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The photo shows the settlements embedded in forests of Tri Ton, in Vietnam’s Mekong Delta. Urbanization, agriculture, and forests are the three main occupations of the earth by humankind. In Asia, settlements are often embedded within forests. This contributes significantly to their livability, micro-climate, and increased resourcefulness. The forests are part and parcel of livelihoods, as in Tri Ton. Clearly, such urbanization and forest relationships provide inspiration for future developments, also in more extreme urban contexts.

Towards an Asian Forest Urbanism

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ABSTRACT

Since time immemorial, urban forestry and city tree planting have been part and parcel of the history of settling in Asia. Attention to urban forestry was a living tradition. It surely predates the late 20th century notions of urban forestry and forest urbanism. Trees are omnipresent (and create environmental quality) in the Chinese *danwei* housing estates (and production units) of the 1960s as much as in the monumental apartment blocks of Seoul of the same period or the average housing allotment in Vietnam, regardless the period. Intensive urban forestry resurfaced as a key element in the nation building projects as in India, Singapore, Vietnam, and China, where it is presently rearticulated in light of the project for an ecological civilization. Urban context or not, settling *with* and *within* forests has occurred for millennia in Asia. Indigenous forest-dwelling communities are part of a larger set of nature-culture worldviews and narratives, all which are deeply intertwined with socio-ecologically-articulated settlement practices. Although there are very different settlement patterns across Asia, with a variety of tissue components, they are more often than not systematically planted with trees. In the era of global warming, it is key to rearticulate this age-old tradition and exploit the acquired expertise, to face the consequences of the climate crisis, while simultaneously creating healthier settlements.

KEYWORDS

Urban Forestry; Forest Urbanism; Asian Traditions; Global Warming; Settlement Practices

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1 “Urban Forestry” and Ancient City Tree Planting

In the Western world of environmental science, the term “urban forestry” was coined by Danish-Canadian forester Erik Jorgensen in 1965. More than three decades before the equally oxymoronic term “landscape urbanism,” urban forestry was defined by Jorgensen as “the cultivation and management of trees for their present and potential contribution to the physiological, sociological and economic well-being of the urban society.”^[1] It was conceptualized

to address urban trees beyond the single plant (street, shade, and ornamental trees) towards an ecological community. It also confronted perceptually different realms: artificial versus natural, civilized versus wild, urban versus landscape. The explicit coupling of dichotomous notions (and the worlds they encompass) led to a scientific paradigm shift.

However, it can be argued that both contemporary disciplines, urban forestry—even forest urbanism—and landscape urbanism, resonate this paradigm shift, which in fact existed millennia before

they were named. No more was this the case than in Asia, where cities and dispersed rural settlements historically developed in relation to a worldview that included geomancy (*feng shui*) and divination, which choreographed the activities of humankind within nature and where beliefs in land gods, river kings, and forest spirits were both practical and mystical.^{[2][3]} Vietnam's Central Highlands' city of Dalat, once a French hill station, is known as the "city of thousands pine trees."^[4] Suzhou, in China, is known as "Venice of the East" and famous for its canals and gardens, yet is embedded in an equally awe-inspiring forest setting. Throughout cities in Japan, trees and "eternal forests" are venerated in relation to *kodama* (folkloric tree spirits) and Shintoism.^[5] Similarly, in Cambodia, both trees and water bodies are worshipped in relation to *neak ta* and Buddhism.^{[6][7]} Traditional Khmer settlements are structured by "wats," forested domains that contain pagodas and other religious buildings. Traditional settlements in the Himalayas are often structured between temples, water, and sacred forests. Throughout Asia, trees and forests are celebrated through numerous rituals, poetry, literature and sacred texts, legends and myths, and folk songs.

In ancient China, *The Rituals of the Zhou Dynasty* (Zhou Dynasty, 1046–256 BC) verifies that tree planting and maintenance by designated officials along moats of city walls was obligatory. The book documents tree planting along riparian corridors in relation to flood protection and soil erosion, as well as the strong tradition of street planting in cities. Initially, capital city streets and imperial highways were planted to provide separated royal passage, shelter against wind, provide shade, protect roads from flooding, and perform specific visual functions. Whenever trees died, they had to be quickly replaced. "Tree plantings along city streets and country roads were considered as good moral behavior and a blessing to the local people, and state officials were always memorialized for their contribution to the construction of greenways."^[3]

2 Forestry and Nation-building

In many parts of Asia, a legacy of afforestation and street tree planting was part and parcel of progressive eras of nation-building. According to Chinese American scholars Cheng Li et al., during the era of the Republic of China (1912 to 1949), the progressive leader Sun Yat-sen "advocated forestry as a means of national salvation,"^[8] linking forestry to socio-ecological justice with improved livelihoods and the key to solving natural disasters. In 1956, China promulgated a "Greening the Nation" campaign as a

part of a larger social engineering and mass mobilization plans^[8], which was complemented by concrete practices and included the dissemination of expert tree-planting knowledge to the grassroots level. Afforestation was included in the draft National Outline for Agriculture Development (1956–1967), "which aspired to plant trees along all roads, in all residential areas, near all bodies of water, and on all barren land nationwide in twelve years."^[8] In short, forests and trees were an integral component of national development of urban dwelling environment. Xi Liang, the then forestry minister, strongly advocated large-scale tree planting to address hydrological issues (in counterpoint to huge engineering projects such as dams) and underscored the inextricable link of soil, water, and trees. Liang was heavily influenced by a strand of German "scientific forestry" which emphasized centralized management (planting and cutting) and forestry conservation as well as the pervasiveness of trees in daily life.^[8] In recent years, Chinese government has continuously underscored that mountains, rivers, forests, farmlands, and lakes are a community of life. The lifeline of man lies in the field, the lifeline of the field is in the water, the lifeline of the water is in the mountain, the lifeline of the mountain is in the soil, and the lifeline of the soil is in the tree^[9]. Use control and ecological restoration must follow the laws of nature. If those who plant trees only care about planting trees and those who control water only manage the water and those who protect the fields simply protect the fields, it is easy to lose sight of the other and ultimately cause systemic ecological damage.^[10]

In Vietnam, the natural environment, specifically forests and trees, plays strongly into Ho Chi Minh ideology and is still drawn upon today. Upon declaring independence from France, Ho likened the country (homeland) to its mountains, rivers, and forests. He explicitly spoke of the necessity of humankind to deeply understand nature, use natural resources economically and steward the environment.^[11] In her book, *Forests are Gold: Trees, People and Environmental Rule in Vietnam*, Pamela McElwee reveals how forestry, as well as its classification, was tied to regimes of power and how forests and trees are much more than ecology and biodiversity but a resource for a new society and the management of citizens.^[12]

Bianca Maria Rinaldi has revealed the role of trees and urban forestry plans in the nation-building projects of postcolonial India and Singapore. These plans were motivated by not only urban forestry's ecological roles, but also its aesthetic and cultural aspects as related to national identities; ornamental trees accounted for a large part of afforestation efforts.^[13] Rinaldi draws attention to the key push of political leaders, Jawaharlal Nehru and Lee Kuan

Yew, and their understanding of trees as expressions of cultural differentiation and a botanical antidote to their colonial pasts—as a connection to an indigenous natural environment, much of which was felled by the colonizers (in both cases the British Empire). “Indigenous” afforestation became part of the nation-building project. The Punjab capital of Chandigarh (inaugurated in 1953) is widely known for the plan by Le Corbusier, in which the built and green structure are interwoven as warp and woof. Moreover, the plan included a *Grille Arborisation* which set a design framework for trees in the city structure. In this light, it is tempting to read the plan of Chandigarh as a hologram: it is an internationalist scheme for the built (which is a conventional look to the plan and is emblematic for the supposedly scientific basis of modernism); it is also a nationalist scheme that reproduces an afforested environment recreated with indigenous species (and based on traditional ecological knowledge). Anyhow, the species selection of primarily flowering trees and their composition was done by Mohinder Singh Randhawa, a local botanist and agronomist. The Chandigarh efforts indeed built on a wider importance of trees in the building of the nation—Tree Planting Week was established in 1947. In 1963, the process of urban renewal in Singapore was initiated by Lee Kuan Yew himself and included a Tree Planting Campaign with the massive reintroduction of tropical trees (not only indigenous species). By 1967, the program evolved to a Garden City mandate and a National Tree Planting Day (1971); over time the city-state has been branded as a Tropical City of Excellence, City in a Garden and most recently as the City in Nature. Masses of trees were and are literally everywhere: in housing estates, parks, along roads and camouflaging highway interchanges and bridges. In both Chandigarh and Singapore, ideal national landscapes were created by trees in the city. In a dialectic iteration between the built and natural environment, trees constructed a synthesis—a living environment that transcends culture–nature divides.

3 Forestry and Settlements

Settling *with* and *within* forests has occurred for millennia. Indigenous forest-dwelling communities are part of a larger set of nature-culture worldviews and narratives, all which are deeply intertwined with socio-ecologically-articulated settlement practices. And, throughout the history of urbanism, there has almost always been an interweaving of structures of plantation with urban armatures and tissues. Cities have been embedded in forests and forest tissues complemented urban fabrics.^[4]

Returning to China, from 1949 to 1976, new cities were realized (with Soviet assistance) with boulevards of street trees. The now-matured trees have become part of the rich heritage of many Chinese cities. Even in the barrack-like housing estates integrated in the “production units” (*danwei*), tree planting was a prominent feature. Their landscape plans might *a posteriori* be considered more important than their urban plans. Nowadays, mature trees are the main neighborhood quality of the remaining estates in cities such as Shanghai.^[14] Same, same and not so different can be observed in the urbanism of Seoul, Republic of Korea, well known for the drastic postwar shift made in the 1960s towards the construction of dense apartment buildings. The building of apartment estates has accelerated during the last decades, where monumental 30-year complexes have been replaced by even higher apartment blocks of 50 and more floors.^[15] In spite of such a radical typological shift and drastic density increase, what characterizes the modern postwar dwelling environments is the abundant planting schemes with trees, as if it were an unconsciously persisting tradition to combine planning with planting (trees).

Similarly, many other countries in the region have an age-old tradition to plant along roads and streets according to elaborate catalogues of infrastructure profiles. From larger scale developments to smaller allotment projects, the construction of infrastructure goes hand in hand with the planting of trees. While waiting (nowadays often in vain, given the real estate crash) for buildings to fill the allotments, trees already generate a lush living environment in the making (while cracking the sidewalks). Throughout Vietnam, from north to center to south, its cities are powerfully embedded in a majestic tropical environment with street trees often defining the reclaiming—draining, stabilizing, and creating bearable microclimates—of urban land. What applies for cities and towns, is all the more applicable for rural settlements. Settling in the quagmire of the Mekong Delta is primarily equated with the continuous weaving of an incredible lace of elongated “garden strips” (*miet vuon*)^[16] and filaments of various widths along (and only slightly higher than) rivers, creeks, canals and roads. Trees (including fruit trees) stabilize “highland” gardens and literally create the dwelling environment, marking a sharp contrast with seas of paddy fields (and nowadays more and more aquacultural mosaics). Although the Red River Delta might have an older and very different settlement pattern, exchanging the linear filaments for villages sprinkled as islands in the majestic floodplain, it does not make the tissue component of these villages very different from that in the Mekong Delta, with systematic presence of trees. The region hosts an abundant variety

of contrasting distinctions between majestic open, seemingly empty plains, plateaus, terraces of rice culture and full (of trees) settlements.

4 Reimagining Urban Forestry and Forest Urbanism in an Era of Global Warming

Beyond all doubt, the earth, while being urbanized beyond any scale ever witnessed before in history, desperately and urgently needs more trees and forests, and there is a clear call for massive afforestation. Throughout history, categorical distinctions were developed and deepened between disciplines—agronomy, forestry, urbanism—to only name the three that deal with humankind’s “occupation of the world.” In this triad, forests were conceived as the most “natural,” whereas agriculture and urbanization were conventionally thought of as cultured. These distinctions dramatically widened during the industrial era and deforestation accelerated as the Anthropocene unfolded. The division of labour facilitated economies of scale and hence fuelled the modern economy. Ecology, however, rarely entered the equation, and the earth continues to suffer from a cascade of catastrophic consequences. There are numerous initiatives of course-correction, but it is evident that additional changes in approaches are necessary. Thinking and understanding must be radically altered, and a myriad of changes needs to converge into a real paradigm shift. Anyhow, contemporary transdisciplinary practices, such as forest urbanism, attempt to transcend the artificial distinctions and distant themselves from the artificial nature–culture dichotomy that has been so deeply ingrained in disciplinary practices.

As has become common knowledge, and shifting to pragmatics, urban tree canopies cool urban heat islands and offer pockets of shade, absorb carbon through photosynthesis, produce oxygen, filter air pollutants, and even dampen noise. The root systems of urban trees help regulate stormwater and slow desertification. More generally, when strategically distributed over cities, trees and urban forests can increase urban biodiversity and make place for non-human species. This opens a window of opportunity to merge the two realms of the urban and the forest—both already characterized with their own multiplicities—and to (re-)construct a world in which wellbeing for humans (for which forests and trees are of such importance) can go hand in hand with a “wellbeing of the world.” Surely in Asia, important and often pioneering stepstones have been taken into that direction, such as the Chinese government programs of ecological restoration (1970s), eco-cities (2011), sponge cities (2012), and, as a general agenda, the Socialist

ecological civilization (2007).^[17]

“Forest urbanism,” formally coined as a term in 2017^{[18]~[21]}, goes beyond urban forestry and calls for the radical redefinition of settlement structures in relation to forests. Forest urbanism bridges landscape architecture and urbanism and reimagines land occupation to overcome the tripartite system of forestry, agriculture, and urbanization through new hybrids and occupation forms of multiplicity.

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聚焦亚洲森林都市主义

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摘要

自古以来，城市林业和城市植树活动一直是亚洲人居历史的一部分。对城市林业的关注也延续至今，而这种传统必然比20世纪末“城市林业”和“森林城市主义”概念的提出更为久远。不论是在20世纪60年代的中国单位大院住宅区，还是同一时期首尔具有历史意义的公寓大楼，或者越南长期以来的普通分配住房区中，树木无处不在，并奠定了人居环境的品质。作为印度、新加坡、越南和中国国家建设项目中的一个关键组成部分，密集型都市林业再次受到了广泛关注，它也是当前中国生态文明建设的一大重要实践。抛开城市背景不论，亚洲地区的森林栖居传统已有几千年的历史。本地林居社区体现出了一种更大的自然文化世界观和叙事，所有这些都与社会生态意义上的人居环境建设实践深深交织。尽管亚洲各地有着截然不同的栖居模式，也有着各种各样的聚落肌理，但它们通常都会系统地种植树木。在全球变暖的背景下，我们应当重新阐明这一古老的传统并从中吸取专业智慧，以应对气候危机、创造更健康的居住环境。

关键词

城市林业；
森林城市主义；
亚洲传统；
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1 “城市林业”与古代城市植树活动

在西方环境科学领域，丹麦—加拿大籍林学家埃里克·乔根森于1965年首次提出了“城市林业”（urban forestry）这一概念。三十多年后，另一个同样看似自相矛盾的概念——“景观都市主义”（landscape urbanism）也应运而生。城市林业是指“在城市发展过程中，为了充分发挥树木在提升城市物质效益、社会效益和经济效益方面的短期和长期价值，而开展的一系列树木种植和管理活动。”^[1]城市林业跳脱了对行道树、庭荫树、观赏树等单一树木本身的关注，而将整个城市的树木作为一个生态系统来考量。此外，城市林业也包含人工与自然、文明与野蛮、人造都市与自然景观等二元概念，这些概念（及其所涵盖的领域）

间明确的二元性也带来了科学范式的转变。

尽管城市林业（包括森林都市主义）和景观都市主义这两个当代学科都体现出了科学范式上的转变，但早在这些学科被命名的千年之前，这种转变就已经出现，而且在亚洲地区尤为典型。在亚洲城市及周边乡村地区的历史演化过程中，风水和占卜活动扮演着重要角色，指导着人类在大自然中的活动；人们对土地神、河神和森林神灵的信仰既有现实的一面，又充满神秘色彩。^{[2][3]}越南中部的高原城市大叻被誉为“千松之城”，曾被法国殖民者开发为山中避暑胜地。^[4]中国苏州享有“东方威尼斯”的美誉，这里不仅河渠纵横、园林交错，而且森林遍布，令人惊叹。在日本的城市地区，树木和“永恒之森”被奉为木灵的化身，与神道教渊源颇深。^[5]在柬埔寨，树木和江河湖泊与“涅达”神灵体系和佛教

关系密切。^{[6][7]}传统的高棉民居建筑多以佛寺的形式建于森林地带，周围遍布着佛塔和其他宗教建筑。喜马拉雅地区的传统聚落往往与庙宇、河湖和森林交织在一起。在整个亚洲地区，森林和树木更是无数的仪式活动、诗歌、文学作品、圣作、神话传说和民谣赞颂的对象。

中国儒家典籍《周礼》明确记载，城墙外护城河沿岸的树木种植和维护工作必须由专门官员负责。根据书中解释，除了出于悠久的植树传统外，沿河岸走廊种植树木主要是为了防洪防汛、避免水土流失。都城街道和皇家御道两侧种植树木的主要目的是独辟御路、防风、遮阴、防洪，以及观赏等；树木死后，必须迅速栽种新树。国家鼓励在城市街道和乡村道路两侧种树，寓意造福当地百姓；很多政府官员也因植树造林有功而被历史铭记。^[3]

2 林业与国家建设

在亚洲很多地区，造林和栽植行道树的传统是国家建设不断进步的重要体现。华裔美籍学者李成等人指出，在中华民国时期（1912—1949年），孙中山曾倡导将植树造林作为国家救亡图存的重要手段^[8]，通过造福民生将林业与社会—生态公平和防御自然灾害联系起来。1956年，作为社会建设和全民动员计划的重要组成部分，中国开展了“绿化祖国”运动。^[8]通过具体实践，专业树木种植知识传播到基层群众中间，植树造林也成为了《一九五六年到一九六七年全国农业发展纲要（草案）》的重要组成部分。草案要求，“从1956年开始，在12年内，绿化一切可能绿化的荒地荒山，在一切宅旁、村旁、路旁、水旁以及荒地上荒山上，只要是可能的，都要求有计划地种起树来。”^[8]总之，森林和树木成为了城市人居环境发展建设过程中的重要一环。德国的“科学造林”思想提倡（树木种植与砍伐的）集中管理、林业保育，以及让树木走进公众生活等理念。中国第一任林业部部长梁希也深受其影响。为了解决水文问题，他没有选择修建水坝等声势浩大的工程，而是极力倡导大规模植树活动，并强调土壤、水文和树木之间的密切联系^[8]。近年来，中国政府不断强调，人与自然是生命共同体；“人的命脉在田，田的命脉在水，水的命脉在山，山的命脉在土，土的命脉在树。”^[9]用途管制和生态修复必须遵循自然规律，如果种树的只管种树、治水的只管治水、护田的单纯护田，很容易顾此失彼，最终造成生态的系统性破坏。^[10]

越南领导人胡志明非常重视自然环境，特别是森林和树木。自脱离法国殖民统治、赢得民族独立以来，胡志明便将国家（国土）建设与山河森林联系起来。他曾明确指出，人类必须深刻认识自然、合理使用自然资源、做好环境的管家。^[11]在《森林是金：越南的树木、公民与环境规范》一书中，帕梅拉·麦克艾薇揭示了森林及其分类与权力结构的关系，指出林木不仅会带来生态和生物多样性裨益，更是新社会和公民管理的重要资源。^[12]

比安卡·玛丽亚·里纳尔迪剖析了树木和城市林业规划在印度和新加坡后殖民时代国家建设中所发挥的作用。这些规划不仅体现了城市林业的生态效益，而且展现了其在国家认同中的审美和文化价值——观赏树木也是植树造林工程中的重要组成部分。^[13]里纳尔迪分析了贾瓦哈拉尔·尼赫鲁和李光耀各自的核心政治主张，并从本土自然环境着眼，探讨了二人是如何通过森林树木呈现文化差异，又是如何通过植树手段修弥殖民历史创伤的——当地森林曾被英国殖民者大肆砍伐，因此，“本土”植树造林运动成为国家建设项目的重要推手。在勒·柯布西耶为印度旁遮普邦首府昌迪加尔（1953年建府）所制定的那份闻名于世的城市规划中，人工构筑和森林体系绿色结构相互交织、相互嵌套。此外，这项规划还以“树状网格”为蓝本，确定了城市结构中的树木设计框架。换言之，柯布西耶将昌迪加尔视为一张全息图：在常规解读下，规划中的建成部分（作为现代主义的科学化体现）展现了国际主义视角；从另一个角度看，这项设计修复了由本土物种构成的森林环境，迸发着传统生态智慧，体现了民族主义情怀。在规划实施过程中，当地植物学家、农艺学家穆新德·辛格·兰德哈瓦最终完成了主要观花树木品种及组配的选定工作。事实上，昌迪加尔城市规划的成功在很大程度上归功于国家层面对森林树木的重视。早在1947年，印度便已设立了“国家植树周”。而在新加坡，1963年，李光耀亲自启动了城市更新进程：不仅发起了“植树运动”，还重新引进了大量热带树木（不限于本土物种）。新加坡于1967年和1971年先后设立了“花园城市”活动和“国家植树日”活动。这些行动计划使新加坡收获了“卓越热带城市”“花园之城”“自然之城”等多项美誉。新加坡的每一个角落都能看到树木的存在：住宅区、公园、道路两侧、公路立交桥旁、桥梁周围……在这一重意义上，昌迪加尔和新加坡都基于树木，成功地打造出理想的国家景观；在建成环境和自然环境的相互促进、共同改善之下，由树木构建的人居环境超越了人文与自然的边界。

3 林业与人居

千百年来，人类一直保留着择林而栖的传统。各类传统的林中聚落是自然—人文世界观与叙事的缩影，而这些皆与社会—生态栖居活动息息相关。纵观都市主义的演变历程，城市格局与肌理一直深受种植结构的影响。城市是森林体系的一部分，而森林亦是城市肌理的一部分。^[4]

回看中国，1949~1976年，在苏联的援助下，许多新城都修建了林荫大道，这些冠大荫浓的行道树现如今已成为了中国城市宝贵的林木资源。即使是在单位大院，种植树木的传统也蔚然成风。现在看来，这些城市的景观规划可能远比城市规划更重要。在上海等城市，成熟大树的数量已经成为衡量现有住宅区社区品质的主要指标。^[14]无独有偶，韩国首尔在始于20世纪60年代的大规模战后重建中修建了大量高密度的公寓

建筑，极大地推动了城市化进程，拥有悠久历史的建筑群被高耸入云的公寓楼所取代。^[15]虽然城市的建设模式已发生翻天覆地的转变、城市的建筑密度激增，但政府始终高度重视树木种植，在住宅区域种植了大量林木，仿佛无意间延续了城市规划与树木种植有机结合的传统。

同样，从基础设施层面来看，越南等很多其他亚洲国家也拥有沿街种树的历史传统。在亚洲各国，不管是大规模的国家建设活动还是小规模的土地开发项目，基础设施建设始终与植树造林协同推进。在土地开发（当前房地产市场疲软，这种现象已不多见）的同时，树木（虽然侵占了人行道）为人居环境添加了勃勃生机。从南到北，越南的各个城市都散发着浓郁的热带风情；行道树通过其在促进排涝、稳定水土、调节微气候等方面的作用，改善着城市环境。在城镇中如此，在农村地区亦是如此。在湄公河三角洲地区，人们宛如生活在蜿蜒的花园带中^[16]，无数宽窄不一的林荫道散布于河流、小溪、运河、道路之间（地势略高于这些河流、道路）。包括果树在内的各类树木使“高地”花园更加稳定，与周边的田涛（及当下的水产养殖区）形成了景观映衬，从而打造了优美的人居环境。红河三角洲的聚落结构更加古老，略有不同的是这里的人居格局不呈花丝条带结构，而是以村庄岛屿的形式分布在广阔的洪泛平原上；村庄之间没有显著差异，都栽种了很多树木；这里的景观与壮美开阔的平原、高原和水稻梯田，以及林木环绕的人居环境形成了的鲜明对比。

4 在全球变暖的时代背景下，重塑城市林业与森林都市主义

当前全球各地的城市化进程无疑正以前所未有的规模快速推进，地球迫切需要更多的树木和森林，大规模植树造林行动势在必行。过去，不同学科之间的界限不断加深。以农学、林学和都市主义三个学科为例，这三者的研究议题均与人类“在世界上的实践活动”有关。其中，森林是最具“自然”属性的产物，而农业和城市化更具人文属性。在工业化时代，这些差别愈加突出，而进入人类世时代后，滥伐森林的情况也在不断加剧。劳动分工带来了规模经济效益，促进了现代经济的蓬勃发展。相比之下，生态建设始终相对滞后，世界各地频繁发生重大灾难。虽然世界各国不断调整发展道路，但这似乎还远远不够。我们必须从根本上扭转思想和观念，并将随之而来的调整切实体现在范式转变上。森林都市主义等当代跨学科实践正在努力跳脱出人为划定的界限，以及根深蒂固的自然—人文二元对立关系。

在现实意义层面，城市森林的益处众所周知：它们能够缓解城市热岛效应，带来片片荫凉，通过光合作用吸收二氧化碳、释放氧气，过滤空气中的污染物，甚至还能在一定程度上吸收噪音。都市树木的根系有助于调节雨洪、防治荒漠化。通常情况下，只要植树造林有方，林木就

可以提高城市的生物多样性，让人类与更多的物种和谐共生。这为城市肌理与森林的融合提供了契机，因为这二者自身都具有丰富的多样性。将两者相结合，可充分发挥森林的价值和作用，既能提升人类福祉，又能促进世界进步。在亚洲，大部分地区已经开展了相关行动。例如，中国政府不仅先后开展了生态修复（20世纪70年代）、生态城市建设（2011年）和海绵城市建设（2012年）等多项行动，还提出了社会主义生态文明建设（2007）的长远大计。^[17]

“森林都市主义”（forest urbanism）这一概念于2017年被正式提出^{[18]~[21]}，其不仅关注城市林业，同时还呼吁从根本上重新审视人居环境与森林的关系。森林都市主义建立起了景观设计与都市主义之间的桥梁，重塑了土地利用方式，通过新的融合方式和人居形式的多样化，打破了林业、农业和城市化这三者间的界限。

文前图片说明

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越南湄公河三角洲知尊县一处隐身于森林中的居住区。城市化、农业和林业是地球人居环境中三种主要利用方式。在亚洲，人类居住区往往为森林所环绕，因为森林能够营造良好的居住环境、改善微气候及提供丰富的资源。在知尊县等地方，森林成为了人类生计的重要组成部分。显然，这种城市化—森林关系为未来的开发提供了启示，对于更极端的城市环境亦是如此。