © THIS TREES AND TEMPLE (COURT OF THE CHAMBERS AT COPODOL, SPAIN). FAR RIGHT: MUHAMMAD VISITING PARADISE WHILE RIDING BURAO, ACCOMPANIED BY THE ANGEL ISRAEL (UPPER LEFT). BELOW THEM, RIDING CAMELS, ARE SOME OF THE FABLED HOURS OF PARADISE—THE "VIRGINS" PROMISED TO HEROES AND MARTYRS. THIS IMAGE IS PERSIAN, 15 CENTURY, FROM A MANUSCRIPT ENTITLED MIRAJ NAMA, WHICH IS IN THE BIBLIOTHÈQUE NATIONALE, PARIS.



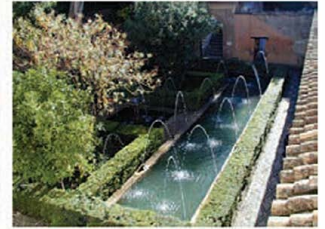
TAJ MAHAL, AGRA, UTTAR PRADESH, INDIA. BUILT 1632-53. FRONT VIEW, RIGHT AND PLAN VIEW, LEFT. MOST PARADISE GARDENS CAME LATER CHRONOLOGICALLY AND WERE TOMB GARDENS, SUCH AS THE FAMOUS TAJ MAHAL. THEY WERE Laid OUT WITH A GEOMETRIC PLAN CALLED CHAR BAGH WHICH GAVE ORDER TO THE GARDEN BY DIVIDING IT WITH FOUR PATHS THAT ALLOWED WATER COURSES AND MET IN THE CENTER AT A FOUNTAIN.

an oasis could be found. These lush areas formed around a spring or similar water source. They were a place where travelers could rest, escape the heat and rest for a while. An oasis is often recreated in Islamic gardens on a smaller scale, using fountains (usually centered in the garden) narrow channels, or shallow pools. The effects are numerous. In particular, water has a cooling effect. This is critical when it's hot, dry, and dusty. Additionally, the sound of water is relaxing, especially when it blocks out other less pleasant sounds. Water also gives life to the garden when used for the irrigation of plants. Orchards are often included within the gardens and the irrigation systems are visible as narrow channels leading to each tree. Fruits and nuts, such as citrus or dates planted in orchards inside of walled gardens made agriculture part of the garden, rather than separate from it.

Islam influenced the way gardens were made. In the Quran, Paradise is

described as a garden of pleasure and delight, with flowing rivers. There is symbolism in each flower and tree. This image of Paradise taken from the Quran, is sometimes interpreted into real life gardens. Also in the religion of Islam, water is seen as life giving, sustaining, and purifying. To waste water would be considered a sin. This means Islamic gardens use water symbolically but always sparingly.

These two factors of geography and religion were essentially what guided Islamic garden design. The people who created Islamic gardens lived in an environment that challenged them physically. The scarcity of water made it the most prominent element in all aspects of life, including their gardens. The religion of Islam describes the afterlife as a garden paradise. In a way, this makes Paradise seem a lot like a fantasy version of a desert oasis. It makes sense that when creating a vision for heaven, it would be seen as a rare, glorious place; a place



EXTERIOR OF ALHAMBRA, GRENADA, SPAIN. (LEFT) COURTYARD AND FOUNTAIN, GENERALIFE, GRENADA SPAIN. (RIGHT)

almost opposite of the real of the world, which was so harsh and difficult to survive in.

Most Paradise Gardens came later chronologically and were tomb gardens, such as the famous Taj Mahal. They were laid out with a geometric plan called Charbagh which gave order to the garden by dividing it with four paths that followed water courses and met in the center at a fountain.

When I was first introduced to the concept of Islamic Paradise many years ago, I thought I understood it, but I didn't. I still struggle to understand, even now. It's not a concept all that different from Heaven or the Garden of Eden as described in Christianity, but it's also something very different. It's not a real place, but it is. It's on Earth, but it's not. The symbolism is clear, but complex. There are four rivers, but where do they go? Who is allowed into paradise and how do they get there? Why four quadrants and four gardens?

How can the human form be included as 'of paradise' but forbidden to be represented in a real garden? I believe that Paradise isn't meant to be fully understood by the living. It's a place you can only fully comprehend once you arrive. You will never want for anything there. Everything will be perfect, and you can rest, indulge and be at peace. So, while I have more questions than answers, what I do understand is that Paradise is a place where everyone would want to go.

5

Pre-Columbian civilizations. The Americas before European arrivals.

Well before the Europeans crossed the ocean in search of a direct route to Asia, the native people of North, South and Mesoamerica were forming the land to suit their needs and beliefs, in many cases building monumental architecture and planning cities. Some were even trading with each other across great distances and therefore influenced one another. But primarily they existed in isolation, unaware of what was occurring other parts of the globe. When compared with civilizations in Europe, for example, where Rome had already risen and fallen, printed books helped spread information about science, math, and philosophy, and the wheel had been in use for thousands of years, they were not nearly as advanced. However, “advanced” is a relative term because it depends on what’s deemed important. These early Americans were very sophis-

ticated in other ways. They were in tune with the natural world in ways that the Europeans had already lost touch with. This meant they were able to develop resilient societies that were sustainable in areas where limited resources were available. Although they were experts at observation who seemed to be always watching the skies, there was much that they couldn’t understand.

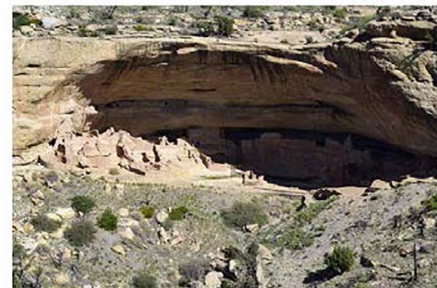
The Mayans, Aztecs, Incas, and the Pueblos had similar cosmological belief systems. Ceremonies and rituals often centered on the worship of the sun and moon. It seems like they were trying to reach higher into the skies when building mountain structures such as at Tikal and Chichen Itza. Machu Picchu in Peru was positioned directly on top of a 13,000-foot mountain peak. The Nazca lines were meant to be seen from above. Were they trying to signal some celestial entity? The Hopewell people built platform mounds that mimicked

hills. Many times, these mounds were positioned in a circle surrounding an open space, or plaza, for gathering. This may have been a socially hierarchical arrangement. Interestingly, this is a configuration that is repeated in sites as far away as Florida by the Calusa people whom have had no none contact with northern tribes.

Perhaps the most intriguing of all the Pre-Columbian civilizations are the Puebloan of the American Southwest, particularly at Chaco Canyon. Geographically there were limited resources, but enough to establish an agrarian society which meant permanent dwellings could be built. The site selection of Puebloan villages was extraordinary. They perched them up high on cliffs (probably for protection from potential attacks) and tucked them under overhangs both to make use of the shade for cooling and for the insulating qualities of the sandstone walls for heat.



CLOCKWISE FROM TOP LEFT: TEOTIHUACAN (AZTEC, DESTROYED) CHICHEN ITZA, YUCATAN PENINSULA, MEXICO (MAYAN), TIKAL, GUATEMALA (MAYAN), MACHU PICHU, PERU, (INCA) CAHOKIA MOUNDS, MISSOURI, ARTIST RENDERING OF A CALUSA VILLAGE, FLORIDA GULF COAST. NOTE THE SIMILAR MIMETIC SHAPES.



CLIFF DWELLING AT MESA VERDE, SOUTHERN COLORADO.

There are dozens of these cliff sites, many of them still well preserved.

What makes Chaco Canyon unique is that it is believed to be the center of the Puebloan culture. This is because some of the structures there are thought to be purely ceremonial, rather than for habitation. Pueblo Bonito was the largest 'great house' in the canyon. It had towering walls, 4-6 stories high. It had 600-800 rooms and could have housed 1000s of people, yet there is no archeological proof of that many people being there ever. Some people did live there, and perhaps they were part of a hierarchal family lineage, members of whom may have orchestrated the massive undertaking that building such a place would require. The remainder of the Chaco people lived in the great houses that are scattered throughout the canyon and beyond.

The north-south orientation of the many of these great houses in the canyon, and the others that are surrounding

it miles away, incorporate lunar and solar solstice marking with incredible accuracy. The circular kivas which are half underground, were incorporated into the houses and are thought to be ceremonial spaces. Ceremonies centered around solstice time. The largest solstice marker in Chaco canyon was discovered on Fajada Butte. Called the 'sun dagger', it uses the sun or moon to cast a ray of light onto a spiral petroglyph carved into a rock. With these achievements, The Puebloans were almost scientific in the way that they studied and recorded astrology. The application of these observations, however, were not only for practical applications (such as to help with the growing of successful crops), but more for the purpose of ritual and myth and maybe for controlling the inhabitants. The people who lived in the great houses probably would have been called to gather at Chaco during solstice and possibly would have brought trinkets as offerings on their



CLOCKWISE FROM TOP LEFT: RUINS AT CHACO CANYON. A LIQAR IMAGE FROM A STUDY OF CHACO CANYONS ANCIENT ROADS. A SATELLITE VIEW OF THE VALLEY AND MESA WITH PUEBLO BONITO ON TOP RIGHT.

pilgrimage. There are many unknowns about Chaco and different theories about what happened to the people that created it, but this only adds to the mystique. The site is perpetually being studied. When I lived in New Mexico I would visit Chaco Canyon often. It had a magnetic pull that made me want to go back over and over. Maybe it was the mystery that piqued my curiosity or perhaps it was something more to do with the energy of the site. There was a reason the ancient Puebloans chose that exact spot and connected all their people to it including an extensive highway system. When one climbs up the same stairs carved into the cliff that the ancient people did to reach the top of the mesa it's hard to comprehend what it would have been like during habitation. In getting to the top of the mesa, the visitor can see in all directions, seemingly forever. A feeling of 'smallness' is experienced. This is just a reminder that a long time ago, all

people took notice of that feeling.



STAIRS CARVED INTO THE SANDSTONE ON A MESA AT CHACO CANYON, NM.



A MAP OF MEDIEVAL BRUSSELS.

6

The Middle Ages

The Roman Empire had a long reign across western Europe but by the late 300s AD, it had started to falter. Various factors contributed to the collapse including leadership changes, infighting, increased taxation, social divisions, and barbarian invasions. Some say the climate may have become less conducive for agriculture. That, coupled with overpopulation and unsustainable farming practices may have degraded the soils making feeding the population more difficult and more

expensive. Additionally, the rise of the Christian Church began to change society from a civic minded one to one where the church was the center of life. Even with all of these changes, it still would have been a shock when, around 410 AD, after 800 years of power and dominance, Rome was overtaken by the Visigoths. To put this in perspective, the United States is 245 years old. If our government collapsed virtually overnight, one can imagine what chaos might ensue. Those living

in the Roman Empire must have felt the loss of stability in their lives very quickly. Without a central government there were no services or a military to protect the people. The fall of Rome marks the beginning of the European Middle Ages which some refer to as 'The Dark Ages'. And although 'dark ages' sounds sad and miserable, if not an understandable moniker considering all that was lost, there were also great strides made across western Europe during this time, as society was reshaped. During the 1000 years that followed, many of the cities and structures as well as the methodology behind them still exist today.

The absence of a central government created a power vacuum which was filled by the church. The Church gained more wealth and power during this time period and leading into the Renaissance. Western Europe lands were divided up into hundreds of fiefdoms. The Church began building monasteries which offered many services for the

citizens. These monasteries were like small villages with many buildings, and well laid out and organized. Whether they were free standing or part of a village, they would have been walled for protection. They would house not only the chapel but a hospital, brewery, school, cemetery, workshops and of course gardens. The cloister gardens within the chapels reflected the influence of peristyle gardens of Ancient Rome in that they were completely walled off and would have been quiet, peaceful places to visit. They might have conjured up visions of a heavenly paradise. The gardens were also practical. The plants grown there would be used for food and in medicines. In this way, the cloister gardens were a tiny bit of curated nature. Beyond the village walls farmers worked their fields. Further away was wild nature, which because it was without the protections of the village, may have been viewed as place of unease and danger.

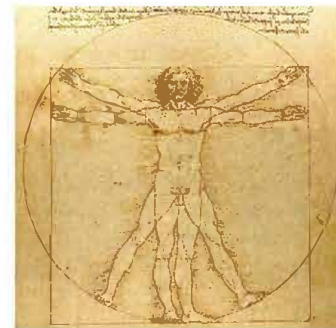
Villages were centered around the church or monastery and grew out from there, in a circular pattern. Many villages would also have a moat and a bridge that would control access. Those who were allowed to enter were required to pay a tax. Controlling access in this way would have given those who lived behind the walls a sense of security, since there was always the threat of marauding invaders. In both architecture and gardens, the imperial scale of the Romans faded away and a more human scale emerged. This was probably directly related to the way of life during the Middle Ages which each village was primarily focused inward rather than what was on beyond its own walls.

It seems inconceivable that after Rome fell, so many of its modern accomplishments were lost. Running water, the recipe for concrete and other modern conveniences of the empire did not reemerge for centuries. Books, records, and ideas vanished. Luckily monks

did copy many texts and kept records that would have otherwise been lost forever. The Middle Ages, dark or not was a long period and one that shaped modern Europe in the way cities were laid out and organized. Made in human scale, they are appealing even today as we think of urban planning in modern cities with neighbors close by and everything needed within walking distance.



MADONNA AND THE ROSE BOWER AND ST. GEORGE WITH DONOR, CIRCA 1490. HANS MEMLING, MUNICH, GERMANY. "TODAY'S 'CLOISTER' (ENCLOSED GARDEN) IS OFTEN SEEN DEPICTED IN ART FROM THE MIDDLE AGES RELATES TO THE VIRGIN MARY AND IN ACTUAL GARDENS OF THE TIME



THE VITRUVIAN MAN BY LEONARDO DA VINCI. A STUDY OF HUMAN PROPORTIONS. THIS IMAGE HAS COME TO BE SYMBOLIC OF THE BLEND OF SCIENCE, MATHEMATICS AND ART OCCURRING DURING THE RENAISSANCE.

7

The Renaissance

After many years of instability Europe slowly began to emerge from the Middle Ages. Monarchies consolidated power and feudalism faded away. It was no longer necessary to live in walled cities for protection. In society, there was a new optimism and openness of thought, based on classic ideas from historic Greek and Roman texts. Based on these writings, Francesco Petrarca developed a philoso-

phy known as *humanism*. He felt an individual's life was not predetermined. He championed the idea that

through education and self-improvement, humans could choose their own destinies. This was a departure from the teachings of the church and its focus on the afterlife. Humanism was about living in the now.

Assisting in the spread of this new way of thinking was the increase of trade

between people in Italy, Germany, France and across Europe. Additionally, the invention of the Gutenberg press, which allowed for books and periodicals to be produced at a scale never seen before, made books available for the common man not just the wealthy elite. It would take some time for literacy to catch up, but the ability to spread information and ideas quickly to so many people was a watershed moment in human history. Important scientific developments were also being made, which sometimes led to conflicts with church views. In landscape architecture, gardens became more open than the cloistered walls that predated them. A more civic minded view, rather than one centered entirely around the church led to the creation of monumental public plazas. As Rogers put it, "Petrarch drew no distinction between the life of the individual and the life of the city." This time of rebirth, known as The Renaissance, changed the way gardens and

cites were made.

Although the role of religion in daily life was reduced, Christianity, most notably the Catholic church, still played a large role in garden design. Various popes used gardens as a way of displaying their wealth and power, creating extravagant gardens with fanciful water features. Wealthy banking families such as the Medici of Florence, Italy were also influential. During the time they were in power, which spanned several centuries, they acted as patrons, nurturing many artists, philosophers, and scientists including Leonardo Da Vinci, D. Rembrandt, Botticelli, and Galileo. The family also built villas with large gardens. These gardens gave a nod to the past, sometimes including actual antiquities such as classical Roman sculptures discovered by archeologists. But most importantly because the gardens were an escape from city life, they showed a great reverence for nature. The Villa Medici at Fiesole was placed upon a



PIETRO PERUGINO'S USE OF PERSPECTIVE IN DELIVERY OF THE KEYS (1482), A FRESCO AT THE SISTINE CHAPEL. PERSPECTIVE DRAWING WAS FIRST SEEN USED IN PAINTINGS DURING THE RENAISSANCE.



TWO MEDICI FAMILY GARDENS: LEFT: VILLA MEDICI DE FIESOLE, BUILT BETWEEN 1451 AND 1462, FIESOLE, ITALY AND ON RIGHT: BOBOLI GARDEN, FLORENCE, ITALY, COMMISSIONED BY A MEMBER OF THE MEDICI FAMILY, 16TH CENTURY.

hillside giving it a vantage point to look upon the beauty of the fields below. Its terraced gardens were not connected to agriculture the way ancient Roman villas were. If there were any agricultural fields, they were just considered part of the view which was meant to be enjoyed by the artists, philosophers, and other influential people of the time who gathered there.

Later, during the High Renaissance, gardens headed in an even more extravagant direction. 'Surprise' gardens such as Boboli Garden in Florence were reminiscent of Hadrian's Villa, with their theme-park like excess. In France, landscape designer André LeNôtre was designing gardens for nobles and merchants who wanted to flaunt their wealth. These were formal in design, laid out on axes and always symmetrical. For Nicolas Fouquet, he created the gardens at Vaux-Le-Vicomte which famously made King Louis XIV jealous

and angry at Fouquet. The king was so impressed with what LeNôtre had created that he asked him to design the gardens at Versailles. There, LeNôtre used parterres (clipped hedges) which had been used in cloister gardens previously but elevated their status by using them to create elaborate, sometimes curvy designs with interesting patterns, best viewed from a high vantage point. Also, at Versailles we have numerous allees, or tree-lined avenues, bosques, orchards, many fountains, and a grand canal, the construction of which was made possible by advances in science and engineering. All of this was for the pleasure of the king and his court. It would have been a sight to witness one of the many opulent parties held there in the gardens, if you were privileged enough to be invited. Paris was transformed as well, from a medieval city of jumbled streets to one that was more organized on a grid. This was taken on by Baron Von



AN ILLUSTRATION OF VERSAILLES, THOUGHT TO HAVE BEEN MADE CIRCA LATE 18TH CENTURY



LEFT TO RIGHT: VIEW OF ROME FROM THE DOME OF ST. PETER'S BASILICA, (PIAZZA SAN PIETRO) ITALY. A RELIGIOUS PIAZZA. 2] THE SPANISH STEPS, SEEN FROM PIAZZA DI SPAGNA, ROME. (A CIVIC PIAZZA.)

Hausman for Napoleon III. It was done primarily for military reasons but aesthetically it created long beautiful views. Back in Italy, plazas given a renewed importance in civic life. They were often built on a monumental scale, such as the Piazza San Pietro (St. Peter's Square) which hosted the pomp and ceremony of the of the papacy. Whether religious or civic in purpose, these squares were designed with a flair for the dramatic. They would be open on several sides allowing people to pass through, as though on a stage.

The Renaissance was rich in philosophy, science art, architecture, and was an era that produced remarkable gardens. Compared to the Middle Ages, there were so many advances across these disciplines. All this progress was a result of change in the human mindset. During the Middle Ages, humans felt they were at the mercy of God and relied on the church to reach the afterlife.

Forever searching for meaning in life, people evolved during the Renaissance, finding a balance of religious and civic life. They saw themselves in control of their own lives and destinies and free to develop their full potential. This was like a spark that lit the fire of the modern era. We now live in an era where man sees no boundaries to what we can accomplish, especially if we work together. Today, landscape architecture often deals with civic spaces, so it is important to remember that in our never-ending search meaning (which is different for each individual) that we all can benefit from spaces that help us to live well.

Romanticism and The English Landscape School

Perhaps as a contrary reaction to the symmetry and formality of the French and Italian Renaissance gardens, English gardens of the 16th and 17th centuries became beautifully naturalistic. The English did not follow the lead of the French who made extravagant formal, symmetrical gardens. They rejected the parterres and ornate fountains, angular pools, long canals, and views that seemed to go on forever. There was still extravagance, of course, because the wealthy landown-

ers desired to display their wealth. But the excess was softened by a style that was naturalistic, with a subtle drama that one experiences when in a wild landscape. These gardens were often so perfectly designed, by the likes of Capability Brown and Humphry Repton, that it was hard to tell that they were not natural. An additional element was that unlike the expansive views of Versailles for example, the picturesque scenes revealed themselves slowly. Most of the view would be

hidden behind a cluster of trees or a turn in the path. This created drama and suspense for the viewer as they were pulled further through the garden, always wanting to see more.

The painters and writers of the Romantic Era desired to elicit feelings of awe, both at the beauty and sublime qualities of the landscape. The 'genius of the place' exalted by the writer Alexander Pope, among others, had a heavy influence on garden design. The landed gentry, so wealthy they did not need to work, spent their time with leisure pursuits, such as reading the works of romantic writers and pursuing intellectual, philosophical, and artistic activities. Although the English are sometimes labeled as stoic or reserved, they are quite passionate people and during Romanticism, intense emotions were embraced and encouraged as a means of living fully. In society, this was an idea that was shared. Gardens

became a backdrop for introspection, solitude, and self-discovery. The ideal aesthetic that developed during this time resulted in gardens that were more about feeling than form.

The private estate parks such as Stowe and Stourhead would later influence public parks in Great Britain, which were created as places where city dwellers could go for quiet contemplation. City planning reflected these ideals as well. Bath, a city in England, was designed with higher density housing adjacent to abundant shared public spaces. In the United States, the naturalistic style is seen in Olmstead's Central Park design. Further, the Garden City Movement started by Ebenezer Howard recognized that a city designed with ample natural spaces and gardens improved the quality of life for the people who lived there.



ABOVE, LEFT: STOWE HOUSE, RUCKINGHAMSHIRE, ENGLAND. RIGHT: LANCELOT "CAPABILITY" BROWN, THE LANDSCAPE ARCHITECT RESPONSIBLE FOR DESIGNING THE GROUNDS AT THE ESTATE.



ABOVE: VIEWS OF STOURHEAD, WILTSHIRE AND SOMERSET COUNTIES, UNITED KINGDOM. A 2650-ACRE ESTATE MANAGED BY THE NATIONAL TRUST.

There something about a naturalistic landscape which is universally appealing to the human soul. We know it's still wild on some level, but we're safe from danger, just as when viewing

animals in a zoo. It calms and reassures people, that man can control or 'tame' the wilderness so that it's beauty can be enjoyed without any of the risk.



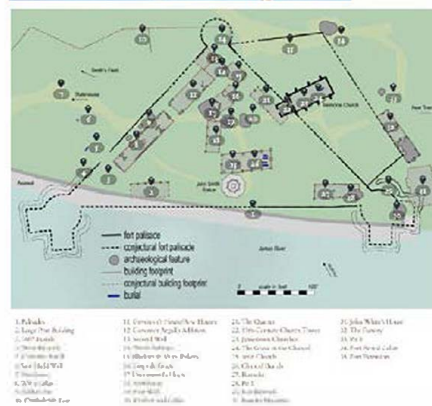
ABOVE: LEFT: THE ROYAL CRESCENT, A NEIGHBORHOOD IN BATH, ENGLAND; AERIAL VIEW. RIGHT: A HA-HA, A TYPE OF 'INVISIBLE FENCE' THAT WAS USED TO CONTROL LIVESTOCK WITHOUT INTERRUPTING THE VIEW.

9

COLONIAL TOWNS

When the Europeans, most notably Christopher Columbus in 1492, set out across the Atlantic in their ships, they were searching for new trade routes and riches. With them, they brought a blend of divinity, science, and their spirit of adventure. There was no way that they could be fully prepared for the challenges they would endure in the New World over the next several hundred years as colonization took place. Harsh weather, disease, starva-

tion, the possibility of violent encounters with native tribes, and several wars took their toll. But in their quest of discovery, they persevered, and in the process transplanted their European culture and beliefs in North America. As they began to colonize the continent they planned and built the towns and cities that we are still learning from today in landscape architecture and urban planning. Unfortunately, in the process of colonialization, they also



ABOVE: A RENDEERING AND (BELOW) A MAP OF THE JAMESTOWN SITE, VIRGINIA, 1615, NOW PARTIALLY SUBMERGED IN THE JAMES RIVER.

essentially erased the native people who had been here for thousands of years along with their cultures and histories and for a time, enslaved African people, sending ripple effects through time that we still feel today.

It was inevitable that some of the first settlements failed. Jamestown, the first permanent English colony was one of those. It was built on a site that was specifically selected for its position on the river near the coast with deep water near shore so that ships could pull directly up. But the site was not perfect, and some theorize drinking water was in short supply, making the already difficult conditions even harder. The settlers also were encroaching on the hunting land of the Powhatan Indians which led to conflicts with the tribe.

The Spanish had a set of rules to guide its new colonies called the Laws of the Indies. This included how everything from the prevailing winds to the size

of the plazas and width of the streets. Today people don't seem to consider each site as carefully as the Spanish colonists, especially when building new suburban neighborhoods. Additionally, The Laws of the Indies had rules for the colonists to be respectful of the native people. However, the rules did not always get followed and were not necessarily enforced. The Spanish continued to colonize across North, Central and South America, building towns from Peru to California, Texas, New Mexico, and Florida. St. Augustine, Florida is one of the most well known and is the oldest continuously occupied city in the US. It's a seaside town situated near an inlet to The Atlantic Ocean, laid out to capture the sea breezes. There is a well-preserved historic district and a large fort positioned for defense against the British and French forces. The thick walls are made of coquina shells, a site-specific material that when cured was incredibly strong. They held

strong even during a 27-day siege by the British, led by James Oglethorpe the founder of Savannah, GA. In addition to waging battles against the Spanish, Oglethorpe also planned the layout of Savannah, Georgia. His plan is highly regarded as one of the most well designed from the colonial period. As an example of urban planning, it is one that that perhaps more towns today should follow. He used a grid to group a series of neighborhoods or wards throughout the city, each having a square or park at its center. There was a mix of residential and civic buildings in each ward. This meant most of what the residents needed would be within the ward or a close walk from it. Because of the way parks and avenues are organized, even today one can walk throughout the downtown area, length or width, on a hot summer day and remain in the shade the entire time. In America during the colonial period, even though so much of the city planning and architecture was taken directly

from Europe, after gaining independence from the British, democracy itself influenced the way cities were planned. In England, France, Spain and other European countries, the king or queen was always at the center of society and so their castle and court would be positioned higher up and/or in the center of the plan. The layout of the National Mall in Washington DC is a prime example of democratic city planning where the people are given the priority. In the United States the people rule themselves. So, in designing new cities, especially the nation's capital, they were careful not to idealize the government leaders as though they were royalty. This meant any buildings that were specifically for them, such as The White House, would not be at the center of the plan. Instead, the president's house is intentionally off to the side, giving it less prominence. The Capitol Building which houses Congress is on the main axis of the plan, highlighting that here in America,



ABOVE: SAVANNAH, GA. A TOWN PLANNED BY JOHN OGELTHORPE USED CELLULAR WARDS. EACH CONTAINING EIGHT CITY BLOCKS AROUND A SQUARE (FOUR RESIDENTIAL BLOCKS IN THE CORNERS, EACH SPLIT BY A NARROW LANE. PLUS FOUR SMALLER COMMERCIAL BLOCKS EAST AND WEST OF THE SQUARE)



MIDDLETON PLACE, ON THE ASHLEY RIVER, CHARLESTON, SC. THE TWIN LAKES IN THE FOREGROUND ARE DESCRIBED AS HAVING A BUTTERFLY SHAPE.

the people govern, not a king.

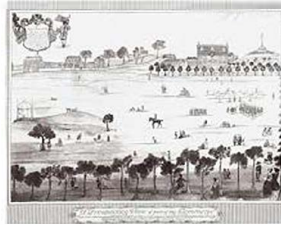
In the northern states cities such as Philadelphia and Boston were both planned with plentiful public spaces. These 'commons' were shared areas that belonged to everyone. They could be used in anyway needed, including as a place to graze livestock. As these cities got bigger, they eventually outgrew the commons. But today some of the spaces are still available for the public, although they are owned and operated as parks by the city.

In the pre-Civil War southern colonies, agriculture was highly profitable, especially with plantation owners utilizing the regrettable practice of slave labor. Plantations were like little villages with various support structures built around the main house. Middleton Place, SC is a notable example of a well-designed plantation. The grounds were somewhat formal near the house and then gradually past the rice fields faded into wilderness, full of mosqui-

tos, alligators, and other dangers. This recalls the gardens of the Middle Ages and the three levels of nature. Henry Middleton designed the garden using European classicalism as a guide. In this way it was as though he brought part of Europe and placed it there, high on a bluff on the Ashley River near Charleston, SC.

The Colonial Period towns were designed with attention to the site and the needs of the society, as well as a reverence for the individual and democratic ideals. The ones that remain, usually in historic districts at city centers where everything grew up and out around them, show us what it was like to live where the needs of the residents were considered in a holistic way. Urban sprawl has since taken over and we seem to have completely forgotten to pay attention to simple but important aspects of how to live well and comfortably in harmony with nature. For example, the colonists would

always consider the prevailing winds or the position of the sun as it tracks across the sky when building. We don't always do that, but if we did it would benefit us in many ways. Additionally, prioritizing walkability over vehicular traffic helps people to connect to each other. For this reason, public spaces including streets, parks, and plazas remain an extremely important aspect of urban planning today, not just for the physical and mental health of their individual citizens but for the health and well-being of the entire society.



ABOVE, TOP: BOSTON COMMON IN 1768, BASED ON A WATERCOLOR BY CHRISTIAN BÉMIK. AND A PHOTOGRAPH OF BOSTON COMMON, PRESENT DAY.



A MAP OF THE OLNSTEAD/VAUX DESIGN OF CENTRAL PARK, NEW YORK CITY, NY

10

Fredrick Law Olmstead The Father of Landscape Architecture in America

Frederick Olmsted was a man with purpose. It just took him a while to figure out what that purpose was. He didn't grow up wanting to be a landscape architect. He wouldn't have even known he could be one, because in The United States landscape architecture wasn't a known profession while he was growing up. The term 'landscape architect' was a term he himself later invented. As a young man, he worked various jobs in differ-

ent unrelated fields, including farming and journalism. He had been to Europe and seen the English gardens. He

also was deeply spiritual and held high moral beliefs. He was a traveler and an abolitionist and his writings on these topics were widely read and respected. But when he found his true calling, he was working as an administrator in New York City managing the clearing of the land in preparation for what



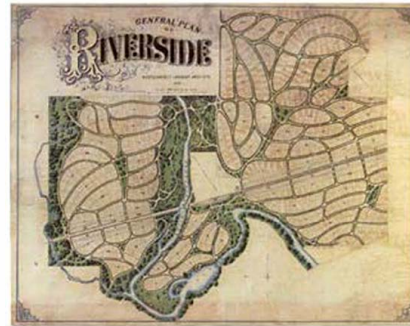
CENTRAL PARK, NYC, NEW YORK. OLNSTEAD'S FIRST PARK AND HIS MOST FAMOUS PARK.

would become Central Park. Interestingly this job, and every experience in his life up until then, somehow fully prepared Olmstead and led him to that exact place and time when the met with an opportunity that changed the course of his life, and led him to landscape architecture.

Calvin Vaux, a New York City architect and designer, approached Olmstead about collaborating on a design for the new park, which was being decided by a competition. They won with their 'Greensward Plan', and the park was built. This means the very first park Olmstead designed is arguably the most famous park in the world, which is quite remarkable. He would have probably stopped there, still not seeing landscape architecture as a viable profession, but thankfully he did not. Many other cities saw the example of Central Park and wanted something as good or better in their city. Olmstead became in high demand, and continued

working across the country for much of his life with this newfound purpose.

What Olmstead intended with his parks and later with his planned parkways, neighborhoods, and cities, was to raise the spirits of his fellow humans. He wanted to make their lives better. He was deeply religious, and this likely made him feel obligated to do so, but he also seemed to just sincerely want to help people. Cities were not very pleasant places to live during this time, and the workers, especially immigrants, had poor living conditions. Olmstead knew many of the citizens had come to work in the city after previously living an agrarian life, and he tried to recreate that for them in his pastoral designs. He believed in a democratic ideal where for the benefit of society everyone, not just the wealthy few, would have access to picturesque public spaces where they could reconnect with nature and have relief from adverse urban conditions.



ABOVE, A PLAN VIEW OF RIVERSIDE, A NEIGHBORHOOD IN CHICAGO. THE CURVED STREETS LEFT OPENINGS BETWEEN STREETS AND PROPERTY PLOTS WHERE GREEN SPACES COULD BE SCATTERED THROUGHOUT, COUPLED WITH THE LARGE GREENBELT IN THE CENTER. THESE SPACES HELPED CONNECT PEOPLE IN THE NEIGHBORHOOD TO NATURE AND EACH OTHER. ALSO ABOVE, A STREET VIEW DEPICTING LIFE IN THE NEWLY DEVELOPED RIVERSIDE NEIGHBORHOOD
LEFT: A PORTRAIT OF A YOUNG F.L. OLMSTEAD.

He created organic curving paths and gentle rolling topographies in his designs, and although he was not concerned with specific plants, he used them in a naturalistic way and always kept in mind who he was designing for and why. He was both artistic and visionary but also practical. For example, his parkway systems helped people get from place to place in an efficient way, but by breaking up the grid and saving more green spaces, picturesque beauty could be enjoyed along the route. This way of planning has saved so much natural beauty that would have otherwise been lost to development. There was a conservationist movement starting around this time in the US, as a reaction to the industrial revolution, which had degraded the environment. Although there was no national park system yet, Olmstead had a vision that something needed to be done. He wrote a report for the California legislature regard-

ing the preservation and management of the Mariposa Grove and Yosemite Valley outlining the moral obligations of a democratic government to protect the wilderness for the benefit of society.

In the United States and around the world, Olmstead's works are still highly revered, and he is known as 'the father of landscape architecture'. In addition to parks and park systems, neighborhoods, and private estates, he also designed the National Mall in Washington DC and the Columbian Exposition at the Chicago World's Fair of 1843, both of which are slightly different in purpose than most of his other projects. These further demonstrate Olmstead's ability to artfully blend the practical needs of a site with the unconscious human need for natural beauty, creating what we know as 'the genius of the place'.



CHARLES ELIOT, 1859-1897

The Rise of Landscape Architecture in America

During the late 19th century and early 20th century more people began entering the profession of landscape architecture including for the first time in America, women. The work of Fredrick Law Olmstead Sr., the gardens of Europe and the conservation movement were the biggest influences on the designers of this period. City planning was a high priority as the western expansion had already begun.

The Land Ordinance of 1785, which divided and organized government land, dictated land usage and made more land available for sale to settlers, helped simultaneously fuel and control the growth of the nation.

Charles Eliot was born into an elite New England family. His father, the president of Harvard University, was able to secure him a two-year internship with Fredrick Law Olmstead, the

premiere landscape architect of the time. Upon completion of his apprenticeship, Olmstead recommended that Elliott see Europe, which he did, touring the gardens of the English School designed by Repton, Brown and others. Returning from Europe he opened his own firm. He was an environmentalist and conservationist, and he was a proponent of setting aside land for public access in what he called *reservations*. Although he died young, he was a prolific writer whose published works were well read and respected, so his influence was felt long after he was gone. His ideas later took hold in the form of state and national park systems. His visionary plan for the Boston area park system is one of his most important works.

Fredrick Law Olmstead Jr. carried on his fathers practice after his passing, along with his brother John. The firm was incredibly prolific and influential, designing hundreds of gardens

across the country. In 1893 they asked Charles Eliot to join their firm as a partner and he worked with them until his untimely death at age 37 in 1897. Olmstead also was a city planner and was a conservationist, involved in the park's movement.

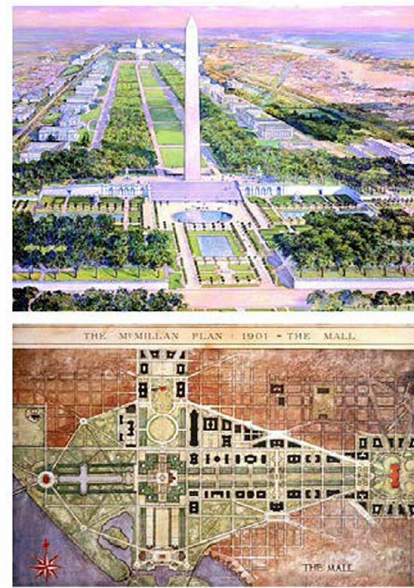
Beatrix Jones Farrand, another New Englander from a wealthy family became one of the first American women to practice landscape architecture. Women were not permitted to design public gardens, so her gardens were primarily for private residences. Many of her clients were introduced to her by her well connected mother. She visited European gardens which influenced her designs. Her most famous work is Dumbarton Oaks. This garden shows influence from Italian, French and English gardens but from those, she created something new and unique, an *American garden*. Dumbarton was tailor made for its upper-class owners and visitors, who would have been well travelled, visited Europe,

and understood the references to other European gardens. Dumbarton is made up of a series of 'rooms', carefully placed into existing topography using a series of terraces, and carefully selected plants for color and form

Ellen Bidman Shipman was another female designer with New England connections who managed to break into the male dominated profession of landscape architecture. Her gardens were artistic in nature, because she approached designing them as though she was painting a picture. Further, she viewed them as experiential, not just beautiful spaces, giving her clients a way to be transported, figuratively speaking. She worked with Charles Platt an architect, artist, and garden designer who was her mentor. The Italian Renaissance, simple geometry and strong connections between the house and garden are hallmarks of her designs.

Jens Jensen, a Danish immigrant who worked in Chicago, was an environmentalist who utilized fell in love with the native prairie plants of the Midwest and used them in his garden designs. He wanted everyone to have access to nature, because he thought it was an essential requirement of the human experience. He designed Columbus Park not just as a beautiful setting but as an educational and social center that could meet the needs of the mental and physical health of its visitors.

Beyond gardens, landscape architects had begun to think about connections, park systems, urban planning, and conservation. Henry Wright was one such city planner and an advocate of the garden city movement. There was a seismic shift in city planning when the invention of the automobile drastically changed the way people lived. There were new towns on the horizon



Olmstead Jr worked on the The National Mall in Washington, DC as part of the McMillan Plan.

as people began a slow exodus from cities. It became critical at this time to carefully plan the transitional places between the urban and rural: the suburbs.



SEVERAL OF THE GARDEN "ROOMS" AT DUMBARTON OAKS, WASHINGTON, DC. LEFT TO RIGHT: 1) LOYENS LANE POOL MODELED AFTER A ROMAN AMPHITHEATER. 2) PEARLE GARDEN, A COURTYARD WITH ITALIAN INFLUENCES (AND PERHAPS A NOD TO THE PANTIERRES OF VERSAILLES.) 3) FOUNTAIN TERRACE GARDEN, A BLEND OF ENGLISH COTTAGE GARDENS AND ARTS AND CRAFTS.

12

New Towns

During the industrial age cities grew larger and full of factories. The factories brought people to the cities from the countryside where they had previously lived an agrarian life. Both the working and living conditions in the cities were increasingly poor. Lewis Mumford saw this happening and although he thought cities were important and necessary in many ways, he knew that they were getting too big. He had a vision for new towns that

with careful planning would provide the sense of community and other benefits of a city without a complete disconnect from nature and a degradation of the quality of the lives of its inhabitants. The Regional Planning Association wanted regional urbanism as an alternative to overcrowded sprawling cities. The invention of the automobile the advent of car culture also created a seismic shift in landscape architecture, and its effect on urban design and city

planning cannot be denied.

With the industrial age in Europe and North America came 'company towns'. Some factory owners built these based around worker housing with the knowledge that current living conditions were poor. These garden city towns were outside of the cities

community.

Some of these towns connected to the railroad lines, but more and more the automobile was entering the picture. In dealing with the automobile, the issue of safety was paramount. Separation of pedestrians from automobile traffic was a huge consideration. Neighborhoods



LEFT: AUTOMOBILE TRAFFIC ON 5TH AVENUE, NYC '91. 3. RIGHT: 8 YEAR OLD GIRL WORKING IN A COTTON MILL, 1920



where many so many people had been living in horrible conditions with dirty water, poor air quality and lack of green space. Each of these garden city towns had access to nature, connections to shops, a school and a sense of

were designed to allow for pedestrians to walk safely to community connections such as shops and schools. Streets were to be designed to slow down cars and limit their direction or flow. Sometimes even the parking would be

hidden away.

When labor laws were passed that required better and safer working conditions. They also that limited work hours so that people were able to earn more within a shorter work week. They now had more money and more leisure time and additionally they were able to own an automobile. This increased their desire to travel and explore. Americans wanted to see their country, whether it was driving across town or to another state. Parkways and National Parks (although limited at first) began to see heavy visitation. More states were also beginning to set aside land for public use that would later be known as state parks. Robert Moses worked throughout New York State on public projects like the Bronx River Parkway and Jones Beach. There also were WPA projects throughout the country that were funded by Roosevelt's New Deal, including 'greenbelt towns.' Many of these towns and neighbor-

hoods were planned with extensive greenspaces.

As leisure culture progressed, cities and towns provided opportunities for recreation and physical exercise for their citizens. This meant parks had to do more than provide beautiful scenery. New parks were built with this in mind, and many parks were retrofitted during



GREENBELT, MARYLAND.

this era to meet the current needs. In addition to adding more sports courts and playgrounds, community centers and other programming making them



SEPERATION OF PEDESTRIAN AND CAR TRAFFIC IN GREENBELT, MARYLAND.

more like cultural centers with various services from educational to health. Although many 'new towns' were well thought out and implemented, adjacent developments were not always as well planned. The suburban sprawl that we see today

thought the country is a haphazard linking of highways and roads to neighborhood after neighborhood, many built to maximize profits by increasing density. This is done in the name of affordable housing, but it's a temporary solution. There are many shining examples of town planning done well, including the *new urbanism* towns like Celebration, FL. However, these towns do not offer affordable housing. This is something that we will have to work on to create a more equitable future. Otherwise, we will see more cookie-cutter neighborhoods blight our towns. Cities and towns alike are in a phase of retrofitting to correct some of the mistakes of the past. More greenspaces are being added, especially in larger cities where they have not only recognized the positive benefits of these spaces on human health and well-being, but also where they have the funding to bring them to reality.

The National Park Service

The National Park Service came into existence on August 25, 1916, as an Organic Act signed by President Woodrow Wilson. The father of American landscape architecture, Fredrick Law Olmstead Jr. was thought by many to be the inspiration of the NPS. His words “to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same

in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” could not be more fitting to its very purpose.

Even before its creation in 1916, the Secretary of the Interior appointed a “general superintendent and landscape gardener” in 1914, to help strike a balance between conservation and the exploitation of resources. By the time the Organic Act was signed into effect two years later, there were already 35

independently managed parks and monuments, and early on much worked to establish guidelines and management policies, which emphasized education, commemoration, and inspiration, with recreation taking a back seat. With the NPS now established, all the parks became centrally managed, which then initiated a “Park Development Plan” to oversee future plans for parks and monuments. Soon after this, the Landscape Division was created to work directly with park superintendents.

A lot was happening during this same period, the profession of landscape architecture was coming into its own, and many established landscape architects sought work and were employed by the NPS. The American Society of Landscape Architects and the American Civics Association had themselves petitioned for the creation of a National Park Service with the

goal or preserving the aesthetics of the landscapes in the parks.

A few years later, during the Great Depression, the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC) were formed, providing a massive workforce to build parks and roads throughout the country. This expansion happened so rapidly that many of the parks that were built had no roads to access them.

Many landscape design styles were incorporated into what was known as “Parkitecture.” This style involved the use of local materials and natural features of the parks to blend in roads, trails, and bridges with the surroundings, and as more parks were developed, a continuity began to take shape with the NPS.

Some notable landscape architects that worked during this period we’re

Daniel Ray Hull and Thomas Charles Vint who was hired by Hull in 1922. He went on to become the head of the Landscape Architectural Division after Hull passed away. During his time there he expanded the design group’s staffing and provided the first master plan for many park service units in his plans for Mount Rainier National Park. This would establish the principle of designating specific areas of wilderness going forward. Vint worked at the NPS until retirement in 1961, and he has been credited for shaping and directing landscape planning at the NPS.

As the years passed the NPS grew exponentially, and inherited sites formally controlled by the war department and Forest Service including many battlefields and other historic properties. In 1935, the Historic Sites, Buildings, and Antiquities Act was passed to establish a “national policy to preserve

for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States,” which would be the beginning of the National Register of Historic Places. In 2000, the History of American Landscape Surveys (HALS) was created by the National Park Service and the American Society of Landscape Architects (ASLS) to document historic landscapes.

Thankfully landscape architecture has and always will be an essential and symbiotic component of the NPS. As the park system grew over time, and continues to grow, so does the role of the landscape architects involved and have never strayed far from the ideals set forth by Olmstead and were the inspiration of the National Park Service, which is an inspiration to us all I think documentary filmmaker Ken Burns said it best when he called the National Parks “America’s best idea.”





FACING PAGE: A PORTRAIT OF PRESIDENT TEDDY ROOSEVELT AND NATURALIST JOHN MUIR. ABOVE: THE NPS LOGO AND AN EXAMPLE OF 'PARCHITECTURE' AT MT. HOOD, OREGON

14

20th Century Figures in Landscape Architecture

Modernism as a movement was about making an intentional departure from the status quo. It was also a rejection of the past or anything that was deemed responsible for the current societal conditions. The modernists wanted to move forward, invent a new world, deconstructing the old one, even completely smashing it into pieces. They wanted change, not just in art but in society, and freedom from its moral

and religious rules. The movement permeated literature, music, dance, art and architecture.

The Bauhaus was a modern school in Germany founded by Walter Gropius that fused art and design. When it was interrupted by Adolf Hitler and World War II, many of the students and faculty fled Europe and settled in cities like New York. This was one of the ways modernist ideas spread

in America. As modernism attempted to define itself, rules were invented. Sometimes they seemed stuck, so they would change the rules again, always moving forward, discarding anything that was unnecessary. Perhaps they

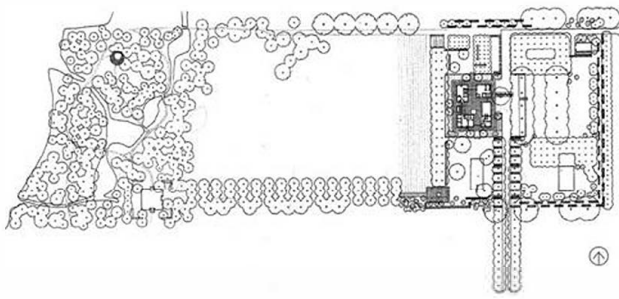
Arts style. However, students were aware of the now legendary Bauhaus and excited to forge ahead. James Rose, Garrett Eckbo and Dan Kiley were among these students.



DAN KILEY, ONE OF THE FIRST MODERNIST LANDSCAPE ARCHITECTS.

thought if they stopped, everything would go back to the past? They most certainly did not want to be doing the same old thing, over and over.

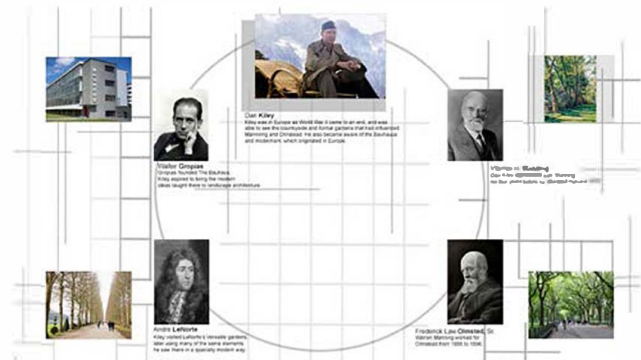
In landscape architecture, schools such as the Harvard Graduate School of Design were still teaching the Beaux



PLAN VIEW OF THE MILLER HOUSE AND GARDEN BUILT IN 1957 IN COLUMBUS, INDIANA. A COLLABORATION BETWEEN EERO SAARIN (ARCHITECT), AND ALEXANDER GORDON (INTERIOR DESIGN) AND DWAN POLEY (LANDSCAPE ARCHITECT). THE GARDEN AND HOUSE EXTEND OUT FROM EACH OTHER, EACH VISIBLE FROM THE OTHER, WITH THE LINE BETWEEN INSIDE AND OUT BECOMING BLURRED. THE GARDEN IS DESCRIBED AS A SERIES OF OUTDOOR 'ROOMS'.



AN ALLÉE AT THE MILLER HOUSE AND GARDEN (CENTER) CONTRASTED WITH ONE FROM CENTRAL PARK ON LEFT (DESIGNED BY OLIVIERE) AND ONE FROM GARDENS AT THE PALACE OF VERSAILLES ON THE RIGHT ((DESIGNED BY LE NÔTRE).



ROBERTO BURLE MARX
A MODERNIST LANDSCAPE
DESIGNER, ECOLOGIST AND
ARTIST FROM BRAZIL. SHOWN
HERE IS A PLAN VIEW OF ONE
OF HIS PROJECTS (THIS PAGE
RIGHT) AND HIS COPACABANA BEACH
DESIGN (LEFT).



THE PAVING DESIGNS AT COPACABANA BEACH ARE VIEWED FROM THE TALL BUILDINGS ALONG THE BEACH, MUCH THE WAY PARTERRES WERE VIEWED AT VERSAILLES, FRANCE.



Some view modern landscape design as boring, or perhaps too rigid, or even unattractive because it was characteristically devoid of excess ornamentation. While some designers of this era did focus more on a simplification of space and form, there are others such as Roberto Burle Marx that seemed unfazed by any of the unwritten rules of modernism that may have existed. He created vibrant and expressive modern garden designs full of fun patterns and colors. In addition to being a landscape architect, he was also a painter, a conservationist and a lover of plants. Maybe it was the beautiful palette of tropical plants where he lived in Brazil that inspired him to create organic curvilinear designs using bold swaths of color, intermixed with geometric pavements, lush plantings, and water features. Burle Marx also advocated for rainforest conservation. He collected plants

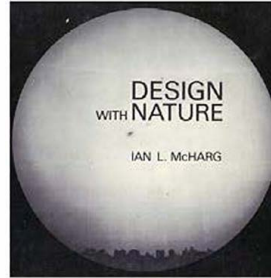
from the wild that may have otherwise been lost to extinction as development pushed further and further into the forest. These specimens were cultivated and cataloged, and there are nearly 50 plants that still bear his name due to this work.



FREEWAY PARK, SEATTLE, BUILT 1976, LAWRENCE HALPERIN. THE MASSIVE, NOISY HIGHWAY CUT A WOUND THROUGH THE CITY, DIVIDING NEIGHBORHOODS. THE PARK ATTEMPTS TO STITCH IT BACK TOGETHER. CONCRETE FOUNTAINS AND VEGETATION HELP DAMPEN THE NOISE.



KELLER FOUNTAIN, DESIGNED BY LAWRENCE HALPERIN, PORTLAND OREGON. TOP: ON THE OPENING DAY 1970 AND BELOW, SUMMER 2021. NEARLY 50 YEARS LATER, THE BELOVED PARK IS FILLED WITH A FOUNTAIN. THE GEOMETRIC FORMS ARE A MODERNIST INTERPRETATION OF A NATURAL WATERFALL.



ABOVE LEFT: IAN MCHARG, LANDSCAPE ARCHITECT, CITY PLANNER, ECOLOGIST, PROFESSOR AND AUTHOR OF *DESIGN WITH NATURE*, A CROSS-DISCIPLINARY GUIDEBOOK FOR DESIGNERS, PLANNERS, AND POLICY MAKERS

Conservation was an important topic during the 1960s and 1970s as people began to become more aware of the destruction and poisoning of the environment around them. One of the most influential people in landscape architecture EVER, Ian McHarg began to speak on this issue. Not only did he focus on ecological systems in his design and urban planning, but he wrote the quintessential book on the subject, *Design with Nature*. The book is still relevant to this day and required reading for any one who's serious about landscape architecture. McHarg's contemporaries John T. Lyle and Anne Whiston Spirn helped keep landscape architecture at the forefront of the conservation movement, advocating for ways to heal and protect the earth and ourselves, since we are part of it and not just 'along for the ride.' Without their efforts others may not have considered the consequences of their actions when designing on the land. Lyle was one of the first to use the

term *regenerative systems* in reference to the landscape, a term we still hear used today. Spirn was also interested in finding ways to heal natural systems that had been degraded or destroyed by previous generations. She advocated for cities to provide more green spaces or *urban nature*. She realized the health of the city and it's citizens was interconnected, each depending on the other for overall health and well-being.

With so many influential people working in the industry during the 20th century, it's impossible to mention everyone, but Lawrence Halperin's work can't be overlooked. Not only has it healed manmade scars (Freeway Park) and reconnected people in urban settings with nature (Keller Fountain) but it has also helped protect fragile ecosystems (Sea Ranch). And of course, we have our own Main Street in Greenville, SC to thank him for, and

it is lovely.



THE BEAUTIFUL, PEDESTRIAN FRIENDLY STREETSCAPE OF DOWNTOWN GREENVILLE, SC
DESIGNED BY LEWIS HAI PHAM.



THE FUTURE OF LANDSCAPE ARCHITECTURE

What does the future hold for landscape architecture? Recent years have been focused on the threats of climate change; water levels rise and the impacts of severe weather. Landscape architects are at the forefront of designing resilient cities and landscapes to tackle these issues. During the covid pandemic, reclaiming public space became an even more important issue than before. A few notable Landscape Architects of this time are Peter Walker, James Corner, Walter Hood, and Martha Schwartz.

"WE F*CKED IT UP SO BADLY.
FUNDAMENTALLY, WE HAVE TO UNF*CK UP THE EARTH,
WE HAVE TO REGENERATE IT.
IF WE'RE GOING TO SURVIVE,
WE HAVE TO SEE IT IN A DIFFERENT WAY."

-MARTHA SCHWARTZ.

* Images included in this collection were sourced from Wikipedia Commons, John Paul Getty Collections, The Library of Congress, Flickr, and others as noted.

Ancient Civilizations and Ancient Egypt

The entire first 20,000 years of human history can be summed up into one ideological search, called Molony, or a way to explain existence and the world around us. In this search came the disciplines of mythology, science, religion, and philosophy, where each was connected and relied on observation of the physical and metaphysical world.

Not to say that modern architecture is wrong or lesser than those of ancient and prehistoric times. Much of modern architecture is based on lines, grids, and the



idea that all space is space and can be used in such a manner if we can develop it. It is all represented in a pictorial perspective. It has only been since the 17th century that design shifted to this idea. The preceding civilizations such as the Chinese, Inuit, and Byzantine, thought that certain land was sacred and should be treated

as such. This is where the birth of landscape architecture occurred. They shifted a focus to incorporating design with the land to make sense of chaos and feel a part of something bigger.

It's almost humorous to say that these early people were the first astronomers, but in a sense that is correct. The early societies didn't call astronomy 'science' in the way that we do today. For them it was more belief and ritual. While trying to understand the order of all existence, they gave a spiritual identity to nature, which shaped their respect and reverence towards the landscape. In both construction and architecture, these early societies paid a sort of homage to the identity of nature. Large towers and obelisks, the designs of cave paintings, earthworks, and stone circles are all just examples of how humanity showed their awe of nature. At its core, it follows the idea that "imitation is the sincerest form of flattery". In the attempt to create order, or position themselves in all of existence, early people had to be aware of their surroundings. Curiosity drove the people to identify what is above, below, and around. This led to the creation of the *axis mundi*, which depicts the sky, earth, underworld, and the four cardinal directions. The simple concept of the *axis mundi* shows the careful attention that early peoples paid when considering movements of the sun and stars.

With natural caves being the most convenient shelter for early peoples is just the simplest piece of evidence that people have always relied on and utilized nature for survival. Cave paintings are some of the oldest records that prove the people's commitment to the search of order and knowledge in nature. Mainly of animals and some plants, and today knowing that those early people were hunters and gatherers, leads to the conclusion that those people revered and sought significance in herds and sacred locations.

After the shift to animal domestication and agriculture, humanity began to identify the concept of boundaries. They were able to build more permanent housing and as a result built large stone and wooden structures that until recently, had become just an eye sore and unknown in landscapes. Stonehenge, probably being the most famous, with stone pillars as tall as 20ft, has finally been defined and begun to be understood. In a time where peoples lived such a simple life of farming, it is hard



to understand what this massive structure could have been. Each stone was part of a massive and complex system that showed the equinox, solstice, seasons, and other lunar and solar

changes. For those early people this was their way to measure and contextualize time. Even in the Native American cultures, several thousand miles from Stonehenge and similar structures in Europe and the Middle East, there have been remnants of calendar-like circles discovered. With massive earth mounds oriented to be directly under the sun and moon on the equinoxes and solstices, it is hard to argue that these people were not mathematically advanced or did not understand the cosmos.

Following the construction of massive structures came urbanization of sorts. Large cities were constructed and oriented around Ziggurats in modern day Iran and Iraq. These massive structures resemble mountains, which suggests an idea that mountains were a representation of power and authority. Proven by name's sake and

archaeological evidence of royalty and religious significance, it is obvious to see why these structures were cores of society. The great pyramids in Egypt, similar in size and shape to the Ziggurats, were designed to orient and match the stars, even the coordinates of today's mapping systems, as well as be symbols of power with the idea of trying to obtain the spiritual significance of Earth's mountains.

On the other side of the planet, in modern day India, ancient Hindu temples and structures have been discovered to symbolize the cosmos in relation to their gods. Identified as caves or sacred chambers to worship gods, the ceiling is open to the sky as if it were a pillar to heaven and a direct path to the immortal beings.

For landscape architecture, it is of huge importance that we understand that even thousands of years ago natural manipulation was utilized for recreation. The great hanging gardens in ancient Islamic civilization, and even 'public parks' were constructed as a way for the people to gather and enjoy. Mainly as places to show wealth or power, festivals and other functions would occur in these places, all with the idea that nature is the best place to celebrate anything and everything. Considered a luxury and a sign of wealth, plants were revered as royal themselves and of great importance. Water being so sacred to life, yet so scarce, was required and in turn required greater feats of physics and science.

Even more into the classical era, such as Ancient Greece, do we see many of these natural feats copied and adapted. The idea that Earth was a Goddess herself, Gaia, was created by the Greeks, but cannot be denied as being heavily influenced by the civilizations prior to Greece. Greek civilization, like



Egyptian, relied heavily on water. For trade, agriculture, and city planning, many Greek cities were founded on coasts, rivers, and inland springs. This allowed for the creation of non-autocratic governments, which heavily influenced the modern democratic process we use today.

Reflecting on history, it is ironic that Western civilization has depicted ancient civilizations as primitive, lesser, savage, and even ignorant of knowledge. Yet, we see a shift today where we are leaning back to the basics of nature to show us how to survive. Cultures are beginning to celebrate lunar and solar holidays and showing respect and acknowledgement towards the scientific advancements of the early people. Even cosmology today, many people in the younger generations use it to justify personalities. But this even goes to show that nature connects not just our relationship with the landscape, but also with each other.

The Classical World



The classical era focuses on the simple elements and the essence of design. The ancient Greeks and Romans focused on the simple structures of form, proportions, key planning, and aspects that drew attention to important fractions of structures. There was such an emphasis on city planning and records that the peoples of today hypothesize reflected the relationship between human society and the environment.

Outside of the changes in architecture and planning, one of the main ideals that came from the classical era was this idea of *Humanism*. Seen across religion, culture, and myth, human aspects and traits were assigned to the wild.

Spirits, half-human animals, and even the gods were all based in a connection between the celestial and awe inspiring wild, and the deep emotions of human consciousness. Arguably, *Humanism* is one of the most simplistic and innate ways that humanity shows our reliance and connection to nature.

During the last 700 years before the common era, Greek cities began to rise around core natural phenomena, such as rivers, springs, and even the Mediterranean,

not much unlike the ancient civilizations. Unlike the ancient civilizations prior to Greece, government and society was based around high figures as kings and religious priests. However, as society began to spread around Greece and smaller cities sprang up, a new form of government began to emerge. This is an obvious example of how landscape affects the culture of people. Cities were constructed based on the idea of the *agora*, or a central portion of the city where society life would be focused on. In the *agora* there were markets, festivals, political debates, philosophical debates, and celebrations. Immediately surrounding the *agora*, archeologists have found major cultural sites. Potters, painters, and textile shops and instruments have been recovered, showing culture as a core belief to the Greeks. Iceland's capital city of Reykjavik utilizes this concept of the *agora*. With the main road into the capital leading from the docks to the airport, it runs right across a bridge at city hall. Connection from the only major airport in the country to the source of its major export, ensures that anyone that visits the city will be aware of the city's center, including the large national church, the capital, and historical museum. Just as the *agora* was the center of the city, the city was the center of the *chora*, which was the visible constraint of the environment around the city. It included the oceans, plains, farms, mountains, and hills that surrounded the city. Placed practically within their environment, this allowed Greek cities to flourish as part of their environment rather than abuse and live off the land.

Being part of nature was not just physical, but metaphysical for the ancient Greeks. In rites and rituals, they changed from sacrifices of blood and riches to more gifts of effort and giving back. Giving offerings of crops, wine, and handmade goods meant more as a reflection of effort from humanity towards the gods. The gift of crops for example was symbolic not only of giving back but was an extension of the effort of the people's livelihoods. Looking at the massive theaters of ancient Greece, they were constructed into the sides of hills with a view off the side. The viewers were given not only of the actors, but of the land around them. Then for the stage, it can be said that the environment was part of the stage, somewhat of a backdrop.



Similar to the idea that taller objects or monuments were more symbolic of power, such as the massive pyramids and ziggurats, the temples, statues, and central buildings of power for the Greeks were designed to rest upon a built-up section of the city.

These structures were larger than the other buildings of the city, but also designed to create a feeling of a journey or pilgrimage to these places. This journey created an atmosphere of dominance or importance to temples. Even today, this essence of higher society can be seen in buildings such as the US Capital. Built large, expansive, and upon a hill above street level, standing and looking up the stairs gives onlookers a sense of power and authority that should be sensed from such an important figure of power.

Cities were built up in two major methods, one being the random growth around the center, and the complete planned cities that were built from the ground up according to design. Both were effective but utilized in two very different ways of life. The continued and gradual growth of cities around a constructed center were usually found inland and changed over time as population grew. The cities planned down to the finest detail were usually seen as coastal cities. Designed to be in that specific location, these cities were initially built up and filled with people as the cities

trade and economy grew. Significant to landscape architecture, the planning of these cities was meticulous and accounted for the shift of the land. The plans were adopted during construction, but they had to build off the rest of the design. Land gradient, land type, location and accessibility to water all had to be considered well before construction and showed a finite attention to detail of buildings in their relation to the environment.

Centuries later, the Roman Empire rose from a small city in Italy. Located between two rivers, it was in all aspects like the city states of Greece. The Empire, however, gave rise to a newfound ideology that still stands today in many modern-day capitals. Imperialistic styles such as size, grandeur, and placement defined Roman architecture. Greek aspects such as the *agora*, were incorporated into large scale city planning. Still acting as the center of the cities, they were the center of all traffic. Usually filled with marketplaces, this plan was not only a cultural balance, but also key to the economic prosperity of the city and of Rome. The Romans took the concepts of grid planning that the Greeks used in cities and scaled it up. Not only were the cities grid like, but the surrounding land was divided the same way. Farmland and crop type, military camps, pastures, and other places of recreation and land were designed into grids.

Rome took the simplistic elements of Greek architecture and added details and rules to create an imperialistic feeling of control. City planning now included ordinances, or rules for construction that forced conformity upon buildings. Roads were constructed in a uniform manner that were required to run through certain areas of a city. Some buildings, such as houses and shops, had to be built below a certain height, while others could not fall below a minimum height, such as homes of senators or great political halls. All these aspects were seen across the empire, creating a nation that was beginning to conform to a set standard. The Roman Empire was never out of the minds of the people, and the sheer enormity of Roman architecture would spell both pride and fear into the citizens. Sophistication was

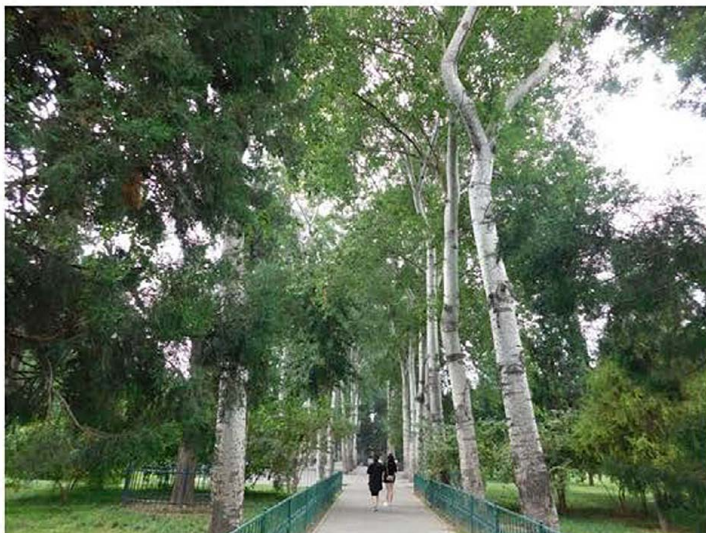
brought across Europe and the Mediterranean, and anyone who objected to the Roman way of life was considered savage and rebellious.

Greek lifestyles were formed from the metamorphosis between land and city. The intentional placement of cities and the incorporation of land into the boundaries of the city state forced society to build independently with a sense of fellowship with their countrymen. Roman dominance was executed through uniformity and size. Power was shown through design and expansive construction. The argument is then made that the Roman Empire was the beginning of the modern era, as we see capital cities today focus on mass construction of political offices. Landscape usage and architecture in general shifted to being about size and form, allowing for detail and culture to show through. For architects today it is important to incorporate both styles of design, Greek and Roman. Using the Greek thought of society as part of the environment, we can create and design places of culture and concentration. Not ignoring the message that Roman sent, the uniformity of design across a nation can also show culture and remind people of pride in a nation and in themselves as part of that nation.

China and Japan

Using the landscape to answer questions of the world and of existence has been humanity's most in-tune and innate way of creating order in chaos. Being immersed in extremely different landscapes offers unique perspective, almost hinting at the diversity of culture because of how unique the world is. Yet, there are still core similarities that can be derived from ancient cultures through their art, architecture, and early societal behavior. One of the best examples of seeing both uniqueness and diversity is between China and Japan.

Early Chinese culture was fragmented between multiple kingdoms, and it took close to 400 years to unify what can be close to modern day China. With such a diverse land portfolio, the effects that the landscape had on Chinese culture was centered around the enormity of Earth, but also finding solitude and familiarity in the closeness of nature and home. Through Chinese art, such as paintings and



tapestries, much of the relationship between human society and nature leans much more in favor of the landscape. Paintings depicted mountains as goliath features that dwarf human impact, showing homes or buildings as a human scale and people as almost insect size, almost to suggest an immortal or heavenly characteristic of nature.

Chinese society, through its many religions and belief systems, such as Taoism, Confucianism, and Buddhism, came with the concept that a relationship with the world and maintaining the health of the world benefits the health and relationships that humans have. “Feng Shui” is a Chinese concept of balance between human impact and natural forces. It gives a holy reverence to nature as a spirit or energy, which was seen all through the world in many forms. Colors, shapes, and spatial balance all held symbolic meaning and were impacted by historical and mythical events. Almost like “genius loci”, the personal health and balance between the individual person and their surroundings was a focus of much of Chinese architecture.

Understanding the importance and reliance of nature, Chinese culture evolved into syncretism, which molded religion, culture, and society all into one common moral system. They saw the landscape as collective. It represented everyone and everyone could benefit from it. Each aspect of nature was imbued with meaning and a story of life. Teaching this as the societal norm through China gave the people a common inheritance and responsibility to nature. It became a way for families to gather and teach, which is why much of ancient Chinese architecture was physically centered around a garden.

Like the Greek “agora” or the Roman “forum”, each Chinese home would be designed with an open area, or garden, that was central to all living and dwelling quarters of homes. Almost like a villa, there were several smaller rooms within this compound where multi generations of families would live. With careful planning along symmetrical axis, rooms bordered this garden, with walkways that were neither indoor nor outdoor, giving balance to the border between the two. These gardens were simple to the eyes but were a culmination of almost every element of the landscape. There are 17 elements of the traditional Chinese Garden...

Proximity
Small size
Walled off
Small sections
Asymmetrical
Varied spatial types
Sequencing
Architecture

Rocks
Water
Trees
Plants
Sculpture
Borrowed Scenery
Chimes
Incense

The Chinese home was meant to be a personal retreat for meditation and self-reflection. Many times, this could be a place of history from an elder family member, or education from tutors, or a secluded retreat to ask nature how to handle the struggles of the world. These gardens began to spread to a much larger scale. Continuing with the 17 elements, gardens were installed at many ceremonial palaces and shrines. Seen in the Golden City, Summer Palace, and at many personal homes of important political figures. Chinese landscape architecture took the simplest concepts of nature and forged a personal relationship with them in their everyday life, both at the physical home and within cultural morality.



Japan, being only across a small expanse of water, yet far enough away from Chinese influence, took all these aspects of Chinese culture, broke them down even further, and rebuilt the concepts of nature in art and architecture. One of the most prevalent results of that is in early Japanese art. Using the Chinese characteristic of enormity and human scale and combining it with the importance of water to the island nation of Japan, much of Japanese art

is centered around massive waves. Paintings depict fishermen battling fierce water movements, or they show islands as sanctuaries in the seemingly endless expanse. But this also shows the cultural and societal reliance on water. Being an island nation, water is obviously a key factor for identity, whether a person lives on the coast or inland is irrelevant.

The Japanese gardens are seemingly unique when compared to Chinese gardens, and while there are many differences that are easy to pick out, the differences are not tangible per say. Taking the idea of personal gardens, Japanese homes also included small, secluded gardens that could act as a retreat or mediation zones. However, many of these gardens were less literal when it came to the elements of the Chinese gardens. Zen gardens included more rock and were based in sand. Literally, this rock garden was an open area that would be surrounded by trees and a vast expanse of moss or grass. Yet, symbolically, these Zen gardens represented the identity and persona of Japan. The sand symbolizes water, and the rocks were aligned as islands, with a geometric similarity to each other. Acting as a place to ground

yourself to the earth, the Japanese people saw the relationship to nature as a nurturing and humble act.

Japanese architecture may have seemed more along the lines of 'build where something fits with the landscape', however, this is far from reality. Japanese homes were not building upon the landscape, more that the landscape was built within the home. Huge masses of earth were moved to form a dynamic asymmetrical property. Plans were drawn to include the movement of water, and whole ponds were created in perfect balance to buildings. Trees were planted and modified to fit aesthetic, and rock paths included many varieties of materials and sizes. These landscapes were designed to create balance and harmony within the homestead of families. It allowed for personal interaction with trees and plants by requiring maintenance, which could be perfected into an art form along a path of Zen.

Both cultures sought a way to bring a small portion of nature into the people's lives, while still maintaining the symbolism of the sheer enormity of the world.

Connecting the landscape into the everyday home life of the people led for centuries of morality based on common and blended beliefs, which allowed for symbolic interpretations of the landscape seen through art and architecture. Even today, there



are many aspects of Chinese and Japanese architecture that have been copied and modified around the world. Central Park in New York City was completely designed, and human made, like the mass garden in the Imperial Palaces of China and Japan. Having a public garden like Central Park in the middle of one of the largest and most

human developed cities in the world shows that even humanity in all its glory and progress still needs to be reminded that nature is still the ultimate design.

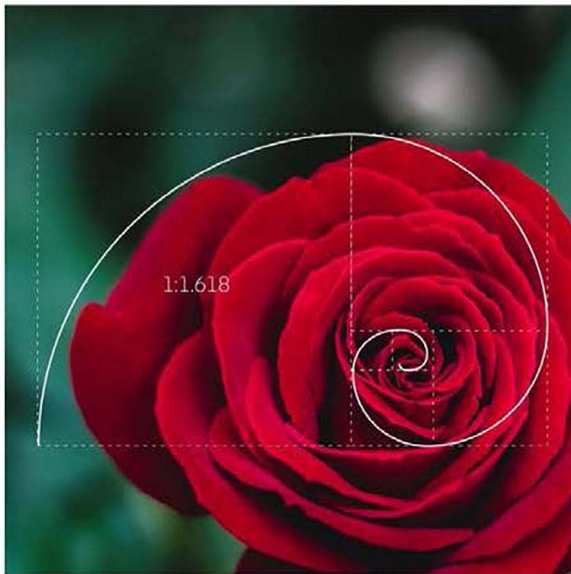
Islamic Influences

Following the chaos that erupted from the fall of the Roman Empire, Islam arose in the middle east as the most prominent religion and culture. Originating in the Arabian Peninsula, then spreading through the Middle East, across the Northern Coast of Africa, and eventually reaching the northern border of modern-day Spain. Located in the middle of the known world, the Islamic world was able to spread culture and knowledge from Europe to Asia, something unheard of since the Roman Empire.

Islam has a core set of values and distinguishable characteristics. Much like the other Abrahamic religions, they are monotheistic and follow Allah. Muhammad was the original and final prophet who was able to speak with Allah, leading to the conclusion that all humanity needs to know is already in the Quran. Islam also believed in social equality, following Sharia Law, and living by the five pillars.

The five pillars, as a literal reference, are the core behaviors that support all Islamic life. From a cultural perspective, naming the core behaviors after 'pillars' immediately shows the importance of architecture and mathematics to the Islamic culture, only foreshadowing their advances in design. The five pillars are 1) sole worship of Allah and finality of Muhammad, 2) Daily Prayer, 3) Almsgiving to the needy, 4) Self Purification during Ramadan, 5) and a pilgrimage to Mecca. Each of these pillars has some effect on the architecture and landscape design of Islamically influenced structures.

With most of the Islamic world being in the harshness of the desert, the landscape had to be part of and decisive of architecture and construction. In the Islamic religion, God spoke to Muhammad at an oasis, and following, these oases were revered as holy sites, as well as restful places for survival. Using these oases as resting points, much of the Islamic population was and even today are nomadic.



While oasis had a real world meaning, there are large portions of the Quran that discuss the perfection of the Paradise Garden. This garden, like Allah, is perfect, with all the most beautiful aspects of nature where nothing ever dies. For all purposes of trying to follow Allah, Islam developed the theory of perfection regarding squares and circles, most commonly called the “Golden Ratio”. The most influential piece of nature that is closest to the “Golden Ratio”, thus the closest to perfection, is the rose. The rose closely resembles the curves and outline of the “Golden Ratio”. The rose

was created and nurtured by Muhammad, giving the Islamic people another reason to refer the rose. In Arabic, rose is ‘Gulshan’, which means ‘soul at peace’. The petals of the rose represent union and harmony based on the size of the petals.

Following the idea of perfect gardens, much of ancient Islamic landscapes were designed with science and mathematics involved. In Baghdad, the initial construction of the city was perfectly round. The center of the city was exactly 1 mile in diameter, with the palace and palace garden in the center. Now while there were cities planned exactly to the smallest detail, there are many larger cities that are more organic, and follow Sharia law and cultural practices. These cities were built at a time when the major form of transportation were camels, meaning that the orientation and size of roads were based on the dimensions of said camels. The size of a camel was essentially the width of a one lane road, which represented a more private lane. A

good Muslim would be open with their behavior, as Allah asks, and show that they live by the five pillars. Following and encouraging this practice, much of the cities are public and very open to society. However, on the other side of the coin, there are sections of the home, mainly for women, that are private and secluded, allowing for respectful privacy. Following respect and mixing in honor of word, the personal ownership of a home, and the usage of said property goes to the original usage and ownership.



In a more modern era, these practices are seen in the reconstruction of middle eastern cities in Iran and Iraq following the last few decades of violence. Today, the most prominent display of the 'perfect paradise' can be seen in the Imam Square Isfahan. It is a religiously significant center, rivaling the importance of

Mecca. It is an open area that is heavily populated during prayer time, scattered with Persian rugs. An aerial view of the square also represents the pattern and shapes of said rugs.

Within these gardens and seen throughout Islamic culture, just as in many other gardens of the world, the incorporation of water is essential. What stands out in Islamic gardens though is that water bodies are shallow and allow for physical reflection. There are reflection pools and wash basins, utilizing the most minimal

amount of water, which was a rare and faltering commodity, all while being symbolic of oases. With water being a religious symbol of life, the movement, sound, and incorporation of water can be commonly seen through fountains, small ponds, and channel systems that also function as an irrigation system.

After centuries of conquest, the Islamic influence stretched all the way to Spain. Still today, there are many structures that incorporate and mix European design with many new elements of Islamic culture. All over Spain today, there are many villas and personal homes, called *Carmen*, that look like the Mediterranean homes.

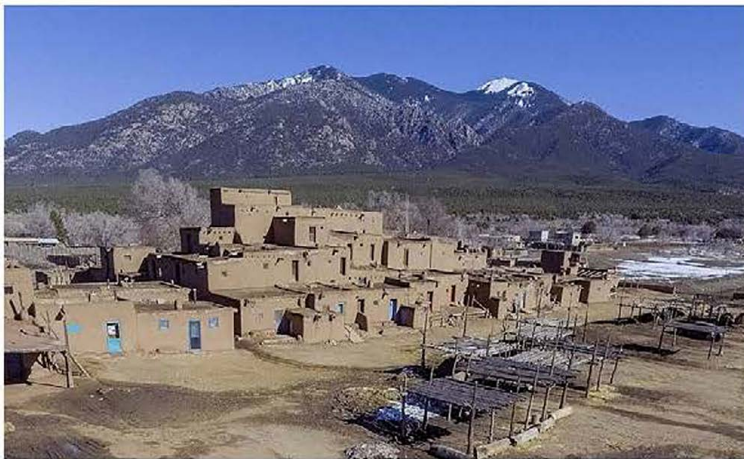


Islam brought vegetation and style from Asia and the Middle East, creating a demand for luxury and exotic goods. Islamic culture required the building of Mosques, and one of the greatest in Spain was the Mosque of Cordoba, today called the Court of Oranges. The courtyard incorporates exotic and native plants, canal irrigation, reflection pools, and the glory and awe of a holy site.

Islam may be so radicalized, but today still has many lasting and influential aspects of landscaping and architecture that work today. Irrigation has begun to be naturally incorporated into our designs today, and the beauty of Islamic gardens have lasted as some of the most religiously important sites for the Muslim people of the world.

Pre-Columbian America

Prior to the discovery of the Americas by Christopher Columbus, hence this time period being called 'pre-Columbian', we are introduced to landscape architecture that is based around mimicry. Heavily defined cultural gatherings, societies were designed and built to tie the landscape to define space.



The first method that we see in the Pre-Columbian era is a continuation of mimicking the landscape. Similar to the Pyramids of Giza or the ziggurats of Babylon, we see the imitation of the surrounding mountain range in the construction of Pyramid of the Sun, Teotihuacan Mexico.

When looking at the front of the pyramid from the bottom of the stairs, the pyramid lines up with the range. At a holy site and the main structure in the area, it shows a reverence to the nature of the landscape. Again, in the Taos Pueblo, we see an imitation of the Taos mountains through materials and the elevation of the city buildings.

Alongside mimicry, there is a utilization of the landscape that is unique to the features of the natural environment. In the Midwest we see this is the construction of cities within the cliff sides of mesas or along the top. Being one of the hottest locations in the Midwest, but geologically being valleys and canyons, Mesa Verde in Colorado is an intuitive incorporation of human structures and the landscape. With cliffs that have formed through weathering, overhangs are an easy shelter that require little to no effort to build. These overhangs are perfect shields from the sunlight that would drastically increase the temperature of the city. With homes being built tall and within these overhangs, they primarily face south-east, which allows for sunlight to shine through during the cold mornings while also protecting from the sunlight in the afternoon during the hottest times. We also see utilization of the environment in the lake city of Tenochtitlan, similar to Venice, Italy. Being the center capital of the nation, being built upon the lake allows for natural defense from neighboring nations, while also allowing the city to be the main center of trade. Being located in the tropics creates a hot and humid climate, but being located on the lake allows for a natural cooling effect as the water absorbs the heat and creates a breeze for the city.

There has also been the discovery of an overarching theme of mass and void that defines architecture during this time. What is and isn't is very impactful of ritual and societal roles. Within the Mayan Empire, within the dense forests we see small cities. Within these cities we see open courtyard space that is defined



and outlined by temple structures. There are no physical walls that create this space, but the presence of the structure is what helps draw attention to the openness, which would have been used for social gatherings and areas of interaction. Even within the Pueblo society, kivas, or small circles within the city, were ritual pits that used the openness for ceremonies. Showing the relationship between mass and void was a subconscious method of architecture that these people were able to utilize to represent their understanding of creation.

The pre-Columbian peoples, while so far dissociated from the rest of the civilized world, faced many of the same metaphysical questions that were already addressed in Europe and Asia. For them, many natural phenomena were revered as heavenly deities. Serpents for one were viewed as holy, as were birds, due to their habitual similarity to the sun. The sun being viewed as rising and setting from and into the earth, was an immediate connection to the snake, who does the same in the morning and evening. Birds were seen soaring through the air, a place where humans

were unable to reach. Cities such as Machu Picchu were constructed to try to reach the highest heights that humans could reach, just to be closer to the heavens. Through the snake and the bird, we see serpents and birds defining the religious deities of these pre-Columbian peoples. From statues to religious clothing, to ritual practices, these two animals define the people's views of the world.



It is incredible that all these societies, which most of Europe defined as primitive, were arguably more sophisticated in their understanding of the natural world. These people were able to construct temples, cities, and trails all without the wheel or prime technology of the time. These peoples were astrologists, which they incorporated into their religion, as seen through the Mayan Calendar, which impacted our understanding of time to modern day. Understanding the methods of pre-Columbian discovery should be significant to landscape architects in the modern day as they can be used to connect our designs with the landscape.

The Middle Ages

The era of the Middle Ages that we are studying lasts from around 500 AD to 1400 AD. Since this time expands over close to 1000 years, it can be divided into three smaller periods. The Dark Ages are generally assumed to be the first 300 years after the fall of the Roman Empire, followed by the Middle Ages and then the Medieval Ages span over the last 500 years.

Culturally, the Middle Ages are heavily influenced by the transition to Christianity. Europe was dominated by Christianity by the year 1000, and much of the architecture during the time was decided and revolved around Christianity. After the fall of the Roman Empire, there was chaos and despair. During such a time, Christianity boomed in popularity due to its hopeful appeal and faith based on a better end. After accumulating a following and control, the monastery life began. The church and its supporting facilities were centers of religion, health, and education.



Education was pushed through members of the clergy as an important aspect of truth and their relationship with God. Through the mission of Christ, these members of the clergy were sent to care for the ill and the less fortunate. Thus, monasteries were built with

gardens, barns, and medicinal plantings. Landscape architecture can be seen in the location of the monasteries. Mainly built upon hill tops or in fertile valleys, these churches were expanded upon with housing, kitchens, and hospitals. These religious communities literally became smaller, self-sufficient communities that could support the local towns as both a religious and medical service.

The architecture of the Middle Ages was defined by larger buildings of stone that featured towers and walls. The location of these structures, classified as castles, were typically located on hills or islands for protection. As already mentioned,



monasteries played such an important and significant role during the Dark into the Middle Ages. As society began to rebuild and balance out, modern cities, such as Paris, grew up around these monumental buildings. Markets began to become more and more important as the general people accumulated more wealth and security. Homes, shops, guild halls, and political centers grew organically and compactly. Even today, the guild hall style and structure can be seen around the world today, specifically like the

Bauhaus Bier Hall at Busch Garden in Virginia. Roads were smaller and buildings were constructed overreaching these stone paths. Compacted yet ordered around the market and the church, smaller gardens would be all around the city, and fields would be expansive and grid-like.

The connection to the environment can be simplified as three natures. First nature is wild nature, the wilderness that has not been explored yet. Second nature is the fields of wheat, corn, and growing food that surrounded the cities of the age. The third nature revolves around man made gardens and the plants in the city, which

today would be the home gardens and planters and potted plants. The importance of the three natures shows the evolution of the relationship between nature and humanity. Especially at a time where the world is full of chaos, being able to control and use nature was a way that could connect the people with something higher.



Today, in the twenty-first century, it's astounding that many of these structures are still strong and exist today. Cathedrals and older sections of cities are still centers of culture and religion today. A few of the elements that allow these historical pieces to remain are their human scale, mixed uses, simple design, and easy access to basic necessities. In the United States, Washington DC is centered around our major political buildings, while being located along two major waterways. Even Central Park in New York City, was created with the idea that it should be an escape from the dark and desperate life of Industrialization. After the burning of the Notre Dame Cathedral, it has taken an international effort to restore it. Even after hundreds

of years, and these structures standing on their own for so long, it's extremely settling that we are continuing to hold these as such important cultural centers.

Italian Renaissance and Baroque

The Renaissance Era was literally a rebirth for architecture, bringing back art, philosophy, and culture that was lost from the Greek and Roman times. This could be stated as the beginning of the modern era, and the foundations of many of the architecture styles and practices that we see in Europe today, and the reminiscence of those made their way to our shores in subtle ways. Science that was pushed in this time led to the revolutionary technology that started the Industrial Revolution. Science and religion were combined, and began to ease humanity's fears of the cosmos, giving humanity a more defined role and place in the world. The Renaissance was a time of 'Real Humanism', where their style was defined by individualism and free will, which was contrasted to the religious influences of the Middle Ages.

The elements of architecture that grew from the Renaissance are considered part of the Artistic Movement. This movement had three core elements that I personally use today in my own designs, what was, what is, and what we want. While these three elements are simple, they hit deep to the core of the individual through self-reflection and self-improvement.

Palladio architecture was the most prominent style of architecture that we see from this era. Defined with the Renaissance Villa, a refuge from the plague and the political conflict, and a retreat for philosophy and literature, the wealthy of the era each had one and used it to the best benefit of their status. The city of Rome specifically shifted and adapted to the Palladio style in an instant. There was a rediscovery of the axis, which was most seen in street organization, and covers most of Europe today. The mathematical use of scale, symmetry, and formality was born in drawings and representation of design. The architectural documents that we create today, site plans, sections, and perspectives, were pushed to their limits and widely used in the Renaissance. Perspectives were highly used as an effective method of representation, highly influenced by math and basic geometry. The one point vs. two

point was the perfect way to tangibly place the person in the designed space. The Baroque style was also born and is basically the Renaissance on steroids. It was far more imperialistic and was a direct reflection of the power and wealth of Renaissance banking families. While much of the Renaissance was supposed to reflect the individual person, the Baroque style was larger than life and threw human scale out the window.

The ideal city was created during this time by Alberti, who wanted a better social life for the public, while also including modern methods. These cities featured large and gated walls that were perfect for the time of conflict. City streets were gridded and followed the cardinal axis, with diagonal streets that cross over key buildings. Public spaces were a new feature, specifically with plazas around significant buildings. The cities were missing the organic growth of the cities during Medieval times and were highly influenced in their shape by new modern military tactics.

Structures such as Campiglio Capitoline Hill, were constructed for the public. It was a refined and simple central area, a simple plaza, with columned buildings. The area was initially unusable, so the construction of a new plaza was significant for the public. It was a monumental stairway for social elements, and the entire space was unified by artistic brickwork.



The Piazza del Popolo was a historical entrance for Rome at the time. It played on the axis of the roads into the city as the entrances and circulation for the square. It basically forced circulation to the steps of the main

buildings, which were commercial and religious. Piazza san Marco being similar to the Piazza del Popolo, tied horizontal and vertical space together through paving patterns and decorative stonework. The san Marco is made of two piazzas that open to a water way. The extended size of the piazza created a common space not only for the public, but it connects a church and bank. The Piazza san Pietro is the most popular today, as it is the forecourt for the Vatican. It has a huge symmetrical pattern with long access that highlights Saint Peter's Basilica. It is more classified as a Baroque period piece of work, as it highly reflects the imperialistic feel of the Roman Church. It has a strong linear direction that forces the power of the church on the public. It is also an extremely open public park in a sense, with a towering obelisk in the middle surrounded by fountains and colonnades.



As already mentioned, villa life was used as a retreat for the wealthy and influential. It was more of a villa paradise or surprise garden. It followed the imperialistic style from the Roman Villa. Highly decorative with paintings, sculptures, architecture, and decorative science. The arts in this time were funded by the wealthy and follow the idea of 'Noblesse Oblige'. The wealthy saw the arts and philanthropy as the ultimate way to show their wealth. Villas such

as the Villa d'Este, built by a Cardinal who was the grandson of Pope Alexander VI, took advantage of the terracing slope of the Italian countryside. It had an amazing use of water and was an incredible show of engineering and science. The enormity of the villa contradicts the morality of Catholic Clergy but is a direct show of their wealth. The villa features close to 500 jet fountains and pools. The Villa Lante is a genius show of water design and features a sequence of water, cascading waterfalls, dripping grottos, and highly detailed sculpture. This villa was a banquet hub for banking tycoons. The Boboli Gardens, built for the Medici family, the most prominent family at the time, adjoined the Pitti Palace. The garden featured a single long axis along the property with wide gravel avenues. There was almost an extensive

use of stone and lavish statues. There were semiprivate and public spaces that suited the daily life of the family and the grand events of the time. The overall feel of the garden was extremely wide open, which was very unusual for the gardens of the time.

The Renaissance era defined more of the social constructs and practices of architecture that we rely on today. But with the overwhelming wealth during the time, the rise of Imperial architecture began to shift the time into a neo-classical era. However, architects today should give thanks to this time for the concepts of 'Noblesse Oblige' and the requirement for public spaces. Urban teachings today can be tied all the way back to the Renaissance and is the culmination of human and social circulation.

The English School

It is important to outline that the English School of Landscape Architecture occurs around 100 to 200 years after the Renaissance. With several similar characteristics, this period can be considered the English Baroque period as well. The English School is a direct affront to the culture of French power during the roughly two hundred years from 1700 to 1900, when England and France were constantly at war. The similar styles that were seen at such a large and imperial size in France were taken and sized down in England, while keeping a royal touch.

As much as this period is baroque, it is more part of the Romantic Movement in English art and literature. While the Renaissance focused on the individual as part of the whole, Romanticism was centralized around that individual's emotions and feelings. Art at this time can be broken down into three elements. First being the picturesque, which at its simplest can be summed up as "would I put a picture of this on my wall?". There was a need for the aesthetic and scenic pleasure of art and architecture. Colorful flowers and seasonal changes were focused on in private smaller settings that would enrapture a person's attention. The second element is the sublime. Sublime in this manner means something that causes or creates a theater of overwhelming emotion. It was meant to reach deep into a person's being and confront their most honest emotions. The last element would be the beautiful. The beautiful was not held as important as the sublime or the picturesque and does not mean the same thing we think today. It was as basic as describing something that was organized and well put together that created pleasure.

All three of these elements were influential in the design of landscapes within English society, both royal and common. To sum up this movement in one word would be *Gardenesque*. Plants and landscape design were considered art, rather than a functioning part of the natural world. You could replace the plantings of the time with plastic flowers today and there would be no real difference in style. Gardening was meant to create a kinesthetic experience for the people of the time. It was meant to create a feeling as one moved through a space, such as a garden or park. These features were able to mimic movement through seasons and time as well, on top of the physical movement of place.



Associated with this idea of physical movement and kinesthetic pleasure, there was a shift from the private large-scale garden that was seen in France, to a more public park system that dominates England today. While many citizens of the UK have smaller private gardens, public parks were a heavy focus of the English School. They mimic the wild forest through a concept called *sinuosity*. This is a method of planting trees in a serpentine movement rather than a straight line. These curved lines were the separate of forested space and open grass and meadow. This punctuation of open mass was significant to create an organic look. These public parks use this method to really focus on the natural look of the wild. Even the paths of these parks were curved and styled, rather than straight alleys.



Later in time, but heavily influenced by this school of thought, we see the emergence of the idea of Garden Cities. As a response to industrialization, where cities were identified as centers of dirt, noise, chaos, and stress, there was a movement to connect to the natural world. As a result, the Garden City Movement was designed to allow retreat into a constructed society that was organic in organization. These neighborhoods would be quiet, with necessities within walking distance. They would be connected to larger hubs by train, allowing for easy access. It was a very classic American Dream, with a private home and suburban feel. There

was not too much special about the style of these garden cities, but during a time of globalization, it would have been a sigh in the ocean of noise and innovation.



The English School of thought is a very personal style that can be seen in many private gardens today. More popular on a smaller scale, home gardens across the world contain the elements of picturesque, sublime, and beauty that were prevalent. To create emotion and reach the true honesty of a person, it is significant to create an environment that allows for people to feel overwhelmed and vulnerable, which can be attributed to this style's success centuries after its origin.

Colonial America

Pertaining to the importance and underlying forces of this era, which is roughly 1492-1776, the movements and relations in Europe play a significant role. Similar to the English School Era, England, Spain, and France were in constant conflict. The constant fighting led to land grabs within the new world, and in order to quickly allocate this land, drastic measures were enacted, which could be seen as conquests or violent take overs. Later in this era we do see peaceful settlements, but it is important to understand that colonization of the Americas was both peaceful and drastic.

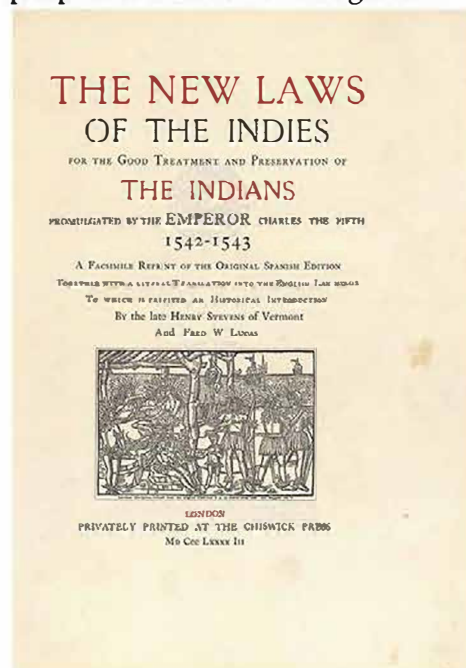
Initial landings within America were defined with large wooden forts. With a massive wall that protected all buildings and housing, these forts reassembled the native villages, but on a larger, more imperialistic scale. Given that many of the European powers were at war or on the brink of war, these fortifications were basically boundaries for land. With access to both forested land and water, massive areas were clear cut to build harbors. Colonial America, more specifically the thirteen original colonies, was regionally defined into three sections. The New England colonies were the northernmost colonies, which geographically had rocky harsh soil, with massive, large forests. This can be a deciding factor as to why many of the original harbors were in Boston and New York. The middle colonies were flatter and more temperate, which made land perfect for livestock. The Southern colonies were built upon beautifully rich soils that were exploited for plantations and agriculture.



Boundaries were drawn and better established, we began to see that these forts expanded into walled towns. Some towns were small enough that they were walled off, others were defined by a central fort, or were coastal cities that used the natural features for defense. But these cities all had one thing in common, they were well planned out and defined well before construction. While older parts of these cities were organic, the more contemporary parts for the time were grid-like in structure and had circulation that surrounded the main municipalities. Unique features at the time would include the “commons”. These areas today are city parks, but during this colonial period were used for community livestock, marching grounds for soldiers, or horses. The commons were small enough and able to support the needs of the town’s populations at the time. However, over the years, the commons

saw changes appropriate to the population change. Location wise, the commons were usually on the outskirts of the town, which made it close enough for convenience, yet removed. As mentioned, these commons rarely exist in their original forms today, as a common land area would be impossible to serve an entire population of a city. This phenomenon has been deemed "The Tragedy of the Commons". On one side, there are too many people for a common to support, and on the other the land itself is unable to support more than a certain amount of people. Solutions then range from finding more efficient land or more land, to reducing the number of people.

The organization and structure of these cities, which were highly planned and developed, can be attributed to The Law of the Indies. Developed by Royal Spain, these laws were more of a guide to building a city in the new world. They ranged from city location, orientation, and size to how the street should be set up, where a church should be, and how to respectfully colonize with the intention of building relations with the natives. While this was seen mainly in Spanish colonies, the same ideas were implemented within French Canada and Colonial America, such as Williamsburg. Now, Williamsburg is a bit different and can be used to show the rebellious nature of the colonies. The towns orientation focused on an axis between the school and the capitol building, with the Governor's House perpendicular. The streets were grid like and well set, with common areas, and circulation that moved through all the major city needs.



These colonial towns resemble each other and seem almost the same, which can be attributed to human nature of doing what is familiar. The cities in America were similar to those in Europe, even with buildings and physical construction. In a new world, with much unknown, doing what was known and familiar was just the people's way of continuing life in a wild time.



One of the longest lasting effects of this period was the plantation hierarchy and lifestyle. Plantations utilized the topography to almost create a physical pyramid of social structure. Mount Vernon for example, houses the master at the highest point, whereas labor

housing was at a lower point. These plantations were essentially self-sufficient towns with a variety of skilled labor as well as food security and an economy. While these plantations were formally set up and organized, the shift from using servants to slaves created a new social structure. Introducing people who lived under a very different culture created a need for different land use. Common areas were filled with different activities and common living rather than smaller cliques or families.

This era may not be so distinct from the other eras covered so far, but it is a fantastic example of how international this new world became. Trade routes were expanded throughout the colonies, and foreign materials were connected to another half of the world. Native culture, African culture, and European lifestyles clashed in a wild formula that defines America today. We continue to see elements of early civilizations and movements. The three natures of cities were brought to smaller scales at plantations. The plantations were surrounded by the wild, with both large agriculture fields and smaller personal gardens, almost mirroring the new social hierarchy. The basic shapes and formulas of Euclidean Geometry followed from Europe and Asia and influenced city planning and construction. At the same time, this era also began to spark conflict and collusion between cultures that will explode in the next era.

Frederick Law Olmstead



When talking about Frederick Law Olmstead, at least in regards to landscape architecture and the format of this paper, it's more important to try to model his life practices rather than his architecture methods.

Just giving a quick overview of his achievements, it's almost impossible to disprove that his

mind was talented, and his understanding of design was the basis for centuries to come. Being the brain behind Central Park NY, World's Fair, Chicago, several universities such as Stanford, along with many city and county park systems, his designs have withstood the test of time. Not only time, but social movements and cultural changes. His designs have then gone on to motivate generations of landscape architects, artists, and designers.

From a historical perspective, specifically one that is trying to understand theory and creating an individual design philosophy, it's more his lifestyle and choices that should be emphasized. This mountain of a man can be boiled down to just a simple American worker. Starting off as a blue-collar farmer, we see the incorporation of his environmental prowess and his passion. He was an Eco-farmer, where he was more focused on the success and effects of his farming on the environment. Much of this can be attributed to the time of industrialization. In a period of our country's history where mechanical movement was more important

than the social, Olmstead wanted to create an escape. While this is much of what modeled his own designs after, his own life was similar in the search for an escape.

His early life was highly influenced by the clergymen who were his personal teachers and scholars. Religion aside, the moral foundations of his life were instilled at a young age and followed him throughout his life thereafter. He then was able to travel throughout the country and specify the south, as a journalist of all things. At 25, he wrote *Cotton Kingdom*, which was meant to discuss the morality and practices of plantation farming. Used to build the anti-slavery sentiment, this is the beginning of Olmstead's search for escape.



WALKS AND TALKS OF AN AMERICAN
FARMER IN ENGLAND; PART II

Frederick Law Olmsted
LEOPOLD CLASSIC LIBRARY

He himself even escaped from the trials of American society to Europe. He went remote into the English countryside, where he saw that the people formed their escape into the landscape over generations, all while supplying the basic necessities of human life. This can be theorized as where he got the basic elements for Central Park, which was one of the US's first public parks. From the basic elements of space created by plantings to the active spaces of open fields, there are several similarities between his work here in the US and Burghhead Park in London. And again, well off of what his image portrayed, he wrote another book called *The Walks and Talks of an American Farmer in England*.

Once the American Civil War broke out, we see his morals start to spread. He saw slavery as an unworkable economy. He then went on to help start and run The US Sanitary Commission, the forefather of the American Red Cross. At the same time, he also began plans for Yosemite National Park, founded The Union League Club, and co-founded "The Nation", a well published newspaper. All his activities here were not landscape architecture projects themselves but adding them all together we see that each played an important role in how he ended up being the most successful landscape architect ever.



This was a man who took the idea of 'you can rest when you're dead' to a whole new level. He took on maybe more than he should have, but that made him a true Renaissance man who focused on the fine arts portion of architecture. Looking at what he would have taught as his personal design philosophy, we see that he incorporated the Pastoral and the Picturesque. He took aspects of every era this class has discussed and pulled all of it together to form his own design characteristics. They are Scenery, Suitability, Style, Subordination, Separation, Sanitation, and Service.

Olmstead was a well knowledgeable man, and well diversified. He was probably what we called multi-disciplinary and would fit well into a liberal arts curriculum today. He followed his moral and social passions, and somehow formed the industry of landscape architecture that we know today. Taking from his own story, those of us in the profession today should look specifically at what our own lives have to offer as a way to diversify landscape architecture, which can be attributed to the goal of trying to be a little knowledgeable about as many topics as possible.

Rise of American Landscape Architecture

Following the life of Frederick Law Olmstead, there grew a trend in American Landscape Architecture that can simply be called “Naturalistic Restoration”. Time scale wise, this era is roughly the early 20th century. These couple of decades are the early transition into what our profession has become today. The Naturalistic Restoration is a combination of early environmentalism and strategies to combat urban toxicity.

Designers, both Landscape and Architectural based, saw the need for relief from the growing urban lifestyle. Urban settings were a breeding ground for poverty, pollution, and dangerous endeavors. A major social movement that arose revolved around city design and city health. Garden design, park growth, and sustainability were the forefront elements of this movement. The citizens that lived in the city needed a formatted place that gave them public access to clean air and natural light.

So much of this era was heavily influenced by FLO’s theory and support for gardenscapes. There were two distinct patterns of green spaces that began to emerge during this time, centrifugal and centripetal. Some landscape architects during this time saw the importance of urban society and tried to develop urban spaces in a natural, ecological way. Just as landscape architecture was born from the field of architecture, urban design is the child of landscape architecture. The need to beautify or update the urban landscape was responded to by urban designers. Using FLO’s theory of street typology, architects raised the idea that streets are public spaces for people. Streets are the easiest way to visualize human scale within an urban environment. Thus, these streets needed to be organized and molded with natural elements. Trees, beds, and flowering sections needed to be included to break up the

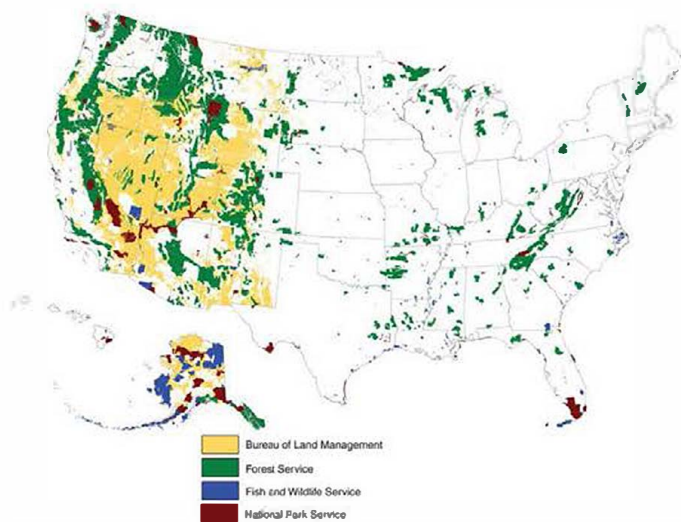
expanses of asphalt that created urban boundaries within cities. Today, we see this more and more with city sidewalks lined with the occasional tree, or with medians being filled with rows of shade trees, or even the flower beds that separate merge lanes on interstates and highways.

While some landscape architects shifted towards urban design, many tried to create spaces outside of the urban setting. The sub-urban sprawl began with the idea of private ownership of land and the natural environment. Rather than having to fit the environment within the city for convenience, suburban neighborhoods were



developed to fit inside of park-like systems. Neighborhood planning was part of the requirement for social stability. Houses were constructed for families with the idea of that cliché American dream. These areas were meant to be owner lived, where the primary occupants were the landowners themselves, rather than tenants. These areas were

outside of the urbanized city and followed that extent of the Garden City Movement. Rather than being connected by rail, highways and interstates connected the suburban areas with the business of the city, all while keeping social health intertwined with the environmental influences.



Landscape architects that were prominent in this era were connected in one way or another to FLO. The Olmsted Firm raised an entire generation of Landscape Architects that covered an expanse of design across the country. Charles Elliott, FLO's partner, focused on eco-education and preservation of National Parks and land use. FLO Jr. followed in his father's footsteps continuing to also

work on public land, parks, and national landmarks. Henry Wright was one of the architects that shifted his focus to the interior of urban settings and wanted green spaces to be a common area of urban residence, while also giving the residents some type of private green space ownership. Jens Jenson wanted to create interior prairies and naturalistic areas that focused more on benefiting spiritual and physical health than aesthetic of pleasure.



Even women began to play a large role in the industry. Several schools were opened for women to pursue education in landscape architecture and exterior design. Beatrix Jones Ferrand was more prominent in upper class design but was the first large scale successful female landscape architect.

Ellen Bidmen Shipman wanted to pursue a more private and secluded home garden. With multifaceted usage, and a private feel, she pushed the more relaxed and domesticated elements of home landscaping, while also being responsible for designs such as Duke University.

The industry we know today is born from this early era, and its multi-disciplinary requirements can be attributed to the people of this time. Every designer that was born from the influence of Frederick Law Olmsted can be named the saints of landscape architecture. The movements in urban areas today were first tackled by these pioneers, and some of the issues with environmentalism and social disparity could be solved with strong urban design.

New Towns

The “New Town” movement started around the mid-19th century and was named after the construction of new, small, towns that were centralized around an urban factory. Removed enough from the city, these smaller towns were formatted and planned for the workers and their families. They included schools, homes, parks, municipalities, and individual spaces. A good mix between the garden city movement and urban expansion. Towards the end of the mid-20th century, the movement shifted to be more focused on the creation of new suburban areas, which are common in outer urban areas today.

During the era of mass industrialization and modernism, there was little government intervention or motivation to create these new cities. So, the vast majority of these cities were constructed and funded by the industrial elitists and philanthropic leaders, fitting into the concept of ‘Noblesse Oblige’. Motivated to improve the working conditions and efficiency of workers, these leaders wanted to improve living conditions first.

The Garden city movement that we already talked about this semester ties into New Towns as an early predecessor and draft. Ebenezer Howard, the father of the garden city movement, sought to connect every aspect of human society by railroad. The garden city itself, or his person envisioning, included a suburban style housing section, which would be separated from the rest of the city by a central large park. On the other side of the park would be more urban style housing, more of the apartment style, that would be closer to the style of downtowns, on the other side of downtown would be factories and railroads for easy access to transportation. The outer side of the city would be agricultural and pastoral, with enough to support the population of the city. Highways would connect each zone, and the railroads would transport goods and people in and out of the city. This allowed for uniformity and internal support of the daily life of the city, while also creating commodities for exportation.

There became two major issues with this goal however, the first being WW1, which created the need for increased urban manufacturing that was already established. The second issue was that the construction of these garden cities did not allow for much growth. As the generation grew up and population increased, the majority of these new able-bodied youth would have to move to a newly constructed garden city.

The New Town movement that was first formatted in Europe, specifically in England. Defined by building code and zoning code, the majority of neighborhoods that were constructed fell under what we would call a townhouse style home today. There were roughly 12 homes per acre, with staggered rooflines, private gardens, and an organic maze of streets. The organization of streets and the connectedness between the cities was reminiscent of the Garden city movement and emphasized the



circulation of pedestrian and vehicular traffic. By planning a more organic use of streets and zoning, many of these planned neighborhoods reduced the amount of street coverage by anywhere from 17 to 40 percent.

In mainland Europe, there was a difference of new town movement, which was specifically seen in Austria and France. Otto Wanger, saw the idea of a picturesque urban center as uniformed, symmetric, and gridded. As a reflection of the machine age, there needed to be a highly regimented order to urban centers. In France, the movement was led by Tony Garnier who envisioned the perfect town as spread and gridded, but less imperialistic than Otto Wagner's idea. The cities that Garnier planned were unique, in that his residential structures were one story, allowing for a closer family knit and allowed for personal space and individual living space. Each city would be self-supported from the standpoints of education, medicine, and agriculture. But the major financial support would be the industrial factory that would define the city's major export. Similar to Howard's Garden Cities, the major issue here was that there was minimal room to grow, and populations were limited to 35 to 40 thousand. The unique part of Garnier's New Town was the incorporation of the Old Quarter. Historical portions of old cities would be maintained as the political and cultural center.



In Spain, there grew two major styles, the linear city and the suburban green neighborhood. The Linear city was first designed by Aruto Soria, who saw the automobile and train overtake horseback. While trying to use transportation as a way to define an urban area, he decided that the best way was to control the flow of automotive traffic through a wide and well controlled central street. Close

to our modern-day metro system, Soria saw that all municipalities were controlled in the middle of the city, and as you traveled linearly outward, you shifted to the residential areas, with industrial areas downwind, and agriculture upwind. The suburban green neighborhood was seen primarily through the design of Park Guell. Meant for the middle class of Madrid, the park Guell was meant to tie modern technology and ecology with the historical and cultural aspects of Spanish heritage. You can think of it more as a gated community that we would see today. There would have been a grand stairway with guards and a concierge, which opened into the main

Market Hall, which would have been a market and social gathering space in the middle of the area. There would have been a Greek Style theater and community garden that would support culturally important vegetation. It was also styled after Central Park when it comes to circulation, where no automobile would have been able to interact with pedestrian walkways. The circulation was segregated by utility and has a specific purpose as to not disturb the daily life of personal experience.

In the US, it's sad to say that during this time the City Beautiful Movement died out with FLO and was replaced with a more practical or economically driven style of urban planning. On one hand, we saw that after WWI, many city planners wanted to use technology and industrialization to modernize the middle-class neighborhoods. Smaller neighborhoods would be constructed of just homes and schools, with larger highways that would connect these small towns to larger urban areas. The concept was designed by FLO Jr. and Clarence Perry. Both sought to separate the work life of the middle class and the home life. The automobile was the



perfect method to allow for this idea to come to fruition. These green hoods were perfect for creating a relaxing, eco-focused, and interpersonal environment that the urban cities were destroying with overcrowding. On the other hand, there were those who saw the automobile as

too urban and designed new towns in a way to reduce the use of cars. Radburn NJ for example features one singular road that leads into the middle of town, where all of the house's face. The center of town was just a giant cul de sac, and all other pathways were footways, which forced people to walk to the necessities.

The New Town Era marked the beginning of a period of time that we can identify as the Urban Shift, which is essentially just a mass exodus of the population from the city to the landscape. This shift can be attributed to the separation of wealth in the city and other economic shifts such as the creation and need of mass shopping centers. For us today, we as landscape architects need to focus on how to individualize personal space, while still being able to motivate residents to utilize public park space as an objective landscape rather than privately owned property.

Key Figures of 20th Century Landscape Architecture

The major key figures that arose in the early 1900's were in some way influenced by Frederick Law Olmstead. Through either direct learning or working with FLO, or being a prodigy of FLO's students, these figures that continued his work took his broad expertise and became masters in their own way, expanding FLO's influence through the century.

First and foremost, the grouping of Ekbo, Kiley, and Rose paved the way towards the modernist movement that had already begun in Europe. The three of them worked at Harvard and introduced the simple and modern way of design to American architecture and landscape architecture. They led what was coined the "Harvard Rebellion". Rather than the intricate plantings or mirroring of the natural environment, these three introduced the very linear and grid like style of landscape architecture that we see so much of today.

Ekbo for example, was more into the residential and smaller scale landscape style. From college campuses, churches, and personal gardens, we see his methods through gridded and equally spaced plantings, which when combined may seem organic, but when looking at them separately, they are very simple and well planned. Even using one tree, which is almost trivial and childish, Ekbo was able to place it and define an entire space with that one single piece. Kiley was very similar but experimented with more of the structural aspect of the exterior. Using the simple beams and supports that would be seen on the inside of buildings, he created these spaces that were both inside and outside.

James Rose focused heavily on the residential side, which can be seen through his own residence that he used as an experimental site. Like his other modernist partners, he utilized the concepts of flat roofs, which functionally as roofs cause several issues with rainwater, but used properly today can be green roof additions. Like Kiley, he also tried to mix the interior with the exterior, but Rose used glass panes to open the outside up and allow natural light to come in. With these glass



panes, he created smaller gardens that were surrounded by the structure, but open to the air, similar to the Japanese macchia gardens. Rose also wanted the landscape to reflect the light at night, so he was one of the first to introduce garden lighting that was lit at the odd times of the night. Creating

this evening atmosphere was important to the modernist style of architecture by always showing the design's characteristics and not hiding the simplistic nature of it.

Roberto Brule Marx was a South American designer, who was most famous for the boardwalk and beach front in San Paolo. While there is little vegetation

compared to the other gardens thus far, he still follows this simple modernist style. He lined the entire street with palm trees, a technique still used in many coastal regions today. The sidewalk itself is a more intricate and abstract combination of tile work and cement. Marx may have been part of the modernist movement, but he was able to blend that with the subtle abstract forms and use of color, without distracting from the design.

Thomas Church is a figure to FLO in the sense of his wide variety of projects. Church was part of college campuses, parks, city blocks, and urban design projects. Residentially, he was also part of a French housing project of apartment buildings. He is most known for the Donnell Garden in San Francisco. It's a combination of a home and a garden. He combines the major utilities needed with the function of homes and natural processes, while keeping it within the human scale and the simple style of the modernist movement.

Lawrence Halprin was the major pioneer of urban design and urban planning. He focused on the city's effect on pedestrian lives, mainly trying to find the human place within urban development. Halprin did not want the urban setting to overwhelm human health and daily life. So, he wanted to design green settings within the urban limit. Many of these were garden or greenways, but also the smaller projects and subtle settings. One of which was lining streets and medians with vegetation. Not only was this a way to separate human traffic with the business and



constant buzz of vehicular movement. The Letterman Digital Arts Center was also designed by Halprin. Ahead of its time, and more something that we would see being built today as part of the eco revolution, it utilizes a retired military installation

and turned it into a design school. As part of a national park, it shows that we can protect and utilize our natural elements as part of education and professionalism. Using renewable resources, green energy, and vegetation as decoration and usable materials, the Letterman Center is a great model for new public gardens and multi-use space while minimizing vehicular traffic.



Ian McHarg was a Scottish Landscape architect at Penn, who during his tenure pushed landscape architecture from design to including engineering. He wanted to not only create good design from human perseverance but also from the environment point. While incorporating the modernist style, he

wanted to use hydrology, geology, and many scientific elements that then shifted into ESRI and ArcGIS. McHarg's most significant piece of work is The Woodlands. He used the New Town style of neighborhood organization, with ecological planning that focused on water management and natural preservation. He wanted to preserve ecological aspects in order to allow for residents to enjoy the natural environment rather than building based on individual needs. Homes were built more within the woods using space that was naturally made, rather than clearing land and building space. There were then minimal private lawns, which forced the use of communal space. It also focused on native species, retention habitats, and expansive greenways.

There was a small-town center, but the entire neighborhood was designed to feel like a communal village rather than just a housing unit.

As the 20th century progressed, and using McHarg's focus on science, John Lyle wrote several books that tried to connect human ecosystems and sustainability of the natural world, while still focusing on the design and utility aspect. Lyle wanted to change human development and revert it back to pre-industrial organization. He still saw that there was a need for urban settings, but wanted their design to be well planned, but still organic in relation to residential and agricultural sections of society. He even went as far as to detail 7 scales of concern when it comes to sustainability. By focusing on the smallest scale, we are able to affect the highest level of scale, without the stress of large-scale effects.

20th century landscape architects each had their own specific element of the broad occupation, which allows for the landscape architects of today to push these boundaries further and develop urban design and residential garden styles to connect human experience back to the basic natural elements of our planet.

Late 19th and 20th Century Landscape Architecture

Similarly, to the other centuries that we discussed in this class, the 21st Century of Landscape Architecture is defined by the renowned designers of the time period. While each of these designers were successful in their own accords, the biggest take away that we should keep in mind is that these are our most direct ancestors in our profession. The advancements that these figures made are a direct tool for the next generation of Landscape Architects to study and develop upon.



Peter Walker is known for his larger designs, a scale that many landscape architects seem to lose when designing urban spaces. Walker designed the John Deere HQ, and focused on the concept of a 'Corporate Campus'. This theory revolved around the focus on the necessity of business facilities, but also

combining with the regional and local environment. By tying these two ideas together, the plan and final product were more relatable as it was closer to a relatable human scale. Walker used this idea of the 'Corporate Campus' again in his design on IBM Solana. I have seen this theory in practice firsthand, with the Research Triangle Park in Raleigh, NC. Major corporations constructed office buildings within the park, and the surrounding communities have significantly benefited. Not only does the

park bring commerce, but it also increases the local population, includes malls and retail, and is surrounded by a community greenspace with trails and smaller local parks. Walker could not have seen the outcome that occurred decades down the road but should be noted as the forefather for these commercial parks.

Martha Schwartz is one of the first well renowned women in Landscape Architecture and should be considered a female icon for many in our profession. Her work is highly contrasted when placed next to the work of Walker, FLO, or even the city planners of ancient Rome. Schwartz's work seems to follow a more temporary timeline, with many of her pieces being featured for a month that either naturally dissolve into the earth or are dismantled. The Necco Garden, a very modern concept of a grid but created with tires and candies, was featured in a courtyard at MIT. Even the Bagel Garden or Splice Garden, were not meant to be features of a building or park. These were deliberately designed to be temporary and more along the lines of fine art rather than architectural. However, I think that in her time, this short life span is what made her work so successful. The fleeting nature of her work forces viewers to come and pay attention to what message she is sending. Her work could be a direct reflection of human or plant life, where it only lasts so long before it is gone and tries to get her audience to value the natural beauty in life.

George Hargreaves is a figure that could be the most influential in the next decade. His work can be boiled down to one central concept, environmental repurpose. Byxbee Park and Harlequin Plaza are just two examples of how Hargreaves takes these destroyed or difficult environments and creates them into public spaces. When I was in undergrad, we had a park similar to his works, called Mt. Trashmore, which was previously a landfill. It was covered and molded into a hill and lake that attracts multiple age groups and cultures.



James Connor is similar to Hargreaves, and I believe that they could create some incredible work together that would pave the way for 22nd century environmentalism. Connor's philosophy is all about Recovery and Repurpose. He wants to take a landscape and, while still trying to make it relatable to humanity, return it to the most natural way that he can. Using Programs, Habitats, and Circulation, he wants people to be more connected to a natural environment rather than a clearly urbanized park. It is arguable that he focuses more on the future growth of the environment than how it can interact with humans, but that might just be compensation for humanities negligence. Being ecologically conservative in a

design isn't always a bad thing when the concept is meant to protect or restore a landscape.



Ken Smith is another landscape architect who repurposes dead infrastructure in order to promote the outdoor experience. He took the old NYC High Line, a former raised rail line, and created a greenway that circulates above the street. While a very progressive method, his design has impacted that community in a way that forces them to connect in order to preserve the space. The Great Park, a former US Marine base, is another example of how Smith terraforms the urbanized landscape. While much of this park has not been fully constructed, the plan focused on rekindling the native environment in a way that could co-exist with human growth.

The 21st century can easily be classified by its attunement to social rights and progress. Architecture can be a way that we as a society can represent our culture and morals through a practical and tangible way. Designers like Walter Hood have brought attention to the scale of racial issues in our country through massive stonework that stands out from the surrounding area. Ecological and environmental issues can be addressed by Landscape Architects in a manner of rehabilitation and co-dependent growth. Design elements such as Urban Villages or New Urbanism will become a focal point in Landscape Architecture over my lifetime in the rest of the 21st century.

LANDSCAPE ARCHITECTURE HISTORY & THEORY

LARC 8300

Dr. Schurch

Jordan Livingston

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Ancient Civilizations and Egypt

The essence of nature has been a sought-after answer through many eras and civilizations in history dating back to the earliest of human existence. The question early people had was how they fit into the grand scheme of the natural world. As civilization transitioned from a hunter-gatherer society into an agricultural society, people began to have leisure time to contemplate the natural phenomena's that were constantly occurring around them. These ancient civilizations were important in history because they showed an emergence of an ideology of wanting order and how they fit within the cycles of nature which led these people to create a spiritual or deity-like symbolism with elements of the natural world.

Human society in the Paleolithic era was made up of hunter-gatherer societies. It was mostly nomadic where these people had to follow in the movements of game species to ensure their highest chance for survival. During this time everyone had a key role to play in the community to ensure the survival of the community. Life and death were close together that a small lull in available wildlife to hunt or severe injuries to many hunters could spell disaster for the community. This is where early cave



Cave paintings of wildlife

drawings depict life during that period mostly showing scenes of large hunts of wild game that these people pursued to provide continuous life for everyone in their community. The people of this time began to try and contemplate their place in nature. Since these early people lived in caves, a symbolism began to emerge that this place was not just their home but a sacred place where they could become closer to the natural world. The numerous drawings of wildlife in caves seem to indicate that these people understood that these animals were sacred in the way that they provided life for their community and could be thought of as a spiritual force that if they paid homage to it, it could provide them with good fortune in the times ahead.

The transition from a society of hunter-gatherers into agriculture saw the emergence of people creating a deity-like symbolism with the elements of the natural world and building on the aspect of order for the people during this time. They thought of mountains, rivers, forests, and caves as spiritual places of great importance. Different civilizations around the world began to build structures that would honor these deities.

Pyramids, temples, and ziggurats are examples of what these civilizations built to become closer to their gods. This relates to the idea of the axis mundi where the sky or “higher realm” was directly connected to the natural world as well as an underworld. One way that these ancient civilizations added to the aspect of order was by looking to the stars as guidance. Astrological calendars began to emerge that would give these civilizations a blueprint on how best to survive. Knowing when to plant and harvest crops during the year was vital and having an instrument to help document this was important. It wasn’t just one ancient civilization that



Mayan calendar

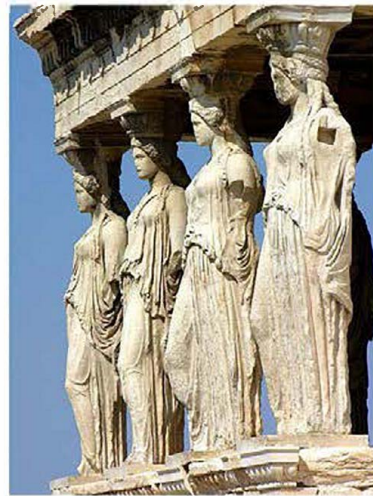
came up with these calendars, it was several separated by vast distances and time. The mythologies of these civilizations were also similar as well despite there being no contact between them. This coincidence in these circumstances is best described by Carl Jung’s idea of “the collective unconsciousness”. This idea that the same instincts and archetypes are engrained in all humans supports the reason that all these different civilizations with no contact with one another could have these similarities in their mythologies and instruments they used to create order.

Over time these ancient civilizations rose to power with the beliefs that there were higher powers in the world. This gave order to the peoples’ lives because they believed that tributes and sacrifices to their deities would grant them good fortune in the times ahead and when unexpected natural phenomena occurred that differed from the records of their astrological calendars, they believed that this was a sign from their deities that they were angry with them. This belief in deities associated with the natural world slowly lost favor as science began to explain more and more of these natural occurrences. However, some places in the world today still hold some sites sacred to the people that live there showing that perhaps these beliefs still are passed down from generation to generation.

The Classical World

Much of the classical period was comprised of the art and architecture from the Greeks and Romans. This idea of classicism is best described as the polis being the focal point for a happy life acting as a matriarch to her citizens and the landscape is where people and nature are bonded together. Being exiled from the city was an act of extreme punishment. The Greeks and the Romans had different approach with how they interacted with nature. Greeks were more in tune with nature and the Romans perceived it as something to control. Nature had different meanings between these two civilizations, and it translated into how they interacted with it by the structures they built.

The Greeks still held on to some of the ancient beliefs that civilizations before them practiced. They had their gods and goddesses for important aspects of life and of nature and they built structures to honor these “higher” beings. The most important part of the Greek society was the city itself, called a polis. Temples and monuments were built near the central gathering places in the polis while the religious sanctuaries were built outside the polis area. The reason for this is that the Greeks believed in embarking on pilgrimages to reach these sacred sites. Instead of experiencing the landscape aesthetically, the Greeks experienced it in a religious way. These sanctuaries were built in important locations within the landscape where they believed the strongest connection with the god or goddess they were planning to honor were. These sacred sites provided opportunities for a polis to assert its territorial dominance over another. Just like ancient civilizations before them caves were still regarded as a sacred site, but to the Greeks they now served as a place where people could be purified. The spiritual center for all Greeks was Delphi. This sanctuary served as a place where pilgrims would go to consult the oracles and participate in the sacred games. Greek society believed in superstition to a degree, so consulting oracles was a way to guide some of their decisions in life. During this time the emergence of the first democracy blossomed. This was a turning point from the traditional kingly figure that would rule over his subjects. Even



Greek temple honoring Athena

though it was just limited to property owning males, this form of government became the building blocks for what western society uses.

Roman culture saw a different approach to nature than what the Greeks practice. Everything was centralized within the city and protected behind walls. Their cities saw a military-based, grid-like pattern for the arrangement of the buildings. The advancement in technology led the Romans to build structures unlike anyone before them. Metal drainage pipes, kiln dried roof tiles, and aqueducts were a few inventions created during the Roman period that led to the expansion of their empire. There was also a trademark look to the Roman architecture seen in the arches and columns they built. Urban gardens were present within the wealthy class. This was a way for nature to be

brought to the people for their personal enjoyment. In Roman society, symbolism was important so to mimic a goddess-inhabited cave, they built a nymphaeum in the city. This was a sanctuary where people could be wedded. Some citizens of the wealthy class had countryside villas where this serves as a vacation home to escape the urban environment. This would be the closest to nature that privileged Romans would get in their lives. These villas represented luxury and were built for the pleasure of the owner.



Roman nymphaeum where people could be wedded

The architecture of the Romans has lasted into the present day across northern Africa and the Middle East where their empire reached. Their desire to have a centralized city with control on nature lead to the large and iconic structures that they built. Their counterparts, the Greeks, were more in tune with nature and deemed special areas within the landscape as sacred where they usually would build sanctuaries to honor their gods. Both civilizations had their own distinctive mark they left on the landscape that has persevered over the centuries and has helped guide other civilizations that came after in the way of architecture within the landscape.

China and Japan

The landscape of the East Asian gardens is one that has evolved over the centuries like the seasons within the year. What were important qualities in the garden with one ruler changed when there was a transition of power. In some instances, a few rulers tried to revert to earlier methodology that created an ever-changing landscape within these gardens. In China, the makeup of the garden landscape rested heavily on the emperor ruling at the time and in Japan there was a stronger influence on a minimalistic garden that left a lot to the viewer's imagination to interpret the meaning of the site.

The ideology of the Chinese Daoist believed in concentrating on living a life in spiritual harmony with nature. Natural elements in the environment had strong aesthetic value in the gardens found in China. In Chinese mythology, the immortals were believed to live on four mountain islands and many of the gardens that were built mimicked this idea using large stones. These stones were carefully chosen

for these gardens based on the character they exuded. Ones that were irregular in shape possessing large fissures were usually chosen because they resemble mountain peaks the best. Designed gardens were a luxury only for the social elite. This could be a reason as to why there was much transformation of the gardens in China as power passed from one ruler to another. Soon the garden values shifted from a design based on aesthetics to one where it served as a place for friends to come drink and play games. The design of these gardens began to only show the importance of housing these



Japanese garden

games for people to participate in. It wasn't until Emperor Song Huizong did China see a reemergence of the importance of the large stones in the gardens. They took on a slightly different meaning than before, but they were highly sought after once again. Now these large stones were seen as collectibles where someone wanted to possess as many as possible. Much of this popularity was due to Emperor Huizong when he was advised to build a mountain of these large stones to "block out evil forces and concentrate good ones". Eventually a manual was written by a designer named Ji Cheng where he explained the

important qualities to build an effective garden. One important quality that he explains that is essential is having an area for sitting. He also discusses the significance of stone picking. This ultimately illustrates that the importance of the stones within a Chinese garden is the foundation that makes it effective.

The gardens in Japan were heavily influenced by the ones in China. Since there was a lot of travel between the two countries, many ideas crossed borders as well. Many garden designers in Japan believed that to make a proper garden, one should venture out and see different landscapes. A big theme in the Japanese gardens was the use of "borrowed scenery". This could either be distant mountain ranges or the top of a temple in the background, but the goal was to enlarge the visual range of the garden. The water gardens of Japan usually mirrored those found in China. For the gardens that used large stones, they usually depicted islands in a sea but sometimes they could be interpreted as mountain peaks. The main difference between the Chinese and Japanese garden designs would have to be the Zen rocks gardens popular in Japan. These rock gardens were very minimal in that they only possessed rocks, sand, and the occasional slow growing and low profile greenery, such as moss, that was meant to not show change over time. These Zen gardens were meant for viewers to meditation for long periods of time in hopes of one day reaching enlightenment. One of the more famous rock gardens is that of Ryoan-ji. This garden consists of only fifteen stones on islands of moss within a sea a finely raked gravel. There are many different opinions on the interpretation of the garden, but most can agree that that it is largely left up to the imagination of the viewer. What also is unique about this rock garden is that the viewer cannot see all fifteen stones from any one vantage point suggesting that in life someone can never see the entire picture at one given moment.



Ryoan-ji rock garden in Japan

Much of the gardens in Japan were shaped by the ideas that traveled from China but eventually they took a path of their own that would make them unique. Chinese gardens saw many transitions because they were limited to the higher classes and nobility and changes in power saw changes in the

design of their gardens. In both Chinese and Japanese culture, it was encouraged for the viewer to admire the beauty of large stones while also using their imagination to interpret what they represented. The biggest element from East Asian gardens during much of their history ends up being the presence of large stones within the design of the garden.

Islamic Influences

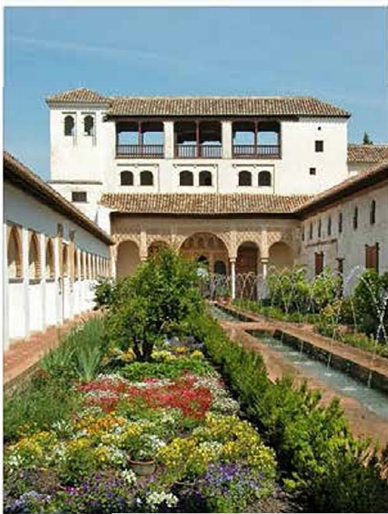
The emergence of Islam in the 7th century gave the world a new outlook on life after death. Spreading rapidly across the Middle East into Asia, northern Africa, and parts of Europe, the Islam became symbolized in the landscape. Like Christianity and Judaism, Islam is monotheistic, Muhammad was the prophet that started the religion, and the Quran is their holy text by which all believers follow. Islamic influences in landscape architecture can be seen in the designs of the gardens they created to represent a paradise on Earth and the use and symbolism of water.

The Islamic religion believes in an afterlife for worthy individuals that consists of a paradise-like environment. There is never any bad weather, no hardships for the people there, and endless amounts of food, drinks, and love. All different types of shade trees with endless fruit with flowers that never die. Most importantly, there are the four rivers of milk and honey that flow throughout this paradise. Since the Islamic religion spread in a landscape that was mostly dry and barren, an oasis in the desert was seen as a paradise environment. A source of water in the desert provided life for its inhabitants. When cities began to emerge in the landscape, rulers began to try and recreate this paradise oasis in the form of gardens. These paradise gardens had a geometric nature to them with a central focal point and always had an element of water present. Islamic gardens were designed to give the viewer luxurious ease and sensory pleasure. Many vegetative elements within the Islamic gardens also had symbolic meaning. Different fruits and flowers symbolized parts of the human body but also important elements within the Islamic religion. The most important symbolic element would have to be the rose. Considered to be perfect in the fact that it was believed to be created by the sweat of Muhammad, the rose has many meanings in the Islamic culture. The



Elements of an Islamic garden consisted of geometric shapes with a central focal point and always the inclusion of water.

rose represents the face but also stands for the soul at peace. The many interwoven petals represented union and harmony with nature. Topiary was conscientiously avoided to allow plants to grow into their natural forms. This idea differed from how the Chinese and Japanese maintained their gardens in how they shaped nature to the forms they found desirable.



The Generalife had many courtyards of gardens and always had a presence of water in some form.

Water was the life-giving element to all people that lived in the desert climates. It was regarded as a purifying force by many societies throughout history. The Islamic culture always saw water in conjunction with the paradise oasis in the deserts and the gardens they built to try and replicate it in cities. Islamic gardens design almost always used water in some way because of its soothing sound and reflectivity. In one of the best known Islamic gardens, the Generalife, the designer is believed to have used water for the musicality, reflectivity, and cooling characteristics to heighten the sensory experience of the viewer. The Generalife has many enclosed courtyard gardens with different themes, but water is the only element present in all of them. The great square in Isfahan is another paradise garden in the desert. Built as a place for selling goods and commerce it also serves as a place for prostitution, entertainers, public punishments, and polo. This garden contains a lot of greenery, so an enormous amount of water is needed to keep everything alive. Massive underground tunnels were dug to provide this water.

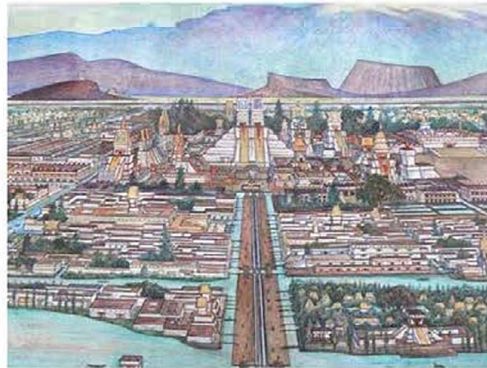
This is common in many Islamic gardens where water is not close. These underground aqueducts helped provide the water needed to create these gardens. In a way, the people harness the element of water to bring lavishness to the desert.

As one of the largest religions in the world today, the Islamic culture has created areas within the desert landscape to represent the paradise garden that they believe will be there in the afterlife. Much of their landscape design is influenced both by landscape determinism and cultural determinism. Living in a desert environment, water became the symbol of a life giving, purifying element that through their culture they used to create these paradise gardens throughout the landscape.

Pre-Columbian America

The western part of the world before Columbus discovered a new land in 1492 experienced the rise and fall of several civilizations over thousands of years since the end of the Paleolithic era. These civilizations such as the Incas, Aztecs, and other native American tribes developed their own technological advancements that helped them be in harmony with nature and the cosmos. Origin stories played a big part in each civilization's mythology and associating divinity to parts of nature was common throughout these Pre-Columbian civilizations. Since much of these civilizations' written history was lost, the structures built by the Aztecs, Incas, and Pueblo Indians showed how they interacted with nature.

The Aztecs ruled in an area that would include present day Mexico City. Driven from surrounding areas by other tribes because of their beliefs, they finally settled within the marshy lands of a lake where they eventually grew their empire; Tenochtitlan being their capital. This was a strategic advantage for them because they could defend their city from a few narrow roads that connected the city to the mainland serving as chokepoints for invading armies. To solve the issue of agriculture, they built floating barges that grew food. Their most important god was that of the sun and war, but they kept a strong connection to the cosmos creating a very accurate astrological calendar. Large mountain-like temples were built as a place of religious practices where human sacrifice commonly took place. As the Aztecs began to grow their empire and take over neighboring settlements, their lust for human sacrifice increased. Most of the people captured from these settlements were brought to the capital only to be sacrificed to their gods. The collapse of the Aztecs was mostly due to the Spanish conquistadors that deemed the Aztecs as pagans and saw to their demise. This was mostly achieved by the means of advanced technology of guns and the disease they brought with them.



Aztec capital of Tenochtitlan built on top of a lake and served as the birthplace of their empire.

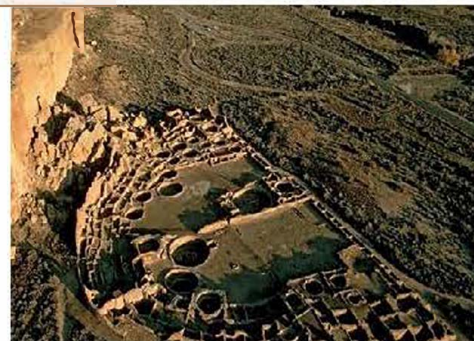


Machu Picchu city showing the level of terracing needed for the Incas to live in this environment.

The Inca civilization ruled over the Andes region in South America and was connected by an intricate road system. This helped the Incan rulers convey a sense of unity to their subjects. The terrain in their territory was very diverse changing from tropical rainforests to steep mountain plateaus. They mastered the art of terracing so they could build and grow food on these steep terrains. They also had a strong connection to the cosmos in that they built their roads and buildings in relation to the positions of the sun, stars, and planets in the sky. The epicenter of their civilization was Lake Titicaca, which represented a womb and the place of human origin. They built mountain-like temples that resembled sacred

mountains in the distance that would serve as religious centers. The Incas also placed a sacred status for distinctive rocks in nature. They would build these nature shrines around them to single them out and protect their sacredness. The collapse of the Incas was believed to also be from Spanish explorers that ventured into South America.

The Puebloan Indians that lived in Southwest America is perhaps the most interesting when it comes to how they interacted with nature. All their settlements were planned out and oriented with respect to the four sacred mountains. They built these circular pits, called kivas, that were sacred and provided a space for religious practices. Within these kivas was a small hole called a nansipu that was believed to be an opening to the underworld from where the life energy emanates upward. This creates a visual of the axis mundi where the physical living plane is connected to what's above and below and some reference to the four cardinal directions, in this case mountains. These settlements of Indians would build small towns within the crevasses of the cliffs in their arid environment with remarkable accuracy in relation to how the sun hits the area providing cooling shading in the summer and warming light in the winter. Chaco canyon



Pueblo Bonito remains showing the numerous kivas built for religious purposes.

was discovered to be a religious epicenter for settlements in the area. Roads were built to connect these settlements to Pueblo Bonito, a structure built to serve as a place for religious gathers. There were many kivas built at this site more than likely to accommodate the amount of people pilgriming to this site. Some remnants of the Puebloan people still exist in small settlements but much of their decline was believed to be due to extended periods of drought within their arid environment where water was already a prized commodity.

Like the civilizations in ancient Mesopotamia and Egypt, these pre-Columbian civilizations had belief in a religion facilitated by the priestly elite, and this caused the common population to build these large feats of earthworks that survive today. This phenomenon where civilizations separated by time and distance arrive at similar ideas is known as “the collective unconscious” proposed by Carl Jung. Even though most of the written history was lost for these pre-Columbian civilizations, their structures remain so that today’s society can understand how their beliefs guided their decisions in relation to nature.

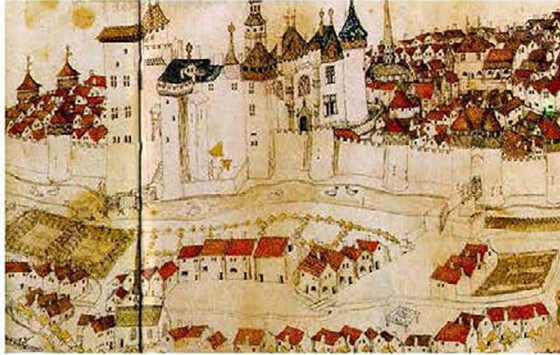
Middle Ages

The fall of the Roman Empire put much of Europe into a disarray for a while resulting in much of their infrastructure was not well maintained. Some of the walled cities that remained gave residents protection from neighboring forces. The church had a strong influence during the Middle Ages especially after the Europe was decimated by the Black Death. The influence of the church and the market forces within the walled cities dictated the infrastructure and message that was conveyed to the general populations.

The church gained power during the Middle Ages especially after the Black Death because many people believed that event was God's judgement on the world for all the sins that were being committed. Visual depictions of good versus evil, heaven and hell were common within the churches. Stained-glass windows and large mosaics often showed religious scenes referenced from the Bible. Paradise in the afterlife was widely known but was perceived as an almost unattainable achievement that only the most devoted followers could obtain. This was furthered with the work of Thomas Aquinas, a Dominican monk, who began to order the knowledge of the world in a way where it was seen as a God-ordained harmony of parts. All knowledge was obtainable but only through the works of God could it be discovered. Cathedrals were seen as a sanctuary that guarded a sacred knowledge. The atmosphere inside usually resembled that of a cave, containing dim lighting and a damp atmosphere. Gardens were usually present outside the churches but served a utility role. They were used to grow crops and herbs for cooking. These gardens represented an earthly paradise and were considered a sanctified spot where the unworthy couldn't enter. Only the deserving individuals could partake in the garden. A series of 12 books were written by Piero de' Crescenzi explaining and illustrating the practical aspects of agriculture that was used in a lot of these utility gardens in the Middle Ages.



Church gardens served a utility purpose growing food and herbs for cooking.



Faubourgs settlement outside the walls of the city.

Walled cities that began to spring up in the Middle Ages had a lot of structural influence from market forces. Trade was very important to each of these cities, and they wanted to layout the city so that it would benefit the merchants. Most of these cities had a central square for trading with streets radiating outwards to the various gates. Additional squares would eventually develop near the gates serving as a convenience for merchants coming in. These walled cities resembled a gated community type atmosphere where people would have to pay a toll to enter the city to indulge in the activities

behind the walls. Eventually growth would reach the boundaries of the walls, and this is where suburban settlement emerges outside the walls, called faubourgs. Market squares would be created without having the burden of paying the taxes to trade found inside the city. Eventually these faubourgs were annexed by the city and new walls were built around them to include them in the city limits. Even though the people of the faubourgs had to now pay the city taxes, it came with extra benefits they previous didn't have. They were now considered true citizens giving them legal privileges, economic advantages, and most importantly security and protection behind walls. New faubourgs would be built outside the newly constructed walls and the cycle would continue as the cities grew and grew. Gardens that were not tied to the church were only available to the aristocratic class. They served as a symbolic representation of paradise but served a social purpose where people could go and enjoy themselves. Gardens were always walled off from the outside often representing the sacredness of the garden like the virginity of a woman.

Like the Islamic gardens, the gardens of the Middle Ages usually had a central focal point with four paths emanating outwards. This depicted the four rivers in the Garden of Eden that is represented in the Bible. The gardens of the Middle Ages served as a place of leisure and a source of food depending on where it was located within the city. The church's gardens were treated as a sacred spot where only the religious worthy could enter and the gardens elsewhere in the city where only the wealthy class could enter. The design of the cities was usually created to benefit the merchants because that would

translate to more money that could be collected increasing the overall wealth of the city. It can be concluded that the most important factor that contributed to the growth of walled cities during the Middle Ages was trade.

Italian Renaissance

The period that is classified as the Renaissance in Europe saw a rebirth of arts and philosophies that were somewhat lost in the centuries before during the Middle Ages. Artworks of the time showed humanistic qualities more than religious ones. The birth of humanism also created a change in architecture within the landscape and the gardens that were designed during that time. People that had the funds to build these gardens did so in extravagant fashion and the amount of ingenuity involved was extraordinary in examples such as the Villa D'Este and the Villa Lante.

Petriarch was named the father of the humanist movement leading up to the Renaissance. This was a rediscovery of the classical antiquities of the past and this influenced new artwork and new ways of design in the landscape. Italian villas became a philosophical and literary retreat where the aristocracy enjoyed the pleasures of rustic life.

It was a common practice to place villas on hillsides so that they could enjoy the views of the countryside. Gardens that were part of the estate would usually have similar architecture to that of the villa to provide a smooth transition from the villa to the garden. Most of these gardens had areas of sun and shade but also provided some level of food production. Wealthy families such as the Medici's had opportunities to experiment with numerous villas to see what qualities worked and what didn't in their designs. Belvederes became an important addition for people to enjoy viewing the gardens and the surrounding landscape. addition of a summerhouse in the gardens

became a great place for discussion groups for people that lived at the villas. Unfortunately, these gardens were not enjoyed by the masses and only the privileged could partake in what these places offered.



Medici Villa Castello was one of many villa gardens built during the Italian Renaissance.

The



One of the extravagant fountain features at the Villa D'Este.

Wealthy individuals that possessed a love for gardens in the landscape pushed the boundaries of what could be done to provide a unique experience that couldn't be found anywhere else. The Villa D'Este by the cardinal of Ferrara, Ippolito D'Este, was a show of money and ingenuity. Taking 22 years complete, this garden was a compartmentalized masterpiece. Because of the slope of the terrain the layout of the garden had to be changed from traditional Italian Renaissance gardens. He wanted to show the relationship between art and nature through the numerous water features within the garden. Many fontanieres were hired to offer the cutting edge in

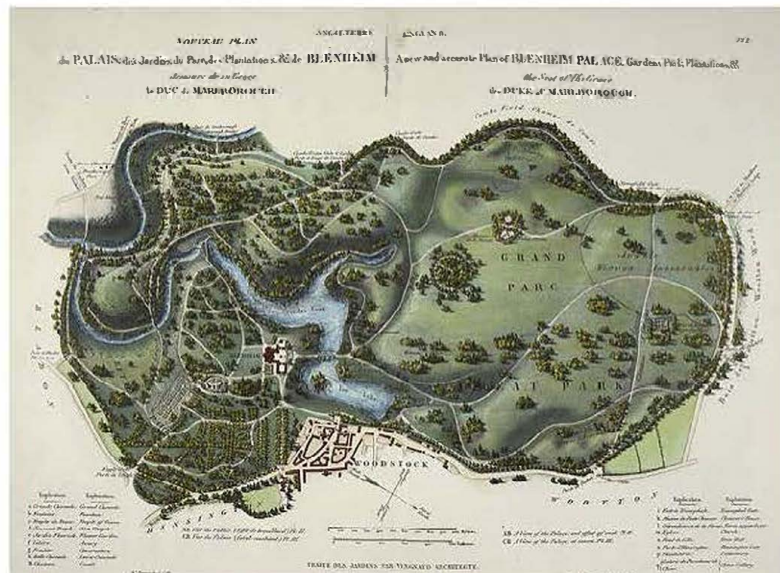
waterworks. Water pressure was manipulated to create amazing effect within these fountains. Statues and carvings were also present in the Villa D'Este garden that were classical in nature. The Villa Lante was another example of these garden masterpieces during the Italian Renaissance. This garden also possessed a large amount of fountain features to capture the attention of viewers. Sculptures were also present that were of classical context. There is a strong element of topiary used around the areas of the fountains to add an element of symmetry and uniformity.

The gardens that were designed during the period of the Renaissance saw a shift from those of the Middle Ages. They were seen more as pieces of artwork and had no ties to Christianity like the gardens before. One similarity though was that these gardens were still only enjoyed by the wealthy class that could afford to have them built. Large sums of money were spent to push the boundaries on elements in the garden, most notably in the fountain features that were popular during this time.

English Landscape

The landscape design practices that developed during the Italian Renaissance spread throughout Europe and eventually became known to English society. England began to experiment and expand on what started in the Renaissance and eventually developed a landscape design that was unique to their own country. Much of 18th century saw a rapid growth in these landscape designs driven mostly by the Romanticism movement and one of the most prominent figures that became famous for his unique work was Lancelot "Capability" Brown.

The Romanticism movement was most present in France and England beginning in the 18th century. Like the Renaissance, it sought to rediscover art and emotion. Much of the landscape design practiced in England was influenced by poetry and paintings. Detailed depictions of landscapes in paintings fueled the imagination for people to try and mimic what they say. Primarily only the aristocratic class was able to afford to transform these landscapes on their estates and add gardens around their palace. These gardens would be places of meditation but also acted like the theater in a way that moved the viewer from scene to scene in a play. There was always some type of classical element to these landscapes usually in the form of temple-like buildings. Eventually some lands owned by the crown were made into public parks where the common population could enjoy the



Blenheim Palace landscape designed by Capability Brown.

benefits of nature, but it was never to the scale of what some estates had. There were so many different designers during this period that experimented with different techniques, and they were never silent to negatively critique each other's work when they didn't like what they saw.

There was one figure during this period that rose to popularity for his methods in landscape design called Lancelot "Capability" Brown. The reason he got his nickname "Capability" is from him always telling his clients that their property had capability for improvements. The more popular he became; the more patrons would try and employ him to transform their landscapes. His designed landscapes created a seamless flow between the house and the grounds. He often usually had open fields in the view



Capability Brown's landscapes were iconic in how he sprinkled trees in the open fields to smooth the transition from open fields to forest.

from the house to try and show endless vastness to the estate. He was an expert in water drainage so there was usually a water feature present and he always smoothly transitioned open fields to forests by planting clumps of trees out in the field and increasing their density the closer he got to the forest edge. This effect created a sense of natural continuity that became very popular. There were some critics to Brown's designs deeming them unimaginative because of his open fields of turf and clumps of trees randomly placed but ultimately it didn't hurt his business because he ended up being revered as the prominent figure in England for landscape design.

The English landscape design is still present today and has influenced others outside the country. Practitioners beginning in the 18th century began experimenting with different ways to

transform the landscape and treated it like a piece of art where people could appreciate it. Each designer had their own flavor of how they achieved this, but none became more famous than Capability Brown and the landscapes he created all over England. His methods may not have been liked by all, but he was extremely effective in making the landscape look nature even though most of it was manmade in some aspect.

Colonial America

The discovery of the New World by Christopher Columbus sparked an economic race by the European nations to colonize and extract the riches from the new land. The two countries that were quick to capitalize on the new endeavor was Spain and England. Large amounts of finance were raised by both countries to give them the best advantages to reap the most benefits in the New World. Spain and England were fundamentally different in how they carried out colonizing the New World.

The Spanish were the most expansive country after Columbus discovered the New World. Their main goal was economic wealth from conquest, gold, and silver. Their strategy for conquest was based on the 3 aspects of new settlements: the mission, military, and the civilian pueblo. The mission was trying to convert the natives to Catholicism. The military part was always creating a fortified town to protect from invaders and the civilian pueblo described how new settlement would have a central plaza

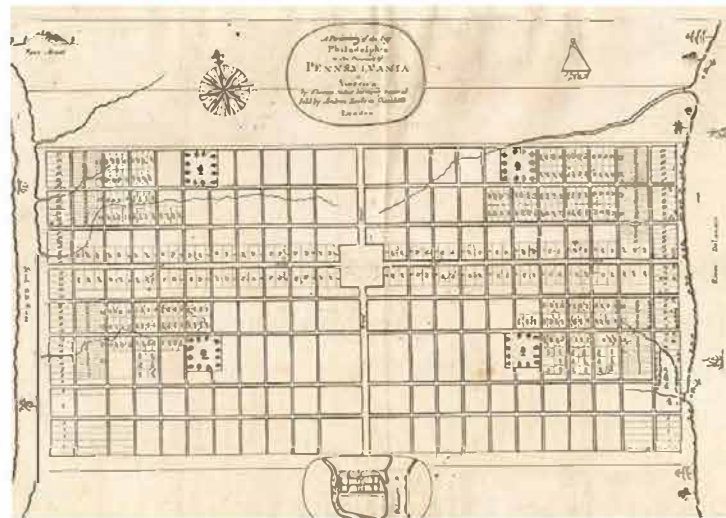


St. Augustine was considered the first settlement in America. Built by the Spanish, showing their attention to fortification of the new town.

to serve as a central community feature for each settlement. Moving west along the Gulf of Mexico into the more arid climates of the Midwest, the Spanish would eventually make their way to the West Coast where they laid claim to all this new territory including what is today Mexico. The "Laws of the Indies" was a royal ordinance dictating how the new settlements would be built. There would be a centralized plaza with the four corners aligning with the cardinal directions. Four primary streets would emanate from the plaza with secondary

roads being added to create a grid-like layout. This type of settlement is very similar to the town layouts of the Middle Ages where the central community feature were the most important part of the town because of the trade and grid-like infrastructure radiated from that central point.

The English were very different in their approach to the New World. They weren't motivated by quick expansion but rather setting up strong settlements that would last. Settling in the Northeast, early settlements had a lot of setbacks from the harsher climate when trying to adequately grow enough food. The English towns fell into three different layouts: linear, square and gridded, and organic. The linear towns were just a single central road that had secondary streets branching off almost resembling a spine in the



William Penn's plan for Philadelphia showing the gridded layout but with several blocks for public green spaces.

landscape. A square and gridded town was the most popular used and resembled order and uniformity. The organic towns were less frequent and were basically temporary places of settlement. William Penn was responsible for the layout of Philadelphia, and he used the gridded format for it. He did set aside blocks of land for public green spaces and wanted all the houses to be set in the middle of the plot with a garden. His vision was to provide everyone with space to live and community spaces to enjoy. Over time with city growth to maximize profit, plots would be subdivided into smaller plots to accommodate rows of houses and soon the green spaces would disappear and would become what Penn was trying to avoid. Possibly learning from the mistakes of Penn, Oglethorpe's Savannah, Georgia proved to solve the issue that developed in Philadelphia. He also followed the grid pattern with public green spaces and

providing adequate land per plot for growing food. What he did differently though was making it a rule that as the city grew and new wards were developed that there also must be a new green space included in the expansion as well. This method proved to be successful as the city grew over time providing green space ever so frequently throughout the city.

What was deemed successful in colonizing the New World proved to be different answers between Spain and England. Spain was looking to get rich and claim as much territory as possible. England was looking to set up strong foundations with benefits accruing in the future. Both had different approaches to how they built within the landscape, but both were similar in the fact that they wanted to keep the tradition of a centralized plaza that would be the central community feature of a newly established town. They ended up serving different purposes, but the principle stayed the same.

Frederick Law Olmsted

The young nation of the United States during the 19th century was trying to find an identity where it could compete with international powers in Europe. Small towns became sprawling cities overnight because the country was trying to become industrialize. This caused most cities to neglect the importance of green public spaces that served as therapy for many different groups of people. In the second half of the 19th century, Frederick Law Olmsted became the prominent figure of landscape architecture in America because of his work beginning with Central Park but also many more projects in adding scenic landscape parks for the public.

Olmsted didn't have any direct landscape architecture experience before his venture with Central Park. His background was in agriculture, and he was able to travel to England in the 1850 to study agricultural practices firsthand. This experience abroad had a lasting effect on him because of some of the landscape spaces he visited were of the pastoral and picturesque nature. He saw the works of Capability Brown and Paxton's Birkenhead Park which he called the "People's Garden" and wrote that America had no equivalent area in beauty that this place captured. He couldn't pursue his literary career as a publisher, so he took a job as superintendent of the clearing operations for Central Park in New York that legislation recently got passed to move forward with. There was a competition held for the design of Central Park and Olmsted saw this as an opportunity to create a space that would compete with the picturesque landscapes he saw overseas. Calvert Vaux, an architect who was very familiar with his literary work desired to partner with Olmsted for the



Large open meadow in Central Park with clumps of trees planted.

competition because of his familiarity with the park landscape. The Greensward Plan was their design of Central Park where both men transformed the area clearing areas here and planting trees there, moving earth to create contours within the rectangular boundary. They turned swamps into ponds and incorporated many large open areas that would be almost identical to what Capability Brown did in England. He also wanted to put a layer of trees around the boundaries of the park so that people could not feel that the park's boundaries were a rectangle. Olmsted saw the landscape as a panorama, a succession of views that flowed harmoniously as the viewer moved through the park and wanted Central Park to be a place of therapy for the masses. In 1858, the Olmsted-Vaux team won the design competition and construction began on the park where he oversaw the transformation of the landscape until the Civil War broke out and he turned his attention elsewhere for a few years.

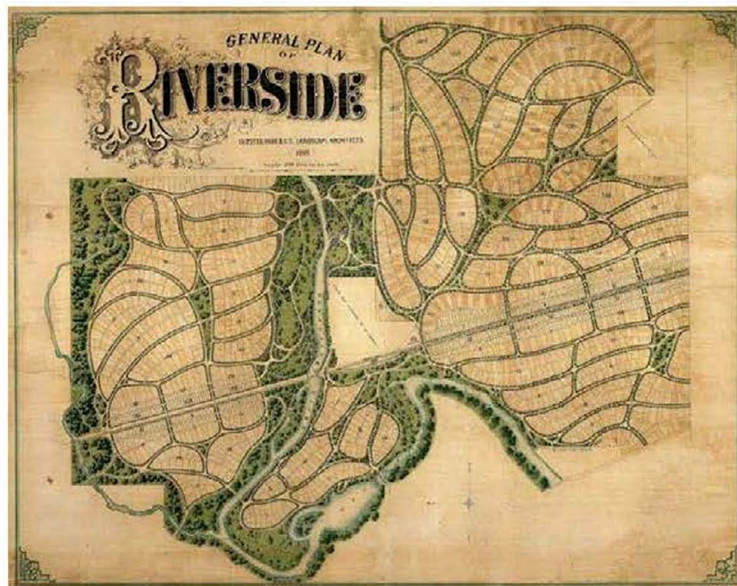
Olmsted could have possibly ended his landscape architecture career with Central Park after he turned his sites to other ventures during and following the Civil War, but it was the persistence of Calvert Vaux that got him to return and work on many more projects throughout the country. Olmsted's



Prospect Park in Brooklyn.

next commission was Prospect Park in Brooklyn. This area already had a lot of different natural composition to work with including large rock outcrops and large boulders left by glaciers. He was able to create a 75-acre Long Meadow that became the quintessential Olmsted landscape and was able to include a waterfall in this park. Olmsted and Vaux's next venture was to try and advocate for a parkway that connected Prospect Park to Central Park but also included picturesque views of the waterfront, the undeveloped countryside, and the Hudson River. This was to serve as a

scenic road system for people to travel on. Their revised plans for this parkway included suburban areas in Brooklyn with the goal of connecting city dwellers to urban parks. Olmsted was called on to develop other parks in other cities because of his growing popularity. In Buffalo, he was able to design an entire park and parkway system. The Delaware Park had the pastoral landscape, the Front was meant as a viewing terrace overlooking the Niagara River, and the Parade was used more for military functions, all three connected by a parkway system when someone could travel from one to the other on landscaped boulevards. In Riverside, Illinois, Olmsted was given the opportunity to use his principles in designing a residential community. Here he created curving streets, tree-lined roads, and a waterfront park along the Des Plaines River. The layout of the site had an organic look to it. Olmsted and Vaux were called upon by the city of Chicago to design two of their proposed parks, Washington and Jackson Park. With Jackson Park bordering Lake Michigan, Olmsted designed a 200ft pier as well as a lagoon. For the inland



Riverside residential community design plan.

Washington Park, he created a large open meadow known as the Southopen Green. Both parks were connected by the Midway Plaisance, which was a land of greenery with a canal in the middle that connected the water from Washington Park to the lagoon in Jackson Park. This ended up being the last project that both men collaborated on because they dissolved the firm. Boston's Emerald Necklace was one of Olmsted's parkways linked park designs. One of his last commissions was designing the grounds for the Biltmore Estate in Asheville. Of the 2,000 acres he recommended the owner, Vanderbilt, to

devote most of it to scientific forestry. Vanderbilt eventually increased his ownership to 120,000 acres and hired on Olmsted's recommendation Gifford Pinchot to manage it who is known as America's first professional forester.

Olmsted ended up spending the last few years in a hospital for his dementia and eventually passed away in 1903. His legacy earned him the title of the father of landscape architecture in America. Most of his iconic landscapes were the large open areas that are very similar to what he saw in England by Capability Brown and others. That travel abroad had a lasting influence on how he transformed landscapes in America in trying to make them look pastoral and picturesque.

Rise of American Landscape Architecture

Following the emergence of Frederick Law Olmsted in the mid-19th century, many others went on to follow in his footsteps in furthering the profession of landscape architecture in the United States. There were some people that were heavily influenced by the works of Olmsted using his techniques in their own designs, and there were others that worked to come up with their own design culture. Some of these landscape architects that emerged into the start of the 20th century were Beatrix Jones Farrand, Ellen Shipman, Charles Eliot, Henry Wright, and Jen Jensen.

Beatrix Jones Farrand and Ellen Shipman were prominent women in the profession in the early 20th century who gained the respect of the male dominated culture from the work they produced. Beatrix was more widely known and sought after for her designs. She was able to tour Europe and visit over 20 gardens where she got an understanding of landscape architecture as a profession. When she returned to the states, she enrolled in classes to learn the technical skills needed to practice the profession. Since her family had ties to high members of society, she was able to gain clients such as JP Morgan, Rockefeller, and Theodore Roosevelt. Dumbarton Oaks was one of her most famous designs. Given the steep terrain, she incorporated a series of descending terraces with native vegetation and

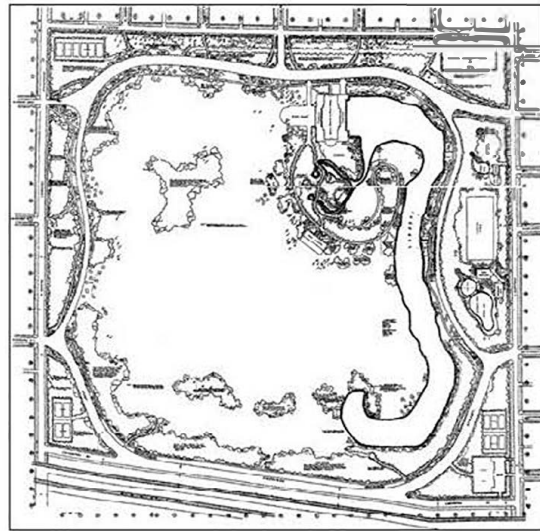


Descending terraces in the Dumbarton Oaks gardens.

different water features depending on the theme of the terrace. Beatrix was also a charter member for the American Society of Landscape Architects. Ellen Shipman had a horticulture background and focused more on residential landscape designs. She liked to design these “secret” gardens to serve as a place for contemplation with heavily screened borders. The incorporation of sculptures was also prominent in a lot of her designs, and she always gave maintenance plans for her clients to follow to

ensure the best possible outcome for the vegetation in her designs. Shipman went on to start an all women firm of landscape architects and was vocal in creating a school for more women to get involved in the profession.

Charles Eliot was the younger partner of Frederick Law Olmsted in the second half of the 19th century. He was instrumental in forming the Trustees of Public Reservations, which was dedicated to preserving wilderness areas in New England. Focusing more on the Boston area, he helped create the Board of Metropolitan Park Commissioners with their plan focusing on restoring the tree cover, steering real estate development, reducing water pollution, making transportation accessible for all, and designing small local community playgrounds in the area. Henry Wright was a landscape architect who focused on residential projects with his two most known works of Sunnyside Gardens in Queens, NY and Radburn in Fairlawn, NJ. Though the Radburn community was never finished because of the stock market crash in 1929, his design showed a garden-city concept with an organic nature in the layout of the streets. He wanted to maximize the amount of open space for private gardens, public greenery, and recreational commons. Jen Jensen was another prominent landscape architect at the beginning of the 20th century who was very similar in practice to Olmsted. A lot of his works have this open landscape with pastoral views and an element of water in some form. Columbus Park was one of his most popular works that showcased a giant lagoon and a large open field for recreation.



Columbus Park designed by Jen Jensen resembling the works of Olmsted

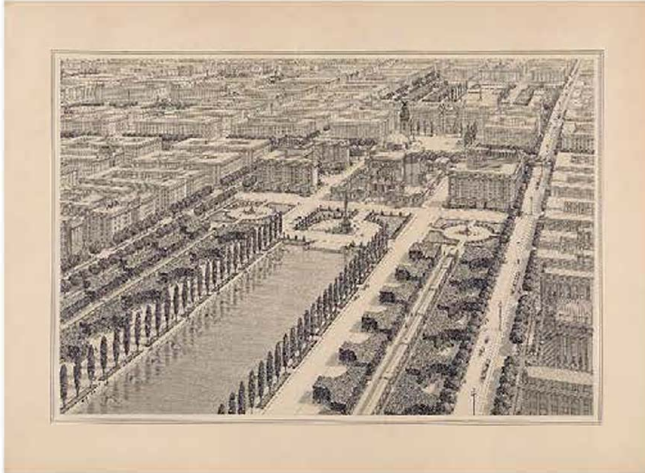
The rise of these landscape architects and several others in the early 20th century was primarily due to the building blocks that Frederick Law Olmsted built in the years before. He gave rise to a

profession that was unknown in the United States and was one of the few professions open for women to practice. Some landscape architects chose to mimic the methods of Olmsted in their designs, and some were able to come up with their own styles.

New Towns

Industrialization became the force that was detrimental to cities having any type of nature present for its citizens to enjoy. Beginning in the 18th century in Europe and the 19th century in America, the industrialization of cities was driven by the economy and advances in technology. Prominent figures in the landscape architecture world tried to combat this type of growth by persuading others to take a city building approach that became known as the Garden City Movement. European figures such as Ebenezer Howard and Otto Wagner, and the several American figures helped push the garden city movement to gain popularity.

Ebenezer Howard became known as the father of Garden City Movement because of his disapproval of how industrialization was changing the cities in a negative way. His city plans that he developed had a circular layout. The agricultural lands were on the outside boundaries with the houses



Otto Wagner's plan for the urban center in Vienna, Austria

inside of that. Parks and other green spaces were closer to the center. His first two cities that he designed were Letchworth and Welwyn Garden City in England. Otto Wagner was one of the first figures in Europe whose city designs were known to be apart of the modernism movement. He envisioned the modern cities showing systematic order, uniform building blocks, wide transportation corridors, and large greenery spaces. In 1911 he designed the urban center for Vienna, Austria that depicted this systematic order, wide corridors with trees abundantly present and in geometric order.

In America, there were several people that pushed the Garden City Movement forward. Frederick Law Olmsted Jr.'s design of Forest Hills Gardens was a take on the picturesque tradition. He paid very close attention to the fine details of the town. The detail went as far down as to the size and color of the pavers being used. Using the Forest Hills Gardens design as inspiration, Clarence Perry designed Yorkship Village. He wanted to make everything in this town within walking distance. The houses were located within a half mile of the school and a quarter mile from the shops with landscaped village green squares throughout the town. The village squares would serve as a focal point for community institutions. Clarence



Public green space in Olmsted Jr.'s Forest Hills Gardens



Greenhills, Ohio neighborhood layout

Stein and Henry Wright were the landscape architects behind the Sunnyside Gardens community design, which would maximize the amount of space for private gardens, public greenery, recreational commons, and a pedestrian walkway network for each block. The successor to Sunnyside was Radburn, NJ. Both men designed the new community to have superblocks of 35-50 acres and designed a more irregular shape to the green spaces, which ultimately created a more organic shape to the town. Unfortunately, the Great Depression hit in 1929 before the town could be fully built but the design lived on to inspire later towns to be built in the same fashion. Greenbelt, Maryland, Greenhills, Ohio, and Greendale, Wisconsin were a few towns that followed the Radburn design. These were built during the administration of Franklin Roosevelt and developed by Rexford Guy Tugwell, who was a student of Ebenezer Howard.

The 20th century in the United States was the beginning of new towns being developed in the garden city image after following

industrialization of the country the century before. There were several experiments that proved to be successful such as Forest Hills Gardens and Yorkship and others that didn't get to be built to its fullest potential like Radburn but ended up being a blueprint for later towns to mimic. The goal of the new towns was to give people the pleasure of nature in their own backyard while also being close enough to the jobs in the city.

National Park Service

Beginning in the early 20th century with the automobile becoming available to the masses, there was a big influx of people visiting natural and scenic landscapes around the country. At first, with no rules or regulations to manage these areas, heavy human traffic would deteriorate the environment. Several iconic figures were instrumental in paving the way for the eventual National Park Service to be created such as Frederick Law Olmsted, John Muir, photographer William Jackson, and painter Thomas Moran. These figures along with the help of others would help raise awareness about these landscapes in the United States and advocated for legislation to be passed to protect these areas for future generations.

Olmsted was not only known for his landscape architecture commissions that he created for many cities across the United States but also for successfully advocating for the Yosemite Valley area to be protected by the government. He had help from photographers such as Carleton Watkins that captured the majesty of the scenery present in Yosemite. In 1864, Congress gave the Yosemite Valley area to the state of California to be set aside for public use, resort, and recreation. This was the first area in the country that was set aside for public use. John Muir, who was considered a naturalist, became one of the biggest advocates for the Yosemite Valley area. He found spiritual inspiration in the scenic landscape and went on to create the Sierra Club and serve as its president for over 20 years. Ferdinand Hayden, director of the U.S. Geological Survey, created an expedition party to explore the landscape of Yellowstone. Photographer William Jackson and painter Thomas Moran were part of the expedition to depict the landscape. These photographs and paintings were instrumental in Yellowstone becoming the first national park in 1872.



Painting of Yosemite Valley that was effective in depicting the natural beauty of the site



Tunnel on the Blue Ridge Parkway

Advocates for protecting the country's natural landscapes continued to push for more legislation. In 1906, President Theodore Roosevelt, who had a strong association with Thomas Muir, passed the Antiquities Act of 1906. This bill gave the president power to acquire areas around the country deemed for its scenic, historical, or scientific value. With all these lands being acquired across the country, an entity needed to be created to manage all these holdings. In 1916, President Woodrow Wilson signed the National Park Service Organic Act that effectively created the National Park Service (NPS) that would oversee conserving the scenery

and the historic objects within and leaving the sites unimpaired to ensure the enjoyment by future generations. Using principles embodied in the National Park plan written by Olmsted Jr, the National Park Service assumed the responsibility of the designs of parks and the parkways. During the Great Depression, the Civilian Conservation Corps (CCC) was created providing many workers to build these parks and parkways across the country. These parkways gave people the opportunity to travel across the scenic landscapes instead of being confined to the paths of the railroads.

The National Park Service has continued to acquire more and more lands over the years. These are not just parks but include historical sites, monuments, and places of scientific research. The steps taken in the 19th century by Olmsted and Muir helped start the movement to preserve lands in the country for future generations to enjoy, which led to legislation in the early 20th century that set up the necessary entities, such as the NPS, to help ensure that these sites would be managed effectively.

20th Century and Future Trends in Landscape Architecture

The 20th century in landscape architecture was a time of exploring the possibilities of what the profession could grow into. Architecture was pushing the boundaries on what was possible and landscape architecture was practicing trends from centuries ago. It wasn't until men such as Garrett Eckbo, Dan Kiley, and James Rose banded together to push for change as well as other figures such as Ian McHarg and John T. Lyle who wrote books on how human societies could be built to coexist with nature and its ecosystems.

Garrett Eckbo, Dan Kiley, and James Rose were all grad students at Harvard University studying landscape architecture, and they were displeased with the curriculum that they were learning and ended up creating their own curriculum to apply to landscape architecture. They were drawn to the modernism that the architects were learning and wanted to incorporate that into landscape architecture. Eckbo later began doing residential projects where he pushed the boundaries of integrating the outside landscape to the premises of the inside of the home. Dan Kiley did not teach or write any time in his career like Eckbo did and primarily practiced his entire life. He started with residential projects but included international projects to his resume over time. James Rose was the last of the trio that preferred to stick with residential projects because he had more control over the final product. He was known for his fusion of indoor and outdoor spaces and ended up establishing a landscape research and design study center in Ridgewood, NJ.



Water garden designed by Dan Kiley

Ian McHarg was a Scottish landscape architect that wrote on regional planning using natural systems. In 1969, he published Design with Nature, which was basically a step-by-step book on how to



Design for John T. Lyle Center for Regenerative Studies

break down a region for appropriate uses. This was the first book of its kind to help identify the problems of modern development and provide a process of solutions. He also believed that homes should be designed with good garden spaces focusing on the analysis of soil, climate, and hydrology of the site. John T. Lyle is known for his work towards regenerative design in landscape architecture. He published Regenerative Design for

Sustainable Development, that can serve as a user's manual that incorporates ecological design within today's society. He ultimately came up with the establishment for the Center of Regenerative Studies at California State Polytechnic University where the goal was to build a community where people could live within the limits of the site's renewable resources.

Landscape architects began to find new ways to push the boundaries during the 20th century that created iconic pieces. Eckbo, Kiley, and Rose were known as the three to push landscape architecture into a more modernistic age. Ian McHarg was most known for his book that helped people identify the negatives with modern development while offering solutions to help design in a more ecological way. John T. Lyle furthered this by creating a center for regenerative studies that provided ways to research how people can live within the limits of the renewable resources present on a site.