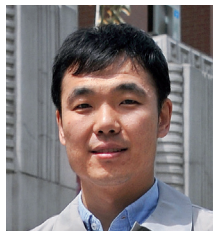


# 论中国生态文明制度建设与景观治理

## A DISCUSSION ON INSTITUTIONAL IMPROVEMENT FOR ECOLOGICAL CIVILIZATION AND LANDSCAPE GOVERNANCE IN CHINA



张振威\*

北京建筑大学建筑与城市规划学院风景园林系副主任、助理教授、硕士生导师

### ZHANG Zhenwei

Associate Chair, Assistant Professor, and Master's Supervisor of Department of Landscape Architecture, School of Architecture and Urban Planning, Beijing University of Civil Engineering and Architecture

\*通讯作者

地址：北京市西城区展览馆路1号

邮编：100044

邮箱：tommy2014@126.com

### 摘要

随着景观学科与治理理论的发展，“景观治理”正成为二者交叉领域的新研究热点，并被视为环境治理领域的分支与延伸。制度建设是推动景观治理理论与实践发展的重要因素。中共十八大以来，中国生态文明建设进入了新阶段，系统性的顶层设计及以制度建设为先导是其显著特色；同时，十八届三中全会提出“推进国家治理体系与治理能力现代化”，将治理作为评判国家能力和国家与社会关系的新路径。两者都将对中国景观规划、设计、保护与管理产生重大影响。

本文从景观的空间尺度效应，景观的地方性、文化性和集体认知，以及景观治理概念的应用等三个方面追溯了西方景观治理理论的发展，继而分析了中国生态文明制度建设将为景观治理带来的诸多契机，包括：顶层设计将从源头上破除环境生态问题的固有矛盾；将助推国家景观治理能力的提高；将构筑以生态安全和生态系统服务为导向的土地利用管制体系；将使景观公共利益回归本位；将有利于培育公民社会与景观治理民主；将对风景园林学的教育科研产生多维影响。最后，本文基于全球和中国国家尺度，分别指明了中国景观治理的进路。

### 关键词

生态文明；制度建设；治理；景观治理；景观途径

### ABSTRACT

With the development of landscape discipline and governance theories, “landscape governance” has become a new frontier of inter-disciplinary research, and is considered a sub-topic and extension of “environmental governance.” Institution is an important factor to the development of landscape governance theory and practice. Since the Eighteenth National Congress of the Communist Party of China in 2012, the construction of Ecological Civilization has marked itself a new milestone for its systematic top-down design and institution-oriented efforts. At the same time, the Third Plenary Session of the Eighteenth Central Committee of the Communist Party of China in 2013 proposed to improve the contemporary national governance system and capacity, and took governance as a new means to evaluate state capacities and state-society relations. Both of them will significantly impact landscape planning, design, protection, and management in China.

This article reviews the evolution of western landscape governance theories driven by 1) the emphasis on the spatial scale effect of landscape; 2) the exploration of the regional variety of cultural and collective identities of local landscapes; and 3) the emphasis on the practice of landscape governance. It also examines the opportunities in China's landscape governance brought by the institutional improvement of Ecological Civilization, which might help: resolve the inherent conflicts that cause the existing environmental and ecological problems; enhance China's capacity on landscape governance; establish a new land-use management system with a greater ecological security and broader ecosystem services; endow landscapes with more public benefits; cultivate a civil society and democracy in landscape governance; and, influence the education and research of Landscape Architecture in multiple dimensions. Finally, the article proposes roadmaps for China's landscape governance at both global and national scales.

### KEY WORDS

Ecological Civilization; Institutional Improvement; Governance; Landscape Governance; Landscape Approach

编辑 王胤瑜 翻译 姜芊孜 田乐

EDITED BY WANG Yinyu TRANSLATED BY JIANG Qianzi Tina TIAN

## 1 景观治理的兴起

自1989年世界银行首次使用“治理危机”的表述后，“治理”（governance）一词就被广泛地应用于政治发展的研究之中，并逐渐取代“统治”（government）成为新的研究重心<sup>[1]-[3]</sup>。近些年，其又被赋予了新的含义，几乎渗透到经济学、政治学、社会学、公共管理学、国际关系学等所有社会科学学科当中<sup>[4]</sup>，形成了全球治理、民族国家治理、地方治理和公司治理四大理论板块<sup>[5]</sup>。

20世纪80年代，在应对环境问题时出现的政府失灵也是“治理”一词肇始的重要原因之一<sup>[4]</sup>，作为规制性政治手段的“环境治理”概念由此产生<sup>[6]</sup>。随着景观理论及景观学科向社会科学领域的全方位拓展交叉，西方的景观治理理论逐渐从环境治理领域衍生出来，成为新的研究方向，其发展主要围绕三个方面：

第一，注重景观的空间尺度效应，从传统治理理论出发探讨景观尺度的治理议题。对于一个特定区域，如果忽视了多层次治理的空间尺度效应，则会造成不同层级（如国家、地方和社区）的自然资源政策之间的失调甚至冲突，这在地理学中被称为“尺度政治”问题<sup>[4]</sup>。随着景观生态学原理的广泛应用，环境与自然资源领域经历了从“共同管理”到“适应性共同管理”再到“适应性治理”，最终转向更依赖景观视角的“景观治理”的模式转变<sup>[7][8]</sup>。这一语境下的景观治理可理解为基于景观自身的系统性和复杂性要求，跨部门、跨尺度、跨层级地整合社会、经济、环境目标<sup>[9]</sup>，在景观尺度上协调实质冲突<sup>[10]</sup>，解决环境政策制定与实施中的部门本位主义、破碎化等问题。相关理论点主要集中在如何用自主治理理论来解决森林景观保育中的公共池塘资源治理问题<sup>[11]-[14]</sup>，以及景观尺度的网络治理<sup>[15]</sup>、集体景观治理<sup>[16][17]</sup>、环境政策一体化<sup>[18]</sup>等议题。

第二，注重景观的地方性、文化性和集体认知，探讨针对特定区域的治理结构。一般性环境政策所面临的另一个挑战是如何与特定场所的自然—社会—文化条件相匹配<sup>[10][18]</sup>，对此，“景观”概念可以从两方面进行回应：一方面，景观的尺度效应为特定区域的地方特质提供了灵活的分析架构<sup>[10]</sup>；另一方面，可借助景观视角下的文化和社会意涵更好地把集体认知映射到集体行动当中<sup>[10][16][19]</sup>，使治理过程考虑更广泛的行动者及其利益诉求。

## 1 The Emergence of Landscape Governance

Since “governance crisis” was first introduced by the World Bank in 1989, the term “governance” has been widely found in political research and become a new study topic replacing “government”<sup>[1]-[3]</sup>. Endowed with new meanings in recent years, “governance” has spread to almost all social sciences including Economics, Politics, Sociology, Public Management, and International Relations<sup>[4]</sup>, branching into four theories, namely global governance, national governance, local governance, and corporate governance<sup>[5]</sup>.

In the 1980s, the government failure in dealing with environmental problems also contributed to the emergence of “governance”<sup>[4]</sup>, as well as the adoption of “environmental governance” as a new measure of political regulation<sup>[6]</sup>. With the all-round cross-disciplinary fusion between the landscape theory and the landscape discipline with social sciences, the western landscape governance theories have gradually derived from environmental governance and grown into a new research sphere upon three sources:

First, the emphasis on the spatial scale effect of landscape and the application of the conventional governance theories at the landscape scale. In practice, the neglect of spatial scale effect of multi-leveled governance might lead to disorder or conflicts among natural resource policies across government levels (national, regional, community, etc.), which is termed as “politics of scale” in Geography<sup>[4]</sup>. Later, inspired by landscape ecology principles, the models used to address this issue have gradually shifted from “co-management,” “adaptive co-management,” “adaptive governance,” and finally towards “landscape governance,”<sup>[7][8]</sup> which considers the systematic and complex constitution of landscape, coordinates social, economic, and environmental objectives across different sectors, scales, and levels<sup>[9]</sup>, and resolves specific conflicts at the landscape scale<sup>[10]</sup>, in order to avoid fragmented efforts in the formulation and implementation of environmental policies among government departments. Relevant theoretical discussions on landscape governance mainly focus on the application of self-governance theory to “common-pool resources” in forest landscape conservation<sup>[11]-[14]</sup>, network governance at the landscape scale<sup>[15]</sup>, collective landscape governance<sup>[16][17]</sup>, and environmental policy integration<sup>[18]</sup>.

Second, the exploration of the regional variety of governance structure, covering the cultural and collective identities of local landscapes. General environmental policies need to respond to the natural-social-cultural milieu of a certain place<sup>[10][18]</sup>, where the concept of “landscape” shines a two-fold importance: the scale effect of landscape provides a flexible framework to review the local characteristics of a particular region<sup>[10]</sup>; and, the lens of landscape can be used to examine the cultural and social implications in collective cognition reflected by collective actions<sup>[10][16][19]</sup>, to understand different kinds of participants and their diverse interests during a governance process.

第三, 将“景观治理”作为一个在逻辑和经验上可广泛协调冲突的既成概念或预设, 不深究其含义而直接应用。如强调景观规划、景观管理向景观治理过渡的趋势<sup>[21]</sup>, 探讨科学知识在景观治理中的作用<sup>[16][19][21]</sup>, 解析景观治理与可持续景观<sup>[22]</sup>、景观整体方法或整合的景观途径<sup>[23]</sup>、可持续价值链治理<sup>[8][24]</sup>等的关联。

景观治理可看作应对食品安全、气候变化和生物多样性丧失等全球挑战, 在景观尺度上实现土地合理利用的有效手段<sup>[25]</sup>。但到目前为止, 景观治理尚未形成统一的定义及完整的理论体系。而中国生态文明制度建设是新时代生态领域制度创新与治理智慧的集大成者, 可为景观治理提供全新的研究视野和中国路径。

## 2 中国生态文明制度建设对景观治理的影响

中共十八大以来, 中国生态文明建设进入了新阶段, 全方位、系统性的顶层设计及以制度建设为先导是其显著特色; 同时, 十八届三中全会提出“推进国家治理体系与治理能力现代化”, 将治理作为评判国家能力和国家与社会关系的新路径。两者都将对中国景观规划、设计、保护与管理产生重大影响, 有助于推动“景观治理”理念及理论在中国的生根发芽。

### 2.1 中国景观治理发展的契机

中国出台了数十项生态文明制度建设改革举措, 其中发挥基础性作用的“四梁八柱”包括: 健全自然资源资产产权制度、建立国土空间开发保护制度、建立国土空间规划体系、完善资源总量管理和全面节约制度、健全资源有偿使用和生态补偿制度、建立健全环境治理体系、健全环境治理和生态保护市场体系, 以及完善生态文明绩效评价考核和责任追究制度。生态文明制度建设将对景观治理产生诸多影响, 具体表现在如下方面:

第一, 顶层设计将从源头上破除造成环境生态问题的固有矛盾。景观规划设计师所从事的传统景观质量提升工作, 并不能从根源上解

Third, the emphasis on the practice of “landscape governance” as an established concept that can logically and empirically resolve conflicts to a great extent, instead of digging into its definition. This is exemplified by the research interest shift from landscape planning and landscape management towards landscape governance<sup>[21]</sup>; a broader advocacy of combining landscape governance with scientific strengths<sup>[16][19][21]</sup>; and increased analyses of the associations between landscape governance with sustainable landscapes<sup>[22]</sup>, holistic or integrated landscape approaches<sup>[23]</sup>, and governance of sustainable value chains<sup>[8][24]</sup>.

Landscape governance is regarded as an effective solution to global challenges such as food security, climate change, and biodiversity loss by improving land use at the landscape scale<sup>[25]</sup>. But up to present, neither an acknowledged definition nor a theoretical system about landscape governance has been formed. China’s institutional improvement of Ecological Civilization epitomizes its institutional innovation and governance wisdom on ecology issues, opening a new horizon for research on landscape governance based on China’s specific conditions.

## 2 Influences of China’s Institutional Improvement of Ecological Civilization on Landscape Governance

Since the Eighteenth National Congress of the Communist Party of China in 2012, the construction of Ecological Civilization has marked itself a new milestone for its systematic top-down design and institution-oriented efforts. At the same time, the Third Plenary Session of the Eighteenth Central Committee of the Communist Party of China in 2013 proposed to improve the contemporary national governance system and capacity, and took governance as a new means to evaluate state capacities and state-society relations. Both of them significantly impact landscape planning, design, protection, and management, and help promote the ideas and theories of landscape governance to root and spread in China.

### 2.1 Opportunities in China’s Landscape Governance

The institutional improvement of Ecological Civilization in China consists of a series of reform initiatives, including completing the property right system of natural resource assets, establishing the national protection institution for land development, formulating the system of land and spatial planning, improving the holistic management system on resource inventory and consumption, improving the mechanism of compensable use of resources and ecological compensation, establishing and improving environmental governance system, improving the market of environmental governance and ecological protection, as well as guaranteeing the performance evaluation and accountability of related practices. The institutional improvement shows significance on China’s landscape governance as follows:

First, this top-down design helps resolve the inherent conflicts that cause the existing environmental and ecological problems in China. The

决大气污染、水污染、土壤污染等背后存在的上位性、结构性矛盾，还必须依靠全面且系统的生态文明制度建设。以国土空间优化、资源节约、生态环境保护的良治为导向的顶层设计将严格保护构成“美丽中国”的“山、水、林、田、湖、草”等环境要素，形成完善的自然资源保护法律制度体系，消解景观保护、规划、设计实践当中的上位矛盾，为景观质量提升扫清障碍。

第二，政治伦理的生态化将助推国家景观治理能力的提高。在过去几十年的景观建设中，存在诸多仅体现狭隘地方利益或长官意志、忽视科学决策的乱象，如古树进城、大广场、大草坪、风景圈地等。生态文明制度建设提出的“美丽中国”“青山绿水”等发展观要求地方政府不仅要在形式上高度重视生态质量提升，而且要在实质上实现生态正义。这一意涵有助于形成自上而下的生态环境保护动力，推动政治伦理的进步及生态决策程序的完善，从而有效摒除生态环境领域的形式主义和官僚主义，优化景观治理的软环境。

第三，国土空间规划制度建设将构筑以生态安全和生态系统服务为导向的土地利用管制体系，为景观治理实践建立更为坚固的科学基础，并提出更为明确的可持续目标。

第四，建立以国家公园为主体的自然保护地体系，在保障生物多样性与生态安全的同时，亦将使景观公共利益回归本位。建构以“风景权”为基础的公民游憩权益保障制度，将促进或完善以景观为媒介的社会公正、社会环境伦理、生态旅游与可持续发展观。<sup>[26]</sup>

第五，在生态文明制度建设中强化公众参与，有利于培育公民社会与景观治理民主。生态文明制度建设提出了景观治理的新内涵，其既包括宏观层面的正式法律制度安排，也包括微观层面基于多元主义和合作主义的公共参与，从而使景观成为民主的空间载体和试验场。反之，与市民生活息息相关的公共空间治理也是最容易实现社会治理变革的领域——由规划师、设计师主导的社区公共空间共治（如社区

traditional practices of landscape planning and design can improve local environmental quality; however, such efforts have helped little resolve the inherent and structural contradictions of environmental problems such as air pollution, water pollution, and soil pollution. Thus, a comprehensive and systematic institutional improvement of Ecological Civilization is urgently needed. The top-down design aiming at a sound governance on land and spatial development, resource conservation, and ecosystem protection will well protect all natural elements (mountain, water, forest, farmland, lake, and grassland) constituting the “Beautiful China” plan with an improved legal system, in order to eliminate the upstream obstacles in the practices of landscape protection, planning, and design.

Second, environment-friendly political ethics help enhance China's capacity on landscape governance. Over the past decades, landscape practices have often seen decisions made for narrow local interests or by officials' personal preferences overwhelm scientific considerations, for example, arbitrary transplanting of ancient trees in urban development projects, building oversized city squares and lawns, and enveloping scenic landscapes for private use. Led by the concepts of “Beautiful China” and “Green Hills and Clean Waters,” the institutional improvement of Ecological Civilization requires local governments to improve ecological quality and justice both in norm and practice. It will also generate a top-down impetus to improve political ethics and decision-making procedures, to avoid formalism and bureaucracy and improve the cultural climate of landscape governance.

Third, for a greater ecological security and broader ecosystem services, the institutional construction in land and spatial planning will establish a new land-use management system, which helps propel landscape governance practices with more scientific support and a roadmap towards true sustainability.

Fourth, the establishment of natural reserve systems upon national parks will endow landscapes with more public benefits, while ensuring biodiversity conservation and ecological security. Guaranteeing citizens' recreational rights and interests (such as “right to landscape”) will further strengthen and promote landscape-based social justice, environmental ethics, eco-tourism, and sustainable development.<sup>[26]</sup>

Fifth, promoting public engagement in the institutional improvement of Ecological Civilization is instrumental in cultivating a civil society and democracy in landscape governance. This updates the connotation of landscape governance through both legalization at the national level and bottom-up public engagement based on pluralism and cooperation, making landscape a place for fostering and testing democracy. At the same time, public spaces are most likely to realize community co-governance under a new social governance model led by planners and designers, because such places are closely associated with citizens' daily life and involve broadly collective decisions and actions (such as participatory renewals of community gardens). Therefore, landscape

花园的参与式改造等)往往意味着广泛的集体选择与集体行动。因此,也可以将景观治理视为推进我国民主进程的有效途径。

第六,新时代的生态文明制度建设也将对景观设计学与风景园林学的教育科研产生多维影响。在教学方面,应重视制度分析方法在描述景观现象、解析景观规律过程中的基础性作用,并将该方法引入景观社会学等课程<sup>[27]-[30]</sup>,在相关法规类课程的教学宗旨中也应更加强调对制度分析方法的掌握,而非仅限于对条文的理解;除此之外,培养既懂景观科学又懂法律政策,可从事景观法律与政策制定工作的人才,也是景观教育的当务之急<sup>[31]</sup>。在研究方面,生态文明制度建设将对我国景观理论与实践产生怎样的影响,如何从景观科学视角提出生态文明制度建设建议,都是需要解答的理论问题。

## 2.2 中国景观治理的进路

在全球景观治理层面,中国应积极参与推动景观国际法的制定,尤其应把握代表欧洲景观治理先进经验的《欧洲景观公约》向全球开放签署的新机遇。在通过“一带一路”等国家战略推广中国生态文明制度建设创新成果的同时,增加景观科研、景观规划设计的国际援助与培训,以中国智慧和大国担当推动并引领全球景观治理。

在国家景观治理层面,应将“景观”作为“美丽中国”的物质空间载体,在政策与制度中重申景观的美学、生态、环境、历史文化,以及伦理价值内涵,将“景观”一词作为一个独立于“生态环境”的显性领域纳入生态文明制度体系,并提升到战略高度。在国土开发利用中强化景观保护,设立景观质量提升目标,并将其纳入各类政府工作绩效考评制度与评价标准。在国土空间规划框架的构建当中,注重景观尺度的生态格局与过程<sup>[31]</sup>,强化景观地域性,引入景观特征评估。树立“风景权”观念,保障公民正当享用风景的利益。保证公民及时、充分、科学地获取景观资讯、知识与理论的程序性权利。通过鼓励公共参与制度建设,实现景观民主化管理<sup>[32]</sup>。LAF

governance can also be regarded as an effective way to promote China's democratization.

Sixth, the institutional improvement of Ecological Civilization will also influence the education and research of Landscape Architecture in multiple dimensions. In terms of pedagogical methodologies, it encourages the introduction of institutional analyses into courses like landscape sociology, focusing on studying the influence of social institutions, laws and regulations, and policies on landscape-associated phenomena and related rules<sup>[27]-[30]</sup>. Mastering of this analytical method, beyond the simple understanding of legal provisions, should also be emphasized in related teaching activities. It is also urgent to cultivate talents who have a cross-background of landscape, law, and political sciences and are capable of formulating landscape-associated laws and policies<sup>[31]</sup>. Regarding research, more theoretical efforts are required to explore how the institutional improvement of Ecological Civilization will influence the development of landscape theory and practice in China, and, in turn, how landscape sciences can promote the institutional improvement.

## 2.2 The Approaches for Landscape Governance in China

Globally speaking, China should actively take part in promoting the international legislation of landscape governance. Particularly, it is expected to seize the opportunity of the opening for global signature of European Landscape Convention, which summarizes European countries' advanced experience on landscape governance. Besides, China is also hoped to share her wisdom on landscape governance (including the innovation of the institutional improvement of Ecological Civilization) through national initiatives such as the Belt and Road, offering international assistance and training programs of the research and practice of landscape planning and design.

To China herself, landscape — as places to build up the “Beautiful China” — should be celebrated for its aesthetic, ecological, environmental, historical, cultural, and ethical significance, and protected and guaranteed with policies and institutions. Meanwhile, the term “landscape” should be integrated into a dominant strategy of the Ecological Civilization institution system, rather than conventionally being part of the term “ecological environment.” It is urgent to strengthen landscape protection in land and spatial development, while setting up goals for landscape improvement efforts and use them to evaluate government performance. Concerning the construction of land and spatial planning framework, the ecological pattern and process at the landscape scale<sup>[31]</sup>, local landscape identities, and evaluation of landscape characteristic should be prioritized. Other exploration includes developing the concept of “right to landscape”; guaranteeing citizens' procedural rights to obtain immediate, abundant, and scientific information and knowledge about landscape; and facilitating public engagement in institutional improvement to achieve a democratic landscape governance<sup>[32]</sup>. LAF

## REFERENCES

- [1] Yu, K. (2002). An Introduction to Global Governance. *Marxism & Reality*, (1), 20-32. doi:10.15894/j.cnki.cn11-3040/a.2002.01.004
- [2] Rhodes, R. A. W. (1996). The New Governance: Governing without Government. *Political studies*, 44(4), 652-667. https://doi.org/10.1111/j.1467-9248.1996.tb01747.x
- [3] Rhodes, R. A. W. (1997). *Understanding governance: Policy networks, governance, reflexivity and accountability*. Philadelphia: Open University Press.
- [4] Görg, C. (2007). Landscape Governance: The "Politics of Scale" and the "Natural" Conditions of Places. *Geoforum*, 38(5), 954-966. https://doi.org/10.1016/j.geoforum.2007.01.004
- [5] Xia, J. (2010). Characteristics of Governance Theories and Research on Community Governance. *Social Sciences in Heilongjiang*, (2), 125-130+4.
- [6] Young, O. R. (Ed.). (1997). *Global Governance: Drawing Insights from the Environmental Experience*. Cambridge: MIT press.
- [7] Sayer, J., Sunderland, T., Ghazoul, J., Pfund, J. L., Sheil, D., Meijaard, E., ... & Buck, L. E. (2013). Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses. *Proceedings of the National Academy of Sciences*, 110(21), 8349-8356. https://doi.org/10.1073/pnas.1210595110
- [8] Ros-Tonen, M. A. F., Reed, J., & Sunderland, T. (2018). From Synergy to Complexity: The Trend toward Integrated Value Chain and Landscape Governance. *Environmental Management*, 62(1), 1-14. https://doi.org/10.1007/s00267-018-1055-0
- [9] Buizer, M., Arts, B., & Westerink, J. (2016). Landscape governance as policy integration "from below": A case of displaced and contained political conflict in the Netherlands. *Environment and Planning C: Politics and Space*, 34(3), 448-462. https://doi.org/10.1177/0263774X15614725
- [10] Van Oosten, C., Uzamukunda, A., & Runhaar, H. (2018). Strategies for achieving environmental policy integration at the landscape level. A framework illustrated with an analysis of landscape governance in Rwanda. *Environmental Science & Policy*, (83), 63-70. https://doi.org/10.1016/j.envsci.2018.02.002
- [11] Van Oosten, C. (2013). Restoring Landscapes — Governing Place: A Learning Approach to Forest Landscape Restoration. *Journal of Sustainable Forestry*, 32(7), 659-676. https://doi.org/10.1080/10549811.2013.818551
- [12] Van Oosten, C., Gunarso, P., Koesoetjahjo, I., & Wiersum, F. (2014). Governing Forest Landscape Restoration: Cases from Indonesia. *Forests*, 5(6), 1143-1162. https://doi.org/10.3390/f5061143
- [13] Mansourian, S. (2016). Understanding the Relationship between Governance and Forest Landscape Restoration. *Conservation and Society*, 14(3), 267-278. doi:10.4103/0972-4923.186830
- [14] Mansourian, S. (2017). Governance and forest landscape restoration: A framework to support decision-making. *Journal for Nature Conservation*, (37), 21-30. https://doi.org/10.1016/j.jnc.2017.02.010
- [15] Scarlett, L., & McKinney, M. (2016). Connecting people and places: the emerging role of network governance in large landscape conservation. *Frontiers in Ecology and the Environment*, 14(3), 116-125. https://doi.org/10.1002/fee.1247
- [16] Opdam, P., Coninx, I., Dewulf, A., Steingröver, E., Vos, C., & Van Der Wal, M. (2016). Does information on landscape benefits influence collective action in landscape governance?. *Current Opinion in Environmental Sustainability*, (18), 107-114. https://doi.org/10.1016/j.cosust.2015.12.006
- [17] Westerink, J., Opdam, P., Van Rooij, S., & Steingröver, E. (2017). Landscape services as boundary concept in landscape governance: Building social capital in collaboration and adapting the landscape. *Land Use Policy*, (60), 408-418. https://doi.org/10.1016/j.landusepol.2016.11.006
- [18] Sayles, J. S., & Baggio, J. A. (2017). Social-ecological network analysis of scale mismatches in estuary watershed restoration. *Proceedings of the National Academy of Sciences*, 114(10), E1776- E1785. https://doi.org/10.1073/pnas.1604405114
- [19] Nassauer, J. I. (2012). Landscape as medium and method for synthesis in urban ecological design. *Landscape and Urban Planning*, 106(3), 221-229. https://doi.org/10.1016/j.landurbplan.2012.03.014
- [20] Westerink, J., Opdam, P., Van Rooij, S., & Steingröver, E. (2017). Landscape services as boundary concept in landscape governance: Building social capital in collaboration and adapting the landscape. *Land Use Policy*, (60), 408-418. https://doi.org/10.1016/j.landusepol.2016.11.006
- [21] Beunen, R., & Opdam, P. (2011). When landscape planning becomes landscape governance, what happens to the science?. *Landscape and Urban Planning*, 100(4), 324-326. https://doi.org/10.1016/j.landurbplan.2011.01.018
- [22] Wascher, D. M. (Ed.). (2000). *Proceedings of European Workshop on Landscape Assessment as a Policy Tool*. European Centre for Nature Conservation and the Countryside Agency, Tilburg, Cheltenham.
- [23] Freeman, O. E., Duguma, L. A., & Minang, P. A. (2015). Operationalizing the integrated landscape approach in practice. *Ecology and Society*, 20(1), 24. http://dx.doi.org/10.5751/ES-07175-200124
- [24] Ros-Tonen, M. A., Van Leynseele, Y. P. B., Laven, A., & Sunderland, T. (2015). Landscapes of social inclusion: Inclusive value-chain collaboration through the lenses of food sovereignty and landscape governance. *The European journal of development research*, 27(4), 523-540.
- [25] Ros-Tonen, M., Derkyi, M., & Insaioo, T. (2014). From Co-Management to Landscape Governance: Whither Ghana's Modified Taungya System?. *Forests*, 5(12), 2996-3021. https://doi.org/10.3390/f5122996
- [26] Li, J. (2007). *Introducing a New Course: Landscape Sociology*. Urban Space Design, (2), 7-9.
- [27] Li, J., & Li, D. (Eds.). (2008). *Observation and Reflection on Land and Society: Pedagogical Cases of Landscape Sociology*. Beijing: Higher Education Press.
- [28] Li, J., & Li, D. (Eds.). (2010). *Observation and Reflection on Land and Society: Pedagogical Cases of Landscape Sociology II*. Beijing: Higher Education Press.
- [29] Li, J., & Li, D. (Eds.). (2011). *Observation and Reflection on Land and Society: Pedagogical Cases of Landscape Sociology III*. Beijing: Higher Education Press.
- [30] Zhang, Z. (2015). *The Relationship between Landscape Architecture and Laws: Reflections on the research frontier of the two disciplines*. Landscape Architecture, (4), 115-116.
- [31] Yu, K. (2016). *Ecological Security Pattern and Spatial Development Pattern Optimization of National Territory*. Landscape Architecture Frontiers, 4(5), 6-9.
- [32] Zhang, Z. (2013). *Research on Public Interests of Landscape and its Protection* (doctoral dissertation). Retrieved from CNKI Database.

## 《景观设计学》2019年第2期（总第38期）更正

### Corrections of No. 2 Issue, No. 7 Volume of *Landscape Architecture Frontiers* (No. 38 in total)

1. 《穿戴式相机在研究个体行为与建成环境关系中的应用》一文（第22~37页）DOI号更正为：  
The DOI of the paper "Application of Wearable Cameras in Studying Individual Behaviors in Built Environments" from page 22 to 37 should be:

https://doi.org/10.15302/J-LAF-20190203

2. 《北京什刹海金丝套滨水空间的视觉感知意象研究与眺望景观优化策略》一文（第121~131页）的引用格式更正为：  
Please cite the article "Research on Visually Perceived Image and Strategies for Vista View System Improvement of the Jinsitao Waterfront of Shichahai in Beijing" from page 121 to 131 as:

Liu, Y., Mou, T., Huang, Z., & Ha, R. (2019). Research on Visually Perceived Image and Strategies for Vista View System Improvement of the Jinsitao Waterfront of Shichahai in Beijing. *Landscape Architecture Frontiers*, 7(2), 121-131. https://doi.org/10.15302/J-LAF-20190212

3. 《无人机测量在景观设计科研与实践中的应用》一文中，第48页图7比例尺和图例有误，更正为右图：  
In Figure 7 of the paper "UAV Measurement in Landscape Architecture Research and Practice" on page 48, the bar scale and legend are misaligned, which should be aligned as the right:

