

生态还是自然主义： 关于当代种植设计的简要回顾 和一些思考

ECOLOGICAL OR NATURALISTIC: A BRIEF REVIEW AND SEVERAL THOUGHTS ON CONTEMPORARY PLANTING DESIGN

1 引言

早在20世纪30年代，美国中西部沙尘暴肆虐——“黑色风暴”是由过度的农业开垦和城市化引起的一系列严重干旱事件^[1]——环境问题随之进入公众视野。1935年，在野生动物和狩猎管理专家奥尔多·利奥波德的推动下，旨在保护自然系统和生物群落的美国荒野协会得以成立^[1]。利奥波德在他的《沙乡年鉴》^[2]中介绍了“土地伦理”（land ethics）的概念，并扩展了“群落”（community）的定义：群落不仅包



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摘要

自然是文化产物，同时也是人类文化景观的一种富有象征意义的形式。自然对于景观设计而言至关重要，其不仅对人造环境中的景观设计实践产生了深远影响，也影响了教育学中“景观”的概念。本文基于种植设计及生态设计方法的视角，对美国当代景观设计实践进行了评述。文章回顾了在过去20年间，景观设计领域中部分种植设计师及他们的实践，这些实践者及其作品展示了景观设计专业实践中种植设计和生态观念的变化，以及——最重要的是——这些变化如何影响了当前的生态设计方法、景观美学和公众的景观认知。此外，本文旨在说明随着时间的推移及在不同文化背景下“自然”观念的转变，以及不同的“自然”观念衍生出了多种解决环境问题的方法。通过这种简要回溯，本文希望为审视当代美国景观设计实践与当前的生态议题提供一个批判性角度，以激发有关专业实践未来发展的讨论。

关键词

景观设计；种植设计；生态设计；自然主义设计；景观设计专业实践

ABSTRACT

Nature is a cultural construct, and a symbolic form to our cultural landscape. It plays a critical role in the profession of Landscape Architecture, shaping both the practice in the constructed environment as well as the conception of landscape in Pedagogy. This article evaluates contemporary landscape architecture practice in the U.S. through the lens of planting design and ecological design approaches. This retrospect situates selected individuals and their practices in the field of landscape architecture in the past two decades, in parallel with the evolving ecological understanding. These individuals and their works demonstrate the changes in planting design and ecological thinking in the professional practice, and most importantly how these changes contribute to current ecological design methodologies, landscape aesthetics, and public perception of landscape. In addition, the article aims to illustrate a shifting conception of *Nature* over time and in different cultural context, in which different conceptions of *Nature* facilitate various approaches to addressing environmental issues. By situating in such context, the article hopes to provide a critical view of contemporary American landscape architecture practice and the current ecological agenda, in order to enable discussions regarding the professional practice in the future.

KEYWORDS

Landscape Architecture; Planting Design; Ecological Design; Naturalistic Design; Landscape Architecture Professional Practice

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括人类，还包括所有生物及他们居住的环境。土地伦理概念中蕴含着诸多环境价值观，在这些价值观的影响下，环境保育活动纷纷开展。后来，随着雷切尔·卡森《寂静的春天》^[1]—书的出版，环境运动得以蓬勃发展。1966年，包括伊恩·麦克哈格在内的少数景观设计师在费城独立宫发表了《关注宣言》，表达了他们对新出现的环境危机的关注，并呼吁景观设计师采取行动。1969年，麦克哈格出版了《设计结合自然》^[4]，这对日后景观设计学学科教育的成型产生了重大影响——在此之后，生态学成为景观设计学教学的重要组成部分。2016年，景观设计基金会峰会在费城的宾夕法尼亚大学召开，此次大会聚集了来自世界各地的具有影响力的景观设计师，发表了《新景观宣言》，并呼吁设计师针对21世纪的环境问题采取行动。2019年，为了庆祝《设计结合自然》一书出版50周年，宾夕法尼亚大学举办了名为“设计结合自然，就在当下”的会议和相关展览，以彰显麦克哈格对全球当代景观设计实践的长远影响。

美国在近些年的景观设计发展中扮演了重要角色，因其对生态学对于景观设计学科的重要意义进行了理论梳理，并加以强调。如今，面对不断加剧的气候变化和愈加频发的环境灾难，生态韧性已成为全球当代景观设计实践的关键驱动因素。实际上，与20世纪相比，当代实践面临着更多的挑战和批判。在消费主义文化、复杂的社会政治环境，以及日益加剧的社会不平等中，景观设计师越来越难以在塑造建成环境中准确地表达自己的身份特征和专业关注。首先，在景观设计领域中似乎存在语义复杂化的趋势。随着专业领域的拓展，文字的语义也有了新的外延。诸如“生态”和“自然”之类的语汇出现了令人费解的滥用，且常被用于品牌和营销目的。那么，景观是商品吗？景

1 Introduction

The environmental issue was perhaps first made publicly aware in America in the 1930s during the “Dust Bowl” in the Midwest, a series of severe drought events caused by over-farming and urbanization^[1]. In 1935, Aldo Leopold, an expert in wildlife and game management, helped establish the Wilderness Society to protect and preserve natural systems and biotic communities^[1]. In his book, *A Sandy County Almanac*^[2], Leopold introduced the concept of land ethics, which expanded the definition of community to include not only humans, but all living organisms, as well as the environment where they live. This conceptualization of land ethics suggested a set of environmental values which became instrumental in future conservation initiatives. Later, the rise of the environmental movement, precipitated with the publication of Rachel Carson’s *Silent Spring*^[3]. In 1966, a small group of landscape architects including Ian McHarg issued the Declaration of Concern at Independence Hall in Philadelphia, voicing their concern for the emerging environmental crisis, and calling for landscape architects’ action. In 1969, McHarg published *Design with Nature*^[4], which was essential in shaping the pedagogy of Landscape Architecture, making Ecology a key component in Landscape Architecture education. Fast forward to 2016, Landscape Architecture Foundation organized a summit to gather world’s leading landscape architects at University of Pennsylvania in Philadelphia, to manifest a new Landscape Architecture Declaration and call to action in the twenty-first century. Later in 2019, to celebrate the 50th anniversary of the publication of *Design with Nature*, the “Design with Nature Now” conference and associated exhibitions were held at University of Pennsylvania to showcase McHarg’s enduring influence on contemporary landscape architecture practice across the globe.

America has played an important role in the recent history of Landscape Architecture, theorizing and emphasizing the importance of Ecology in the discourse. Today, under the pressure of accelerated climate change and environmental disasters, ecological resilience has become a key driver for contemporary landscape architecture practice worldwide. Indeed, contemporary practice faces more challenges and criticism than it had in the 20th century. In a culture of consumption, a complicated socio-political environment, and the aggravating social inequity, it has become increasingly difficult for landscape architects to represent their identity and agenda precisely in shaping the built environment. Foremost, there seems to be a semantic complication in the field of Landscape Architecture. As the profession expands in scope, words also expand their meanings. Terms like “ecology”

观设计在营造未来世界中是否发挥核心作用？景观设计项目是否引起了中产化？

2 美国近期的生态设计

本文旨在基于种植设计的视角来审视当代景观设计实践。种植设计不仅是景观设计学习和实践的基本组成部分，同时也在很大程度上影响着建成环境的营造及公众对景观的感知。本文重点介绍自20世纪90年代后期以来，几位在当代种植设计领域具有影响力的代表性职业设计师的建成项目和著作。限于篇幅，许多相关的生态学家和理论学家并未包含在本文中（图1）。

2.1 公共景观认知中的审美变化

近年来，荷兰花园设计师皮特·欧多夫在公共花园种植设计领域的卓越贡献使其成为了美国最负盛名的种植设计师之一。例如，在芝加哥卢瑞花园（于2004年向公众开放）和纽约高线公园（第一阶段于2009年向公众开放）的种植设计中，他运用了“北美草原”种植风格，使用了很多曾经被视为杂草的北美本土禾本和多年生草本植物——在过去，加拿大一枝黄花（*Solidago canadensis*）、柳叶马利筋（*Asclepias tuberosa*）和白车轴草（*Trifolium repens*）都被视作花园中的入侵性杂草，而现在它们已常常被用于不同的乡土种植之中。欧多夫已出版多本书籍，向景观专业人士和园艺爱好者倡导运用乡土植物进行种植设计——《葑草造园》^[5]、《自然主义花园的梦幻植物》^[6]、《种植设计新理念》^[7]和《植造自然主义花园》^[8]等书无不体现了他遵循植物自然生命周期塑造花园的理念。例如，欧多夫反对通过摘除枯花来刺激植物继续开花的传统园艺方法。不摘除枯花的做法不仅可以促进植物种子的孕育，亦可展现植物的自然结构及其完整的生命周期。欧多夫曾表示冬天是观赏他的北美草原风格花园的最佳季节。在许多美国城市中，冬季的公共景观无外乎常绿乔木或灌木，外加一些装饰性的枝杈和一品红（*Euphorbia pulcherrima*）摆花。在卢瑞花园中，欧多

and “nature” can be abused and used in a confusing fashion, and often for branding and marketing purposes. Is landscape a commodity? Does landscape architecture play the central role in shaping the future world? Are landscape architectural projects causing gentrification?

2 Recent Ecological Design in America

The article intends to look at the contemporary landscape architecture practice specifically through the lens of planting design. Planting design is not only a fundamental part of Landscape Architecture training and practice, but also a critical component in constructing the built environment and the public perception of landscape. The article focuses on built works and publications from professional practitioners since the late 1990s. The group of selected individuals represents designers with built works and are influential in the contemporary planting design practice, and thus many relevant ecologists and theorists are not included in this particular group (Fig. 1).

2.1 An Aesthetical Change in Public Perception of Landscape

In recent years, through his contribution in public gardens, the Dutch garden designer Piet Oudolf has become one of the most celebrated figures in America. His planting design, such as the Lurie Garden in Chicago (opened to the public in 2004) and the Highline in New York City (Phase I opened to the public in 2009), promotes the “Prairie Style” which uses North American native grasses and perennials, and many of the species in his design have been previously considered as weeds—For instance, *Solidago canadensis*, *Asclepias tuberosa*, and *Trifolium repens*, which used to be considered enemies for gardens but today are used in native planting for different purposes. Oudolf has published multiple books advocating



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1. 在当今景观设计师中较受欢迎的部分种植设计著作。
2. 芝加哥的卢瑞花园。秋季的“浅色”种植区：多年生和草类植物展现着它们的色彩、纹理和植物结构。松果菊属植物（*Echinacea* spp.）的籽头显得格外突出（摄于2015年10月）。

1. A few of planting design publications that are popular among contemporary landscape architecture practitioners.
2. Lurie Garden in Chicago. The “Light Plate” planting beds in fall: perennials and grasses showcase their colors, texture, and plant structure. The seed heads of *Echinacea* become highlighted decorations in grasses (taken in October, 2015).



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① 詹姆斯·凡·斯韦登曾表示：“新美国花园风格的‘新’对美国本身而言也是新的；这种充满活力、大胆创新的方式灵活地调和了自然（植物）和培育（植物）。”（参见参考文献[10]）

② 该书于1981年以德文出版，后于1993年发行了英文版。

① James van Sweden once stated that “what is new about our New American Garden is what is new about America itself: It is vigorous and audacious, and it vividly blends the natural and the cultivated.” [Source: Ref. [10]]

② The book was first published in German in 1981, and translated in English in 1993.

夫展现了枯草与种穗之美，营造了一种别样的公共花园冬季景象（图2）。在欧多夫之前，詹姆斯·凡·斯韦登和沃尔夫冈·奥姆也在他们的种植设计中大量运用了乡土植物。他们的作品被称为“新美国花园风格”，以运用大片由草类和多年生植物组成的图案为设计特色。受到北美草原景观的启发，他们的种植设计突显了乡土植物的季节性，以及生态和观赏价值^[9]。新美国花园风格“调和了自然（植物）与培育（植物）。”^{①[10]}

北美乡土草类植物在公共景观中的日益普及也推动了公众的审美转变：从欣赏修剪整齐的草坪与观赏性花径，转向了欣赏那些被城市化吞没的、充满自然野趣的荒野景观。得益于生态学和植物学的发展，特别是对于植物群落和生态种植设计理解的深入，那些旨在再现或恢复当代自然主义景观的设计目标得以实现。

2.2 基于植物群落的种植设计：传统园艺的演变

自20世纪50年代初期以来，德国景观设计师和花园设计师一直在花园和公共景观中就植物群落设计进行研究和试验。在这些学者中，理查德·汉森和弗里德里希·斯塔尔因他们备受赞誉的《多年生植物及其花园生境》^[11]一书而受到美国同行的推崇。书中详细介绍了在其首次出版时^②园艺市场上可获得的各种多年生观赏植物的生态习性，并按照种植特性及与相邻植物的竞争能力对每种植物进行了分类。在这本书中，汉森和斯塔尔还鼓励花园设计师和景观设计师深入野外去观察植物及其群落，以了解每种植物的生态位与每种植物应对环境变化的

the use of native plants to professionals and home gardeners. Among them, *Gardening with Grasses*^[5], *Dream Plants for the Natural Garden*^[6], *Planting: A New Perspective*^[7], and *Planting the Natural Garden*^[8], all expressed his appreciation for a plant’s life cycle. For example, he recommends against deadheading plants, a traditional horticultural practice which removes dead flower blooms from the plant in order to encourage further blooming. By not deadheading, it encourages seed generation and celebrates the structure and overall life cycle of plants. Oudolf has stated that winter is the best season to view his prairie style gardens. In many American cities, the winter public landscape typically suggests evergreen trees or shrubs with decorative branches and poinsettias (*Euphorbia pulcherrima*). Oudolf’s Lurie Garden puts dried grasses and flower seed heads into display, creating an alternative image of public garden in winter scene (Fig. 2). Prior to Oudolf, James van Sweden and Wolfgang Oehme also promote native plants in their design. Referred as the “New American Garden Style,” their works are often characterized by large drifts of grasses and perennials. Inspired by the prairie landscape, their planting design promotes seasonality, and ecological and ornamental values of native plants^[9]. The New American Garden Style “blends the natural and the cultivated”^{①[10]}.

The growing popularity of prairie grasses in public landscape promotes new aesthetics, moving away from perfectly manicured lawn and plots of ornamental flowering plants towards an image of untamed wild landscape that has been lost due to urbanization. The intention to recreate or restore a contemporary naturalistic landscape is enabled through the development of the science of ecology and botany, particularly through the understanding of plant communities and ecological planting design.

2.2 Community-Based Planting Design: An Evolution to Conventional Horticulture

Since the early 1950s, German landscape architects and garden designers have been studying and experimenting with plant community design in gardens and public landscape. Among the German pioneers, Richard Hansen and Friedrich Stahl were well-known in America, through their highly-praised publication *Perennials and Their Garden Habitats*^[11]. This book details the ecological needs of individual ornamental perennials that were available in the horticulture trade when the book was first published^②. Each plant is categorized by the conditions required for its success as well as its competitiveness with neighboring plants. In the book, Hansen and Stahl also invited garden designers and landscape architects to go out in the field

情况。最近，汉森的学生克劳迪娅·韦斯特通过她的实践进一步促进了多年生植物生境的研究。

韦斯特拥有德国景观设计教育背景，曾跟随汉森研习过植物生境和植物群落。她目前在美国从事景观设计和苗圃培育工作。韦斯特通过她的研究和实践提出了一种非传统景观种植方法。2015年，韦斯特与他人合著了《在后荒野世界中种植：利用植物群落设计塑造韧性景观》一书，并提出传统的景观种植设计需加强对于生态功能的理解^[12]。书中展示了在兼顾美学和生态功能的同时，弥合传统园艺与当代生态设计之间鸿沟的新方法，同时批判了传统的种植设计施工图——这些图纸只能通过二维的方式反映种植设计的排布，忽略了植物在结构和形态上可能存在的重叠。韦斯特建议设计师从三维空间和垂直空间分层上识别植物的结构和生长空间。例如，她格外强调地被植物（之于植物群落）的重要性，因为这些植物可以在周围高大植物遮蔽的弱光条件下生存。地被植物还可防止水土流失，抑止杂草的入侵，为整个植物群落创造健康的基底条件，也可以替代传统园艺中使用碎木覆盖物的做法（图3）。

对生态学和植物群落相关概念的理解和运用是当代景观设计实践中非常重要的一环。公共领域中的种植设计涵盖了从低影响开发中人行道旁的生态滤沟、大型的景观（生态）修复，到流域尺度的绿色基础设施。越来越多的公共花园和公园开始运用生态修复理念。这些项目，特别是在城市环境中的项目，让城市居民有机会感知一种城市荒野的意象，并推广了“亲自然城市”的理念。此外，这些项目还展示了种植设计和景观管理的新途径（图4，5）。



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3. 费城香克利尔花园中的一处地被种植：车轴草（*Galium odoratum*）和苔草（*Carex pensylvanica*）组合在多年生植物铁筷子属植物（*Helleborus* spp.）和玉簪属植物（*Hosta* spp.）下形成了厚厚的一层地被，有效防止了杂草入侵。
- 4, 5. 费城华盛顿大街码头绿地公园。沿特拉华河步道的废弃码头经过设计和修复已转变为滨河公园，公园中所营造的乡土植物群落为野生生物提供了栖息地，并为人们提供了与河流互动的多种方式（摄于2019年8月）。

to observe plants and their community, in order to understand each plant's ecological niches and how each responds to environmental changes. More recently, Hansen's studies of perennials habitats have been further developed through the work by his student Claudia West.

West was trained as a landscape architect in Germany, and studied plant habitats and plant communities with Hansen. She is currently practicing in America, in both landscape architecture and nursery profession. West proposes an alternative approach to traditional planting methods through her research and practice. In 2015, West co-authored the book *Planting in a Post-Wild World: Designing Plant Communities for Resilient Landscapes*, suggesting that traditional landscape planting design can benefit from the understanding of ecological functions^[12].

3. One area of typical ground cover planting at Chanticleer Garden in Philadelphia, where *Galium odoratum* and *Carex pensylvanica* form a thick carpet underneath perennials such as *Helleborus* and *Hosta* to prevent invasive weeds in the planting.
- 4, 5. Washington Ave Pier in Philadelphia. An abandoned pier along the Delaware River trail has been designed and restored as a riverfront park, celebrating native plant communities, providing habitats for wildlife, and offering different ways to engage people with the river (taken in August 2019).



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5 © Tara Zheming Cai



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6. 仍处于生长初期的格兰斯通博物馆缓坡草甸。约16hm²的草甸串联起了整个博物馆景观，在种植设计中选择了一些能够对生态系统起到滋养作用的植物品种（摄于2018年10月，当时新博物馆刚刚对公众开放不久）。
7. 格兰斯通博物馆的野花草甸，草甸继续生长并为博物馆建筑提供了极具质感的前景（摄于2020年6月）。
6. Meadow hills at Glenstone Museum. The meadow is still in the establishing period. There is nearly forty acres of designed meadow that spreads throughout the museum ground, with species that are chosen to nurture the ecosystem through natural processes (taken in October 2018, the first year when the new museum opened to the public).
7. Wildflower meadow at Glenstone Museum. Meadow continues to establish, and creates a textual foreground in front of the museum buildings (taken in June 2020).



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The book manifests new ways to bridge the gap between traditional horticulture and contemporary ecological design while considering both aesthetic and ecological functions. The book also criticizes traditional planting design documentation which is laid out and documented in plan-view, ignoring the spatial structure and morphology of plants where their occupations may overlap in space. West advises designers to recognize plants' structural and spatial occupation three dimensionally and in layers. For instance, West emphasized the importance of the ground cover species that can survive under low light conditions beneath the surrounding taller plants. The ground cover layer prevents erosion and the establishment of invasive plants, creating healthy conditions for the overall planting community. Ground cover also provides an alternative to conventional mulch application (Fig. 3).

The understanding of Ecology and plant community becomes instrumental in the contemporary landscape architecture practice. Planting design in the public realm ranges from a bioswale along the sidewalk for low impact development, a large scale landscape restoration, to green infrastructure at a watershed scale. More and more public gardens and parks involve ecological restoration perspectives. These projects, especially the ones in the urban environment, have embraced the residence with an image of urban wilderness, and promotes the concept of a biophilic city. These projects have also demonstrated new ways of planting design and management (Fig. 4, 5).

2.3 将管理和维护作为设计

拉里·韦纳景观设计事务所的创始人拉里·韦纳因其在草甸设计、修复及长期管理方面的专长而为人称道。自1990年以来，韦纳长期致力于推进自然主义景观设计，他主持了名为“美国景观的新方向”的会议，并在相关研习班中担任导师^[13]。2016年，他与汤姆·克里斯托弗合著了《花园革命：我们的景观如何成为环境变化的源头》一书^[14]，该书的核心内容展示了如何结合生态进程进行种植设计。韦纳与景观设计师合作完成了众多项目，其中包括马里兰州的格兰斯顿博物馆草甸种植设计（图6，7）和康涅狄格州格雷斯农场种植设计（图8，9）。有别于美国传统园艺中那些经年维护的种植设计中形状图案保持不变的做法，韦纳采用的生态设计手法强调植物的生命周期及其生境特性，即植物会为了生存与繁衍而发生位移。换句话说，韦纳的种植设计方法不是把鲜活的植物排布成静态的图案，而是通过设计创造动态的植物群落，在景观管理的干预下，这些群落可以随着时间的推移而不断衍变（图10~12）。例如，韦纳经常建议在早春修剪草甸，以消除大多数入侵性草类（大多是冷季型草类），从而促进原生草类（主要是暖季型草类）的生长。通过景观管理这一生态种植设计中至关重要的手段，设计师能够更多地参与到实地工作中。

种植设计对于向公众展现景观设计至关重要。与建筑、构筑物 and 硬质铺装相比，植物可以鲜活生动地表现人造环境中的时间和变化。通过色彩、纹理、气味、声音、季节性和象征意义，种植设计与人们产生了亲密的情感互动。植物生长还可以直观地展现自然过程，能够向公众普及植物群落所具有的诸如减少地表径流、增加生物多样性等生态绩效。从近些年来的种植设计实践中可以明显看出，景观设计工作——尤其是在公共领域——已从传统的“看上去很自然”的设计转向以自然过程为核心的设计。在新近的公共景观项目中，大面积的草坪、由一年生植物构成的装饰性花径，以及需要频繁维护的绿篱已经真正实现了自然化。在生态理念的指导下，当代景观设计使植物在适应不同环境条件的过程中能够产生更好的生态绩效。因此，种植设计不仅是景观设计中重要的技术性解决手段，而且在塑造公众对景观设计的认知方面也发挥着重要作用。

随着人们对生态和生态系统理解的不深入，一些前沿理念已经通过实验项目的方式得到检验。然而，在关于生态种植设计实践的最新章节中，“园艺”（horticulture）、“花园”（garden）和“自然”（nature）仍然是在描述当代种植设计作品时最常使用的语汇。在气候危机的背景下，讨论这些过时的术语对景观设计师而言并没有太多的指导意义。但是，通过对“花园”和“园艺”的讨论，种植设计实践可以激发更广泛的公众关注。本文讨论的所有生态种植设计著作并不仅仅为景观设计专业人士撰写，业余园艺爱好者和植物爱好者都可以从这些出版物中受益。因此，这些出版物通过向更广大的受众介绍生态学原理，使人们可以在各自的花园中进行生态设计实践，从而推动支持和理解当代景观设计的集体文化。



2.3 Management and Maintenance as Design

Larry Weaner, founder of Larry Weaner Landscape Associates, is well-known for his expertise in meadow design, restoration, and long-term management. Since 1990, Weaner has hosted and directed the conference and workshop “New Directions in the American Landscape,” dedicated to advancing natural landscape design^[13]. In 2016 he authored the book *Garden Revolution: How Our Landscape Can Be a Source of Environmental Change* with Tom Christopher^[14]. The key design approach demonstrated in his book is to work in partnership with the ecological processes. Weaner has collaborated with landscape architects on countless projects such as the Glenstone Museum Meadow (Fig. 6, 7) in Maryland and Grace Farms (Fig. 8, 9) in Connecticut. Different from the traditional horticultural practice in America, where one maintains the planting drift in its designed shape from year to year, Weaner’s ecological approach accounts for the plant’s life cycle and its ecological habitat—plants will move in order to survive and proliferate. In other words, Weaner’s approach to planting design is not to create a static pattern made of live materials; instead,

8, 9. 格雷斯农场的草甸。格雷斯农场是一个占地约32hm²的公共空间，由SANAA设计事务所、OLIN设计事务所和拉里·韦纳合作设计完成。景观设计重新引入了乡土物种，提高了生物多样性（摄于2018年8月）。

8, 9. Meadow at Grace Farms. Grace Farms is an 80-acre public space in New Canaan, Connecticut designed by SANAA, OLIN, and in collaboration with Larry Weaner. The landscape design reintroduces indigenous species and encourages ecological diversity (taken in August 2018).

10. 五月时的长木花园草甸。占地约35hm²的草甸花园由乔纳森·奥尔森设计，他还提供了草甸的管理/维护手册。割草是早春时一种（草甸维护）常见处理手法，这个时节是大多数入侵性杂草（冷季型草类）的生长季节，而大多数原生草类尚未（或刚刚）开始发芽（摄于2015年5月）。

11. 7月初的长木花园的草甸。夏季，草甸变成了由多年生植物和草类组成的“织毯”。马利筋属乳草（*Asclepias syriaca*）、泽兰属植物（*Eutrochium fistulosum*）、北美小须芒草（*Schizachyrium scoparium*）和须芒草（*Andropogon virginicus*）成为了这个群落中最耀眼的明星（摄于2015年7月）。

12. 冬季的长木花园草甸。一些枯萎的植物可达2m多高（摄于2017年2月）。

10. Meadow at Longwood Garden in May. The 86-acre Meadow Garden was designed by Johnathan Alderson, who also developed a management / maintenance manual for the garden. Mowing is a common management technique in early spring, which is the growing season for most invasive weeds (cool season grasses), while most of the native grasses have not (or just barely) start sprouting yet (taken in May 2015).

11. Meadow at Longwood Garden in early July. The meadow becomes a tapestry of perennials and grasses in summer. *Asclepias syriaca*, *Eutrochium fistulosum*, *Schizachyrium scoparium*, and *Andropogon virginicus* become the highlights of the community (taken in July 2015).

12. Meadow at Longwood Garden in winter. Some dried plants are over 8 feet tall (taken in February 2017).



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his planting design is creating dynamic plant communities that evolve overtime through management (Fig. 10 ~ 12). For instance, Weaner often recommends mowing meadow in early Spring to eliminate most invasive grasses, which are mostly cool season grasses, in order to promote the growth of native grasses, which are mostly warm season grasses. Landscape management becomes a critical tool in ecological planting design, engaging designers more with actual field works.

Planting design is essential in representing landscape architecture in public. Compared to architecture, structure, and paving, plants can vividly illustrate time and changes in the constructed environment. Through color, texture, aroma, sound, seasonality, and symbolic meanings, planting design interacts with people intimately and emotionally. Living plants also enable the legibility of natural processes and provide educational opportunities to demonstrate ecological performance such as reducing stormwater runoff and increasing biodiversity. Through the retrospect of recent practices in planting design, it is obvious that the work of landscape architecture has moved away from the traditional “natural-looking” design to natural processes driven design, particularly in the public realm. Large areas of lawn, borders of ornamental annuals, and highly-maintained hedges have been truly naturalized in recent public landscape projects. Contemporary landscape is designed with ecological understanding allowing plants to adapt to environmental conditions with more successful ecological performance. Planting design therefore has played a critical role as both a technical solution, as well as helping shape the public perception of landscape architecture.

The understanding of ecology and ecosystem continues to grow, and some advanced theories have been tested in experimental projects. However, in recent writings on ecological planting design for professional practice, “horticulture,” “garden,” and “nature” still are some of the most used words to describe contemporary works. In the context of climate crisis, it seems counterproductive that landscape architects are still referring to such old terms. However, the practice of planting design through “garden” and “horticulture” engages the public at different levels. All of the ecological planting design publications that have been discussed in this article are not merely written for Landscape Architecture professionals, as they are accessible to amateur home gardeners and people who are interested in plants. Therefore, these publications also introduce ecological principles to a larger audience who may practice ecological design individually through home garden projects, and contribute to a collective culture that understands and supports contemporary landscape design.

3 自然的意识形态

对自然的观念转变在专业实践和一般认知中都是显而易见的。比如，英国斯温顿的斯托园和由乔治·德孔布设计的瑞士日内瓦艾尔河河道花园都可以被视作自然主义景观。或许它们一个具有自然的外观表象，而另一个则具有自然的运作机制。当下，景观设计师应创建可持续的适应性系统以解决环境问题。可能有人会认为传统的“自然主义”设计概念已毫无价值。那么，在当代语境下，传统景观和规则式园林是否不存在生态价值？

让·马里·莫雷尔在他于1776年出版的《花园理论》^[15]一书中强调了自然过程在景观设计中的重要性，设计师必须“尊重并遵循”自然过程，以实现自然的再造和模拟。

凡尔赛宫园林是规则式园林中最具标志性的意象之一，但令人意外的是，其在生态绩效和生物多样性上也有出色表现。最初的凡尔赛宫公园是一个狩猎场，包括大林圃和小林圃——面积比今天联合国教科文组织认可的凡尔赛宫公园大10倍——其拥有一个由农田、人造林地、苗圃、果园、蓄水池、花园和运河等生产性景观组成的景观系统，公园因此为各类野生动物提供了丰富的栖息地。尽管凡尔赛宫公园以其精心修剪的树篱而闻名，但它也被设计和管理为一个富饶的景观系统^[16]。

许多当代项目都显现出对于自然的丰富想象。高线公园开始于乔尔·斯特恩费尔德所拍摄的废弃铁路的照片，而荒野的意象则成为该项目的驱动力。公园的种植设计并没有完全保留场地上原本存在的（约150种）植物品种；尽管如此，设计仍创建了一个充满生命力的植物王国（超过400种），能够激发人们与原有场地景观的相似情感联系^[17]（图13，14）。另一边，法国国家图书馆的森林花园设计同样也受到了诺曼底森林生态系统乡土动植物的启发——在实际的种植设计中也包括移植来自同一森林植物群落的成熟松树^[18]。在城市环境中的景观设计项目经常试图营建城市绿洲，以唤起人们对自然和荒野的意象或想象。然而，在让城市环境接纳这种荒野景观方面，景观设计师如今面临着更多的挑战：市政府官员通常担心罪犯和无家可归者藏身于高高的草丛后；当孩童们靠近多年生植物时，父母会担心他们感染蜱虫和莱姆病。此外，人工设计的城市荒野是否是自发性人类世生态系统的一部分？人工城市荒野能否真实地反映城市生态，还是只是映射在现实中的一场幻梦？

西方概念里的自然景观意味着人类未曾涉足的环境，即真正的荒野。美国西部和新英格兰森林的原始景观仅仅是19世纪初期以来经过欧美人重新概念化的产物。这些以前被认为是“质朴无华的自然”其实是美洲原住民为了追求橡子产量和野生动物狩猎量而设计和管理的人工景观^[19]。从历史上的角度来看，自然之于贵族阶层一直是幻想、娱乐和休闲的来源。但放眼于世界，在大多数的乡土文化中，自然既

3 The Ideology of Nature

The shifting conception of *Nature* is obvious in both professional practice and general perception. For instance, both the Gardens of Stowe in Swindon, UK and the recent River Aire Rivergarden in Geneva, Switzerland designed by Georges Descombes can be described as naturalistic landscapes. Perhaps one has a natural appearance and the other performs naturally. Today, landscape architects are urged to address environmental issues by creating sustainable and adaptive systems. One may suggest that there is nothing valuable from the traditional conception of “naturalistic” design. Do traditional and formal landscapes provide little ecological value and contemporary relevance?

In his 1776 publication *Théorie des Jardins*^[15], Jean-Marie Morel emphasized the importance of natural processes in landscape design, and that the designer must “consult” natural processes to create and emulate *Nature*.

Versailles Park, one of the most iconic images of formal landscape, surprisingly generates great ecological performance and biodiversity. The original Versailles Park, including both the Grand and Petit Parcs, was 10 times larger in size than the current Versailles Park defined by UNESCO. It was a composition of various productive landscape systems, including farmlands, man-made forests, nurseries, orchards, reservoirs, gardens, and canals. The park thus provided a diversity of habitats that sustain a great range of wildlife. Although the park is known for its meticulously pleached hedges, it was also designed and managed as a productive landscape system—it was first a hunting park^[16].

The imagination of *Nature* steers many contemporary projects. The High Line started with Joel Sternfeld’s photographs of the abandoned railroad, and the image of the wilderness became the driver for the project. While the park was not designed with the accidental plant species (around 150 species) found on the existing site, the design nonetheless captured a robust palette (more than 400 species) to evoke a similar emotion^[17] (Fig. 13, 14). Alternatively, Forest Garden at the National Library of France was inspired by the native flora and fauna of the forest ecosystem in Normandy. The actual planting design involves transplanting mature pine trees from the same forest community^[18]. Landscape architecture projects in urban context often attempt to create an urban oasis, evoking the image or imagination of *Nature* and wilderness. However, landscape architects are facing more challenges in the urban environment today in accepting such wilderness. City officials often are concerned about criminals and homeless people hiding behind tall grasses, while parents worry about ticks and Lyme disease when their children are near the perennial plantings.

13. 早秋时的高线公园，游客于高大的多年生植物间穿行，胡氏水甘草 (*Amsonia hubrichtii*) 即将变成金黄色 (摄于2018年9月)。

14. 晚春时的高线公园，新生植物成为纽约城市中的一道风景线，画面远处的胡氏水甘草正值花期 (摄于2015年5月)。

13. Highline in early fall, visitors meander through tall perennials, and the *Amsonia hubrichtii* is about to turn golden color (taken in September 2018).

14. Highline in late spring, new growth becomes a foreground for viewing New York City, and the *Amsonia hubrichtii* is blooming in the distance, New York City (taken in May 2015).



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没有被客体化成为与人（技术）对立的对象，也没有被视为有待攫取的资源。自然在乡土文化中一直被认为是人类为了生存必须积极参与并经营的过程。

直到19世纪末，西方的“nature”概念才首次被译为中文的“自然”一词——在此之前，中文语境中的“自然”并非指客体化的环境，而是指“自然而然”^[20]。将自然理解为一个过程，使得乡土文化可以创造出可持续且具有韧性的景观。人类活动及其建造的环境是自然过程的一部分，和白蚁筑巢改变地貌或海狸筑坝如出一辙。全球范围内许多传统农业实践都创造并维护了动态的系统和群落，以确保生产性和生物多样性。此外，这些人造的生态系统可以极具象征性，并拥有重要的文化内涵。

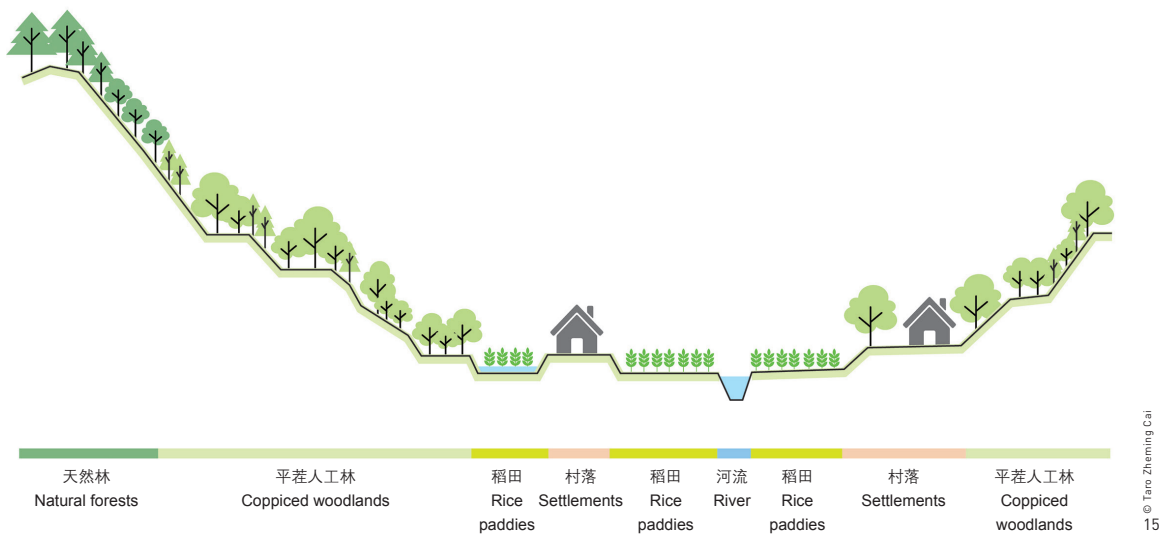
在亚洲，许多传统景观的诞生都基于将自然视为一个能够在各种系统之间建立和谐且可持续的平衡的过程。这类乡土景观的一个范例是日本的里山。里山是日本农村地区常见的人工生态系统。它通常由陡峭山脉上的平茬林、山脚下的村庄和河岸系统，以及位于森林和村庄之间的稻田组成（图15）。平茬林每3至10年轮作修剪/收获一次，并将收获的木材用于建筑材料和制炭。平茬的做法可以不断促使森林

Furthermore, are designed urban wilderness the same as the spontaneous novel ecosystem? Do they truly reflect the urban ecology, or simply a projected imagination?

The Western concept of the natural landscape suggests an environment that is untouched by human, a true wilderness. The pristine landscape of the American west and the New England forest are merely reconceptualization of Euro-Americans from the early 19th century. The previously considered “unadorned *Nature*” was designed and managed by Native American in order to maximize acorn and game animal production^[19]. Historically, *Nature* for aristocrats has been a source of imagination, amusement, and recreation. However, in most of the vernacular culture world-wide, it has not been objectified to contrast human (*techné*) nor seen as resource for extraction; *Nature* has always been considered a process in which humans must actively participate to survive.

“Zi-Ran” (自然) was adopted in China to translate the Western notion of “nature”—before that, “Zi-Ran” was originally meant “so of itself”, rather than the objectified environment^[20]. Understanding *Nature* as a process allows vernacular culture to create landscapes that are sustainable and resilient. Human activities and their constructed environment are parts of the natural process, similar to termites creating large landforms or beavers building dams. Many traditional agriculture practices across the globe create and maintain dynamic systems and communities to ensure production and biodiversity. Furthermore, these man-made ecological systems can become extremely symbolic and culturally significant.

In Asia, many traditional landscapes are created with the understanding of *Nature* as a process and able to create a harmonious and sustainable balance between various systems. One great example of such vernacular landscapes is the *Satoyama* in Japan, which is a common constructed ecosystem in rural Japan. It consists of coppiced forest on steep mountains, villages and riparian systems at the foot of the mountains, and rice paddies in between (Fig. 15). The coppiced woods are harvested in rotation every three to ten years and used for building materials and charcoal. The practice of coppicing continuously regenerates the forest, ensuring robust root systems to prevent erosion during monsoon seasons. Coppicing also reverses the succession process, opening up the canopy and forest floor, allowing different stages of ecological processes to occur regularly and produce more diverse species than unmanaged forests. The coppiced forest also enhances the quality of the rice paddies and the villages down the hill. Japan has lost a large area of *Satoyama* landscape due to urbanization. As a result, the urbanized areas have experienced frequent



15. 里山景观结构示意图

15. A diagram of the structure of a Satoyama landscape

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再生，确保森林根系牢固，以防雨季的水土流失。平茬还可以逆转生态演替过程（*succession*）：树木的定期修剪开辟了林冠层和林底空间，让生态演替过程的不同阶段得以规律性发生，且可以比未经管理的森林孕育出更多物种。平茬还提高了稻田和山下村庄的品质。城市化已使日本丧失了大量的里山景观；由于缺乏基础设施景观（里山）对水土流失的控制，导致城市地区洪涝频发。里山不仅仅是一个农业生产系统，亦是一种韧性基础设施，还是一种日本文化的象征^{[21][22]}。

自然在不同的文化和时空背景下，有着不同的意识形态。一些当代实践将自然过程包装成创造“零维护”项目的灵药。然而，为了维持自然过程按预期进行，项目可能需要在维护和管理上增加人工和资金投入。为了寻求应对当代问题的最具环境和社会韧性的解决方案，当代实践可以借鉴传统乡土景观中更具交互性和参与性的景观管理模式——尽管如此，当代“生态的”或“自然的”设计是否仅仅是对因工业化和商品化而不复存在的景观的一种审美怀旧？

4 结语

本文基于种植设计和生态手段的视角，对过去20年间美国当代景观设计实践进行了简要回顾。本文旨在对当前实践从历史和文化维度进行批判性思考。毫无疑问，对生态过程的理解在当代景观设计中至关重要，设计师能够通过实体实施和长期管理参与到生态过程之中。这些实践还通过更新“设计结合自然”的概念来传达景观设计专业的当代形象。

flooding events because of the lack of erosion control in the landscape infrastructure. *Satoyama* not only works as a productive agricultural system, but also serves as resilient infrastructure; moreover, it is also considered as the symbol of Japanese culture^{[21][22]}.

The ideology of *Nature* varies in culture and in time. Some contemporary practices promote natural processes as magic potion to create maintenance free projects. However, more labor and cost in maintenance and management may be required, in order to sustain the natural processes to function as anticipated. In search of the most environmentally and socially resilient solutions for contemporary issues, the traditional vernacular landscapes may shed new light on contemporary practice by offering more interactive and engaging models in landscape management. Having said that, is the contemporary “ecological” or “natural” design anything more than an aesthetic nostalgia for the landscape that has already lost due to industrialization and commodification?

4 Conclusion

The article provides a very brief retrospect of contemporary landscape architecture practice in America, particularly through planting design and ecological approaches in the past two decades. By situating in a historical and cultural context, the article aims to provide a critical look of the current practice. Undoubtedly, the understanding of ecological processes is essential in contemporary landscape architecture, and it enables designers to engage with the processes in their work, through material implementation and long-term management. These practices also illustrate contemporary images of the Landscape Architecture profession, through a refreshed concept of designing with *Nature*.

本文还揭示了自然的文化意识形态在表现性、感知性和接受性上之于景观设计行业的重要意义。自然是一种文化产物。正如马乔里·尼科尔森所言，“我们所见所感的自然，都是被（文化）教化引导的所见及所感。”^[23]因此，除了塑造物理环境外，景观设计师塑造公众对景观和自然的感性认知同样重要。

在加速的气候变化和复杂的社会政治环境的压力下，景观设计师如何与公众传达景观的生态学理念？景观设计如何在塑造能够承载韧性未来的文化环境方面做出自己的贡献？

与其仅仅将公共景观设计成免费的福利设施和绿色背景，景观设计师需要教育公众将景观视为一个生命系统——如果在一个城市中，居民缺乏与景观产生互动的机会，那么他们很难将自己代入并视作为自然过程的一部分。设计师需要在公共领域中增加景观的可读性和可感性，并与社会的文化及生态系统一起进行协同设计。种植设计（包括传统的花园设计和公共园艺设计）可以通过不同途径与人产生互动（包括体验建成环境和阅读文学作品），并建立起属于个人的，或集体共同的互动关系。人们不仅需要将景观理解为一个过程，还需要对所居住的景观环境产生依恋情感。类似于专业中的“设计结合自然”，需要向公众宣导“生活结合自然”的理念。为了设计一个可持续发展的未来，景观设计师在为韧性景观创造文化基底的过程中需要更广泛的公众参与。LAF

The article also reveals the importance of the cultural ideology of *Nature* in this profession, in representation, perception, and reception. *Nature* is a cultural construct. As Marjorie Nicolson reflected, “we see in *Nature* what we have been taught to look for, we feel what we have been prepared to feel”^[23]. Therefore, besides constructing physical environment, it is equally important for landscape architects to shape the public perception of landscape and of *Nature*.

Under the pressure of accelerated climate change and the complicated socio-political environment, how can landscape architects share the ecological understanding of landscape to the general public? How may landscape architecture contribute to create the cultural context for the resilient future?

Rather than merely designing public landscapes as complimentary amenity or greenery backdrop, landscape architects need to educate the public to visualize the landscape as a living system. For instance, it is difficult for urban residences, who can be distant from an interactive relationship with landscape, to understand that they are part of the natural process. Designers need to increase landscape’s legibility and sensibility in the public realm, engaging and designing with the cultural system of the society along with the ecological system. Planting design, including traditional gardening and public horticulture design, offers both collective and individual ways to engage with people by experiencing the constructed environment, as well as through literature. People need not only to understand landscape as a process, but also to develop an attachment to the landscape they live in. Similar to “design with nature” within the design profession, there is a need to educate the public to “live with nature.” In order to design a sustainable future, landscape architects need to engage more with the public in creating cultural context for resilient landscapes. LAF

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