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Narrative Features of Planting Design

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ABSTRACT

The narrative character of planting design is the fun of landscapes, telling stories and morals in a unique way in planning. When the landscape stimulates our multiple senses, it even has a great impact on our behavior, our views, and our psychological perception of the world. The way of landscaping tells stories or conveys ideas from four planting design angles, including the symbolic meanings of plants, dynamic storytelling, philosophical design and contrast with Eden. It reflects the importance of a successful landscape and public values, and enhance the interaction with public emotion. This paper provides a detailed exposition of methods and specific scenarios for creating narrative landscapes through the use of plants, drawing on examples from classical gardens in various countries, including Europe, England, and China. This study aims to organize and summarize the cultural symbols present in planting design, clarify the expressive techniques of narrative landscapes through plant design, and provide theoretical insights for interpreting and understanding classical gardens, as well as practical support for future landscape design endeavors.

1. Introduction

Landscapes are repositories of narrative, and garden design adeptly harnesses the power of storytelling to connect with the public. Plants, revered for their symbolic significance in various cultures, play a crucial role in religious ceremonies, literary works, and architectural designs. In the realm of garden design, cultural elements are intricately woven through the use of imagery and themes, ensuring that the selection and arrangement of flora are attuned to cultural contexts, thereby creating unique landscape experiences. Narrative design, a burgeoning approach

within landscape architecture, offers fresh insights and innovative strategies for the study and advancement of landscape design. This method, which integrates narrative thinking with design techniques, enriches plant landscapes with additional cultural depth, enhancing the emotional bond between the public and the narratives that are embedded within their surroundings.

Roland Barthes, a renowned French narratologist, posited that narratives are diverse, encompassing not only literature but also theater, painting, cinema, comics, news, and conversation [1]. Narratives are conveyed through a spectrum of mediums, from oral

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and written language to static and moving images, gestures, and a synergistic blend of these forms. As narratology research expands, it intersects with an array of disciplines, including design. The landscape narrative represents the confluence of landscape design and narratology; designers employ narrative techniques to subtly infuse landscapes with story threads and plot elements, presenting them in a narrative format [2]. This approach enables individuals to organically absorb knowledge about history, culture, or nature, stimulating a sense of spiritual identification and emotional connection with the landscape. Planting design, as a spatial language, can convey specific cultural, emotional, and ecological meanings through the arrangement of symbols and the construction of narratives. This is primarily manifested in the following three aspects: (1) Multi-layered Significance of Symbols: Plants, as a combination of signifiers and signifieds, possess not only surface-level meanings (denotative meanings) but also deeper cultural connotations (connotative meanings). In planting design, the selection and arrangement of plants can function as a symbolic system, communicating specific cultural, emotional, or ecological messages. For example, in traditional Chinese gardens, *Pinus* spp. are often used to symbolize resilience and perseverance, while *Bambusoideae* represents nobility and humility. (2) Construction of Narratives: Roland Barthes posited that narrative is a structure for generating meaning, conveying specific themes or emotions through the organization of time or space. Planting design can construct spatial narratives through the spatial arrangement of plants, seasonal changes, and growth dynamics, guiding the emotional experiences of viewers. (3) Repetition and Variation of Symbols: The Rhythm of Planting Design: The repetition and variation of symbols are essential techniques in narrative construction. In planting design, the repetition and variation of plant arrangements can create a visual and emotional rhythm. For instance, in the gardens of the Palace of Versailles in France, meticulously trimmed hedges (e.g., *Buxus* spp.) establish a solemn and orderly rhythm through repeated geometric forms, while interspersed flowers (e.g., *Tulipa* spp.) add vibrancy and interest through variations in color. A Chinese scholar Meng Linghui has integrated narrative into landscape design, delving into the narrative qualities of landscapes and introducing the concept of "storytelling" to plant landscapes [3]. By endowing plant landscapes with the capacity to narrate, they establish a link with human behavior and

perception, converting plant landscapes into bearers of intrinsic value and narrative potential.

This paper explores the mechanisms through which narrative design in gardens intensifies emotional expression between individuals and their environment. It does so by harnessing the symbolic meanings of plants, dynamic storytelling, philosophical design elements, and the mythological concept of Eden, thereby providing a rich framework for understanding the interplay between people and their surroundings in the context of garden design.

2. Symbolic Significance of Garden Plants

In the cognitive framework of humans, plants are ascribed anthropomorphic qualities that encapsulate cultural narratives and reflect their biological attributes, including morphology, color, phenological patterns, structural features, functional roles, and life cycle dynamics. The efficacy of ecological planning and the artistry of planting design are compromised when they overlook the ecological behaviors, biological nuances, and cultural dimensions of plants. Such oversight results in landscapes that lack a cohesive vision and gardens that are devoid of the spiritual essence that defines their spatial identity [4].

2.1. Flower Symbolism

In the tapestry of nature, flowers serve as emblems, their transient blooms a reflection of deep cultural import. The symbolism of flora is steeped in antiquity, with humankind's enduring quest to ascribe meaning to botanical entities. *Rosa* spp., a floral icon of love, is nuanced by color—red for ardent love, white for chaste affection, and pink for the warmth of friendship. *Chrysanthemum × morifolium*, linked to mortality, is a funeral staple yet considered unsuitable for hospital visits. *Narcissus tazetta* embodies self-absorption, its etymology rooted in the myth of Narcissus, who became the daffodil's patron deity after his demise, thus associating his name with the term "narcissism." *Myosotis alpestris*, known as the forget-me-not, is a plant whose name is intrinsic to its symbolic value. Plants as national emblems include *Paeonia suffruticosa* for China, *Cerasus × yedoensis* for Japan, *Tulipa gesneriana* for the Netherlands, *Ficus religiosa* for India, *Helianthus annuus* for Russia, and *Olea europaea* for Greece. Symbolism extends to plant organs; *Acer rubrum* leaves symbolize Canada, *Quercus robur* acorns denote abundance, *Ficus*

spp. leaves suggest humility, and *Laurus nobilis* signifies peace [5].

The construction of "floral phrases" through these symbols allows bouquets to convey complex messages—red roses for love, *Jasminum sambac* for gratitude, and *Convallaria majalis* for joy. In garden design, these symbols can narrate stories, with some combinations being ubiquitous and others carrying specific connotations. A garden abundant with roses, for example, evokes romance, while a memorial adorned with laurels, forget-me-nots, and *Philadelphus coronarius*, both emblematic of remembrance, is a fundamental element of a martyrs' cemetery.

Floral and botanical significance, however, is subject to cultural variation, with meanings diverging across different perceptions. *Taraxacum* spp., a symbol of wealth in some cultures, assumes a distinct connotation in French, where "Pissenlit" translates to "bedwetter," a term that precludes it from carrying profound symbolism. *Lilium* spp., once a symbol of French royalty, has largely lost this significance, although its aesthetic qualities render it a common feature in landscape gardening. In symbolic settings like the Élysée Palace, the lily's emblematic meaning reemerges, awkwardly representing the old regime. Yellow roses, traditionally associated with deceit in Europe, are seldom chosen for gardens, with red, pink, and white being the predominant colors selected.

2.2. Symbolic Significance of Trees

Trees, in parallel with flowers, serve as symbols of particular meanings, albeit with less definitive precision. *Quercus robur*, for instance, is venerated by Celts for embodying nobility and representing strength, longevity, and fertility. Within these forests, the transience of human existence is palpably contrasted with the enduring nature of the land. *Salix babylonica* is often associated with sadness and melancholy, while *Ficus carica*, with its bountiful fruit, symbolizes the enjoyment of the present, akin to the misinterpreted "carpe diem."

The symbolic significance of trees is less pronounced compared to the reproductive organs of angiosperms, and this symbolism can become incongruous when trees are relocated outside their indigenous environments. *Trachycarpus* spp., once a symbol of victory in French floriography, now commonly signifies exoticism, invoking images of tropical beaches and vacations rather than triumph. In met-

ropolitan France, palm trees appear out of place, as they are more characteristic of Mediterranean locales. In arboreal planting schemes, the importance of climate compatibility and site-specific adaptation is paramount, even more so than with flowers. The use of indigenous flora is crucial for atmospheric creation and message conveyance, as these plants more accurately reflect landscape attributes and pay homage to local vegetation, highlighting regional distinctiveness. The oak maintains particular relevance in regions of Europe where Celtic culture persists, such as Brittany and Ireland. *Juglans regia* is closely linked to the Grenoble area, and *Pinus* sp. are integral to Alpine product branding and culinary traditions. Given their substantial size and extended lifespan, trees exert a profound influence on landscape architecture. The fusion of ecological planning and planting design with indigenous cultural elements is instrumental in shaping regional style and character, imparting affirmative messages regarding scientific understanding, cultural self-assurance, regional identity, and sustainable development.

3. The Art of Plant Design for Creating Dynamic Experiences

3.1. Narrative Expression

In the realm of landscape design, narratives are constructed across various dimensions, leveraging the morphological attributes, growth patterns, ecological behaviors, and biological traits of flora to convey scientific and cultural narratives in a static manner. Spatial syntax facilitates the interpretation of the intricate designs within landscape architecture; however, this approach remains temporally static. In contrast, dynamic narrative techniques capitalize on the evolving perceptions of visitors as they navigate the landscape, employing strategies such as visual and physical pivot points to direct movement, establishing visual linkages between spaces, and creating tension points that accumulate and subsequently release, thereby enhancing visual storytelling.

The dynamic expression in landscape design draws parallels with certain cinematographic techniques. While cinematic narratives are propelled by text and imagery, these elements alone are emotionally neutral, similar to factual newspaper reports. To evoke an emotional response, cameras dynamically interact with the narrative, using close-ups to foster intimacy with characters and zooms and pans to

transition between perspectives. Filmmakers utilize music to share characters' emotions, allowing the audience to discover deliberately hidden truths within the story alongside the characters. They employ color schemes to set the mood and reinforce characters' personalities through recurring attire, irrespective of contextual realism. Transitions are critical in conversation scenes, composed of multiple shots and reverse angles to maintain dialogue flow, and between scenes, signaling shifts in location and time. Landscape design can similarly employ these transitional techniques across its components, and techniques that create dynamic experiences often involve spatial layout, plant configuration, pathway design, and elements related to time. Table 1 shows some techniques that can be used to create dynamic experiences.

Through these examples, we can see the diversity and complexity of plant forms in spatial narrative. They influence not only the physical structure of space but also profoundly affect people's emotional experiences and cultural understanding. A garden operates as a self-contained microcosm, distinct from indoor spaces, offering a tranquil, atmospheric, and narrative-rich environment. The arrangement of its elements and the transitions between them are pivotal in bringing the narrative to life. Consider an English pastoral scene where a path from a house leads to a small grove, vanishing at the end. As one follows the meandering path into the grove, the house disappears behind the trees, symbolizing a departure from the stresses of modern civilization. Exiting the grove reveals a landscape, a serene new world reminiscent of the Peach Blossom Spring. Passing through an

Table 1 | Methods of narrative landscape design using plants.

Design method	Plant form	Description
Pathways Design	Guiding sightlines and movement	• Design meandering paths to guide visitors' sightlines and movements, enhancing a sense of exploration. • Use surfaces with different materials and textures to provide visual and tactile variety.
Focal Points	Plants with specific cultural symbols and specific forms	• Place focal points within the garden, such as sculptures, distinctive plants, or water features, to attract visitors' attention. • Create dynamic visual experiences by guiding the line of sight and transitioning between focal points.
Spatial Sequence	Defining spatial boundaries and creating privacy	• Arrange spaces in an orderly sequence, such as from enclosed to open, or from dark to light, to create dynamic spatial changes. • Use a sequence of landscape elements to guide visitors through different spaces, enhancing the fluidity of the experience.
Light &Shadow	Influencing spatial atmosphere	• Create dynamic light and shadow effects through the layout of plants and structures, utilizing changes in sunlight and shade. • Design nighttime lighting to highlight certain landscape elements or create an enigmatic atmosphere.
Interactive Elements	Tactile plants	• Introduce interactive elements, such as operable devices or participatory landscapes, making visitors part of the experience. • Design landscapes that change with visitor behavior, such as sand areas or trample-resistant lawns.
Time-based Art	Expressing seasonal changes	Select plants that change with different seasons to demonstrate the passage of time and the shift of seasons.
Topography	Shaping spatial rhythm	Utilize variations in plant height, form, and color to create dynamic visual and spatial effects.

archway of pruned flora, one encounters a vibrant floral display in an open-air space. The clear, defined space offers a visible path leading away on the opposite side. Departing requires a turn guided by curving walls. The path, narrowing between tall hedges and stone walls, induces a sense of unease due to the obscured endpoint. However, upon advancing, relief follows as an open field with a central body of water and a majestic oak casting its shadow comes into view. The pond and tree exert a compelling attraction, seeming like the universe's center, an eternal domain. From this vantage, the manor is visible again, signifying the narrative's end. Yet, the landscape appears distant, dreamlike, and all prior worries are forgotten. This sequence of contrasting spaces, escalating and then releasing tension, akin to "Alice's Adventures in Wonderland," blurs the line between dream and reality, subtly transporting individuals to a fantastical realm.

3.2. Philosophical Expression in Planting Design

In the realm of landscape architecture, the conveyance of cultural and spiritual narratives can be more efficacious than verbal discourse. Contrary to the auditory-centric approach of lectures, gardens engage the human experience through a multisensory array, encompassing visual, auditory, olfactory, gustatory, and tactile stimuli. Such an immersive encounter allows for the perception of abstract ideas as immediate, tangible sensations, circumventing the need for higher-order cognitive functions such as logical reasoning and linguistic interpretation [6]. This approach aligns with the interdisciplinary appeal of landscape architecture, resonating with both the aesthetic sensibilities of art and design scholars and the functional objectives of environmental and cultural studies.

3.2.1. French Formal Garden

The French formal garden tradition, rooted in the human aspiration for natural subjugation, culminates in the 17th-century Palace of Versailles, a masterpiece by André Le Nôtre. This garden epitomizes symmetrical design and geometric precision, symbolizing royal authority and the human conquest of nature, which aligns with a transcendent Christian ethos (Figure 1). The garden's design minimizes improvisation and natural elements, with trees meticulously shaped into spheres or cubes and aligned along axial vistas to embody the monarch's dominion [7]. Buxus



Figure 1 | The garden of Versailles

sempervirens, valued for its plasticity and ease of up-keep, is a common feature. The plants' significance is enhanced when they embody heraldic symbols or mythological motifs, yet they remain conceptually decorative, as their species do not inherently relate to the meanings they are meant to express. This approach to garden design offers a compelling blend of aesthetic order and symbolic representation, appealing to readers in landscape architecture and art design disciplines. Additionally, plants are often imbued with specific symbolic meanings in French formal gardens, conveying profound cultural connotations through their forms and arrangements. Visitors, through their interactions with these plants, experience a sense of cultural resonance. A notable example is the design of the "Latona Fountain" at the Palace of Versailles. The plants surrounding the fountain, such as *Laurus nobilis*, symbolize victory and glory, while the central sculpture depicts the story of Apollo, the sun god. As visitors explore the garden, the interplay between the symbolic meanings of the plants and the sculpture evokes a sense of the grandeur and sanctity of the royal garden, fostering a deeper connection to French history and culture.

3.2.2. English Landscape Garden

In the landscape architecture discourse, English gardens stand in stark contrast to their French counterparts, embracing asymmetry to evoke a sense of liberation and to approximate the natural landscape through intentional planting schemes. A stroll through such gardens compresses the experience of a prolonged rural journey into a brief span, encompassing the ascent of a knoll, the traversal of a watercourse,

the passage through a tranquil woodland, and the revelation of a remote residence. This crafted naturalism, designed to encapsulate the essence of pastoral life within a confined space, often remains obscure to the observer, contrasting with the Chinese garden's explicit endeavor to mirror natural environments [8]. Within the English garden paradigm, arboreal forms eschew geometric pruning yet are managed to specific dimensions, and floral arrangements, while not adhering to geometric patterns, are deliberately fashioned to appear unnatural. The vegetation is carefully curated and orchestrated to achieve an integrated, aesthetically pleasing composition, appealing to scholars and practitioners in landscape architecture and art design. In the context of landscape architecture, English gardens are distinguished by their strategic integration of herbaceous and liana species to replicate the bucolic character of natural landscapes. The gardens augment their visual tapestry with flowering plants, such as *Dianthus* spp. and *Centaurea cyanus*, which contribute to a rich, painterly aesthetic. In the realm of landscape architecture, English gardens are noted for their intentional use of herbaceous and climbing plants to capture the pastoral charm of natural settings.

3.2.3. Japanese Zen Garden

Japanese Zen gardens, akin to the nation's poetic tradition, embody a minimalist and restrained aesthetic that values the continuity between interior and exterior spaces and the embrace of wabi-sabi, which reveres the beauty found in imperfection. These gardens are noted for their simplicity and subtlety, with a significant emphasis on achieving a dynamic equilibrium among various elements. In contrast, European gardens are often defined by their vivid colors and lush foliage, yet they frequently overlook the concept of balance.

From a Japanese worldview that sees humans as integral to, rather than separate from, the natural world, Japanese gardens mirror the Chinese classical approach by integrating with residential areas to foster a harmonious symbiosis. The flora within these gardens is selected with meticulous care to promote coexistence and ecological balance [9]. Japanese gardens, while meticulous in detail, eschew the perfection associated with linearity, symmetry, and geometric forms, viewing these as discordant and jarring within the garden environment. Instead, they champion the seamless integration of sparse elements—



Figure 2 | Ryōan-ji Zen Garden

stones, bamboo, and koi ponds—to form a balanced composition. Mosses and lichens are particularly favored due to their natural role in integrating vegetation with rocky landscapes, aligning with the Japanese garden's ethos of understated elegance and naturalism (Figure 2).

3.2.4. Chinese Garden

Chinese gardens are inherently narrative-driven, with a strong emphasis on the garden's name and its historical, mythological, poetic, and documentary significance. The gardens of Suzhou, including the Ouyuan Garden (Xieyinyuan Garden), epitomize this narrative, reflecting the tranquil retreat of the owners within its divided yet complementary design. During restorations, the garden's narrative is often given precedence over its original design, resulting in layout modifications to suit new owners and eras. In contrast to European gardens, Chinese gardens incorporate architecture that reflects cultural, moral, ethical, and philosophical values, with curated vegetation, rockeries, and structures as integral elements. These gardens not only imitate but also transcend nature, with each locale named and crafted for specific functions or scenes, such as moon-viewing pavilions or ponds with three islands [10].

In the context of landscape architecture, Chinese gardens are recognized for their intentional plant selection, which is deeply rooted in symbolism and contributes to the garden's narrative fabric. The crape myrtle within the Humble Administrator's Garden (Figure 3), for instance, is historically connected to the Tang Dynasty's Central Secretariat, with the "Purple Micro Star" aligning with the "Purple Micro Terrace," thereby symbolizing authority and mirroring the



Figure 3 | Humble Administrator's Garden

scholarly pursuit of bureaucratic status. Such botanical-cum-historical integration deepens the garden's cultural resonance and storytelling capacity.

The Ge Garden serves as a paradigm of employing seasonal flora to represent the temporal cycle. Its rock arrangements and seasonal rockeries are accentuated by plants that epitomize each season: bamboo and stone sprouts denote spring's revival; lotus and crape myrtle embody summer's opulence; red maples and pines capture autumn's crispness and tenacity; wintersweet highlights winter's austerity. The garden's synergy between plant life and rock-work encapsulates the narrative of seasonal metamorphosis and the passage of time, offering a rich tapestry for academic exploration in the fields of landscape architecture and art design.

In the landscape architecture discourse, gardens, despite their individuality, collectively elucidate the intricate human-nature dyad, a paradigm influenced by unique cultural and temporal matrices. The abstractions of philosophy concretize within the tangible realm of design. Vistas expansive incite intellectual and aesthetic stimulation; sylvan settings instill an ambiance of enigma and reverence; and vegetation exists in a symbiotic equilibrium, exemplifying harmonious cohabitation within communal ecological niches.

4. The Impact of Culture on Planting Design

4.1. The Garden of Eden in Mythology

European gardens, akin to the mythological Garden of Eden, embody an idealized nature, representing a pristine, harmonious realm serving as a sanctuary and spiritual emblem, devoid of human strife and

deceit. This conception of nature as a human ideal rather than its intrinsic state is evident in garden design, which, as artificial constructs, are meticulously crafted to reflect an Edenic ideal.

The concept of ideal nature evolves over time, yet European gardens maintain commonalities in their narrative of human-nature relations, characterized by serene settings, minimal structural intervention, and an intentional absence of productive functions.

The Garden of Eden symbolizes a harmonious existence without conflict over power or resources, a place of perpetual tranquility and timelessness. European gardens seek to replicate this by isolating themselves from external noise, emphasizing the stillness or rhythmic movement of elements such as water wheels, which symbolize continuity and peace, contrasting with the noise-inducing Shishi-odoshi of Japanese gardens, which represent imbalance.

The Tree of Knowledge's apple in Eden signifies human impurity, leading European gardens to obscure buildings, favoring landscapes dominated by natural elements like seas, mountains, and rivers, with minimal urban intrusions. When present, structures in gardens, such as Marie Antoinette's villa at Versailles, are idealized to harmonize with nature, offering a pastoral ideal.

Gardens, as distinct from orchards and fields, are realms of botanical beauty and refinement, with no utilitarian purpose beyond aesthetics. The popularity of vegetables and aromatic plants in gardens is increasing, with the Marqueyssac gardens exemplifying this trend. Situated atop a ship-shaped rock, they are covered in cloud-like boxwood, creating the illusion of a floating castle. The ideal garden, akin to the original Garden of Eden, exists solely for the pursuit of art, music, and poetry, devoid of any productive or supply-related functions for the castle.

4.2. Historical Origins of Roman Garden

In the 15th century BCE, Mesopotamian gardens along the Euphrates River showcased elements that were seminal to the later development of Roman garden aesthetics. Roman gardens, however, were not mere extensions of Mesopotamian designs; they were also influenced by the garden traditions of Persia, Egypt, and Greece. Notable influences include Persian water features tailored to arid conditions, Egyptian spatial arrangements of atriums and inner courts informed by mythology and religious doctrine, and Greek contributions to architectural and sculptural

al embellishments. With the advent of the Roman Empire in 27 BCE and Rome's ascendancy as a Mediterranean superpower following the subjugation of the Italian Peninsula, the Roman aristocracy employed villa gardens as emblems of political might and opulence. They adopted Eastern garden paradigms, incorporating exotic botanical species, fauna, and artistic pieces from the Orient [11]. It was during this epoch that Roman gardens reached their acme.

The grandeur of ancient Roman gardens diminished following the division of the Roman Empire and the incursions of external tribes, particularly after the Western Empire's downfall in 476 AD, which left many imperial gardens in desolation. Despite this, Roman literati meticulously documented horticultural activities, offering detailed glimpses into the aristocratic and regal lifestyles of the epoch. The early expansion of the Roman Empire led to the dissemination of Roman garden design beyond Italy, across various European territories. Together with the conserved architectural and garden remains at Pompeii, these gardens provide invaluable evidence for scholarly examination of Roman garden legacy in later periods.

During the Roman Republic, the patrician class sought to retreat from the political nucleus's tumult, favoring the construction of suburban villas as sanctuaries of natural elegance and wellness. The "hortus," thus, emerged as a symbol of bucolic idylls and a refuge from civic discord, celebrated by the philosopher T. Lucretius Caro as the "tranquil abode of the gods" [12]. By the late 2nd century BCE, the "hortus" had evolved to prioritize the natural landscape over architectural elements, with a heightened emphasis on botanical curation and arrangement. Hadrian's Villa stands as a paradigmatic illustration of this shift towards a garden ethos that valorizes the natural environment.

Scholars of the Roman epoch meticulously recorded the period's prestigious gardens and horticultural activities, offering invaluable data for the study of Roman garden evolution. Pliny the Elder, in his "Naturalis Historia," first delineated Roman gardens, portraying them as initially productive, intrinsically linked to the agrarian class [13]. His "Historia Naturalis" further illuminated the gardens of Tarquinius, the final Etruscan king, whose horticultural zeal manifested even in the landscaping of funerary sites, complete with arboreal and floral arrangements tended by specialized gardeners. These gardens were emblematic of elevated social status and class

demarcations. The opulence of Republican-era Roman gardens is now discernible solely through epigraphic and literary sources, as the physical gardens have succumbed to the ravages of time.

Marcus Vitruvius Pollio, an eminent architect of Rome, elaborated on the aristocratic gardens and their architectural components, emphasizing the grandeur of terraces, avenues flanked by trees, and decorative flower beds [14]. General Lucius Licinius Lucullus, a figure of note for his garden embellishments during the Republic, built his villa atop a terraced slope, with monumental steps leading to a summit circular structure, believed to be a temple dedicated to Fortunaz [15]. These estates, replete with exotic flora and monumental themes, indicate a paradigmatic shift from the utilitarian aspects of gardens to their symbolic representation of affluence and social standing among the era's proprietors.

4.3. Chinese Garden in the Myth of Penglai

The philosophical underpinnings of Chinese garden design are steeped in ancient mythos, shaping the conception of an idealized dwelling. These imperial gardens, envisioned as terrestrial paradises, sought to integrate the celestial, terrestrial, human, and divine realms harmoniously. The Daoist reverence for nature and the ideal of immortality have profoundly sculpted the naturalistic aesthetic of Chinese gardens, which endeavor to embody the "Dao" and create landscapes that, while crafted by humans, appear as if they have been shaped by nature itself.

The iconic "one pond, three mountains" paradigm, prevalent in Chinese imperial garden design, originates from Emperor Qin Shi Huang's interpretation of the "Eastern Penglai myth." [16] This layout, utilizing the Wei River as a pond and constructing the mythical mountains of Penglai, Fangzhang, and Yingzhou, enhanced the visual complexity of water bodies and the overall landscape, setting a precedent for palatial gardens that followed, such as Emperor Wu of Han's Taiye Pool, the Luoyang Xiyuan from the Sui and Tang dynasties, the Genyue of the Northern Song, and the Kunming Lake of the Summer Palace during the Ming and Qing dynasties (Figure 4). This design principle is also reflected in civilian landscapes like Hangzhou's West Lake and Suzhou's Lingering Garden.

Additionally, the symbolism of mythical flora, like the immortality-imbued bead trees from "Liezi Tangwen," extends to garden plant selections. Plants



Figure 4 | Kunming Lake of the Summer Palace

such as pines, signifying longevity, and plum blossoms, representing purity, are chosen for their symbolic connotations, enriching the garden's cultural narrative and reflecting the pursuit of an ideal life. These botanical choices infuse the gardens with a deeper layer of mystery and cultural resonance, articulating the yearning for a life of perfection.

5. Conclusion

The narrative essence of planting design is pivotal to a garden's appeal, providing a contemplative space that communicates narratives and ethical principles silently through sensory engagement, thereby significantly influencing behavior, perspectives, and environmental cognition. Planting design employs four principal methods for storytelling and concept communication.

Firstly, floral semantics, where the symbolic meanings of plants, from well-known to subtle and often overlooked, convey specific messages, mirroring the expression of values through paintings and sculptures within architectural contexts.

Secondly, kinetic narration generates emotional progressions through dynamic interactions between the observer and planting spaces, directly stimulating the senses in a comprehensive manner. Unlike built environments, garden sequences offer a unique transition from the ordinary to a culturally-enriched natural setting.

Thirdly, philosophical design materializes abstract concepts, a prevalent approach in architecture, particularly in public and memorial landscapes. The need

to manifest authority, religious beliefs, or noble virtues guides architectural aesthetics and spatial planning.

European garden cultures, with their shared references to the Garden of Eden, reflect Western societal and cultural values through myths and narratives. And the gardens of Asian countries have all been influenced by Chinese Daoist thought. Effective garden design requires an intimate understanding of public values, encompassing family histories, local customs, national culture, and the complex multicultural fabric of global trends[17]. These values encompass a range of expressive themes and design vocabularies. By integrating these approaches, designers can create meaningful designs imbued with multilayered significance that connect with a wide array of audiences. In the future, the interpretation of landscape spaces will increasingly rely on intelligent technologies, such as using three-dimensional point cloud systems to conduct spatial scans of classical gardens. These methods will enable the quantitative interpretation of cultural expressions embedded within these gardens.

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