

WEEDsilence

Human-Plant Symbiosis and Spontaneous Landscape

雜草重生

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「雜草重生」是港深城市\建築雙城雙年展的其中一個展覽。這個進行中的項目透過審視規劃和設計以外的植物的功能，以及從民族植物學的角度去審視我們對雜草的看法，重新了解人類與植物的共生關係。這個項目旨在累積有關日常生活中近在咫尺卻被忽視的自然知識和體驗，並融入這些自發景觀和生態到可持續發展和韌性城市的設計和規劃中，探索在高度城市景觀中與其他物種共存的方法。

*"At its core, a weed is, quite simply, a plant that people do not like because it is growing where they do not want it to grow. To put it another way, it is the context in which a plant is growing – not the plant itself – that makes a weed."*¹

Peter Del Tredici
Wild Urban Plants of the Northeast. 2020.

Perception of urban weeds

Cambridge Dictionary defines a weed as, "any wild plant that grows in an unwanted place, especially in a garden or field where it prevents the cultivated plants from growing freely." The term "weed" is often associated with a negative impression and considered undesirable. Yet, the ecosystem services and resilience of these spontaneous inhabitants, which thrive in

- 1 The WEEDsilence exhibition is a trial demonstration to plant "weeds" and spontaneous plants with aesthetic value.
- 2 Intended greening on a vertical green wall fails to survive and occupied by spontaneous plants.

the most human-disturbed conditions, are often overlooked and rendered invisible.

Our perception of "weed" is ethnobotanical and culturally constructed. In her influential book *Silent Spring*, the conservationist Rachel Carson, argued that "Our attitude toward plants is a singularly narrow one." We regard most non-cultivated plants as "weeds", and "if for any reason we find its presence undesirable or merely a matter of indifference, we may condemn it to destruction forthwith."² A plant escapes being perceived as weed only when it makes itself useful.

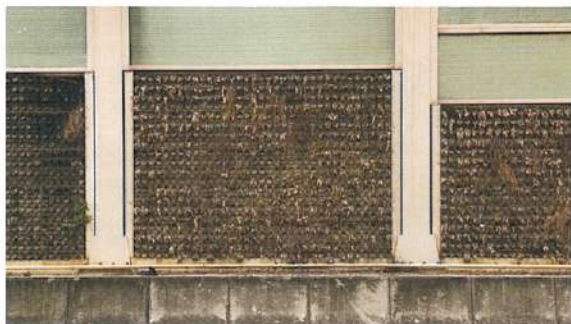
The terms "weed", "exotic" and "invasive" are not interchangeable. Wild plants can be native or exotic. Both native and exotic plants can be invasive. Contrary to common belief, many "weed" are native species and are ecologically valuable. Some "weeds" are edible or medicinal. Some have aesthetic values, bringing a sense of wildness into the city. Others are closely connected to rural landscapes utilized by villagers, forming part of rural life and vernacular knowledge. The disconnection of human-plant symbiosis for urban dwellers appears to be associated with "plant blindness" as well as cultural practice. In an urban context, except for amenity purposes, the functions of plants are largely irrelevant to people's daily life. The value of a plant depends largely upon the man around it.³

Human-plant relationship

Our early childhood experiences with plants are often fun-filled: blowing the pappus of "dandelion" (*Emilia sonchifolia* (L.) DC.) (一點紅)⁴, touching the sensitive leaves of Mimosa (*Mimosa pudica* L.) (含羞草) or playing tricks on friends with Shepherd's Needles (*Bidens alba* (L.) DC.) (鬼針草). The relationship with plants in rural environments blends into everyday life. Diamond Flower (*Hedyotis corymbosa* (L.) Lam) (傘房花耳草) (L.) and Chinese Feervine (*Paederia scandens* (Lour.) Merr.) (雞矢

藤) are collected for making herbal tea and Cha-Guo. Sandpaper vine (*Tetracera asiatica* (Lour.) Hoogland) (錫葉藤) is a perfect substitute of scouring pad. The list of plants used by villagers goes on and on. Even lalang grass (*Imperata cylindrica* (L.) Raeusch. var. *major* (Nees) C. E. Hubb) (大白茅), one of the most common weeds along highways regularly eradicated by maintenance agents, is one of the ingredients of the popular sugar cane and imperatae drink. Ironically, lalang grass is so appealing during flowering period, normally from April to May, that it attracts crowds of visitors traveling to the countryside to take social-media worthy photos. The same plant condemned in urban as "weed" is inextricable to rural living and is appreciated in the countryside. The intention to individualize "unique" experience with rural "nature" also forms a paradox to the proliferated existence of the same plants in urban context. The "personal image" and "cultural identity" established through Instagrammism⁵ with plants can be solely associated with our perception. From the perspective of a plant however, it grows in an environment it can tolerate and thrive in places that are most suitable to it. Whether a plant forms part of the terrain vague⁶ or a productive landscape all depends on how we manage and perceive them.

The traditional human-nature relationship built upon a mutually beneficial basis has vanished in urban settings. Many people are now aware of the need to re-establish this connection, as reflected in the urban farms on rooftops, and in derelict land, factories and other underutilised urban spaces. Yet, urban lifestyle is a main obstacle to the reconstruction of this relationship. If the countryside is the new frontier to our common future, are we simply extending the overwhelming urban operation to the rural and further erode the rural landscape, or should we reclaim vernacular knowledge and transcend to a different mode of contemporary living?



Resilient and spontaneous landscape

In ecology, resilience is the ability of an ecosystem to resist, to recover from, or to adapt to adversity and to maintain its functions and services during and after disturbances. The resilience of "weeds", many of which are native species and part of the local cultural landscape, is indisputable. They are strong colonizers. Weeds are tough and can adapt to environmental stress, scavenge nutrients and water in harsh conditions. They are diverse in morphology (with unique patterns in each species) and can interact with other species (particularly insects) and provide ecosystem services at places no other cultivated plants can survive. But instead of appreciating its beauty and exploring their functions, many worry about having too many of them. Such a dilemma is reflected in the high maintenance cost of urban landscape with doubtful cost-effectiveness. Opportunities to incorporate "weeds" in design and planning framework are seldom explored. Can "weeds" be alternatives to our designed landscape and as a new niche?

Urban ecologist Ingo Kowarik argues that human beings are facing three global crises, namely, climate crisis, biodiversity crisis and extinction of experience with nature crisis, and urban wilderness is the nature-

based solution to these crises.⁷ Landscape scholar Norbert Kühn pushes the idea further and advocate the deployment of spontaneous vegetation that it has the merits of being part of the natural dynamics, authentic in historical aspects and with much lower costs of maintenance. He has introduced an apparently contradictory approach: "to intervene in spontaneous vegetation to improve it aesthetically" through design and calls for a different form of planting design that brings spontaneous vegetation to the "consciousness of the urban public"⁸ Other associated notions, including novel ecosystem, urban foraging, introduction of pollinators and so on., are being fiercely debated among scholars, ecologists, architects, landscape architects and planners in China and abroad while very little has been initiated in Hong Kong.

The environmental catastrophes of today's world – from climate change to biodiversity loss and extinction of experience with nature as what Kowarik mentions – requires design and planning professions to synthesise interdisciplinary knowledge and offer new ways to tackle the challenges and meet the circumstances. When we talk about resilience and sustainability, we often associate with big plans and mega-infrastructure but neglect nature hinted in nuance and just under



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- 3 Eclipta (*Eclipta prostrata* L.) is commonly found on artificial grassland. It is used as a traditional Chinese medicine, food and hair dye in Asian countries.
- 4 Mimosa (*Mimosa pudica* L.) (含羞草) is an exotic plant species yet often connected to our connection with nature in childhood. (Credit: Yannis Chan)
- 5 The rhizome of lalang grass (*Imperata cylindrica* L. Raeusch. var. *major* (Nees) C. E. Hubb) (大白茅) is the ingredient of sugar cane and imperatae drink.
- 6 A cultivated rooftop lawn occupied by spontaneous plants.
- 7 The WEEDsilience exhibition

(All images by the authors except Fig.4.)



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our feet. In fact, neither do we have sufficient understanding on the silent spontaneous plants co-existing with us – we fail to even name most of them, not to mention their unique characters, functions, ecological niches and interactions with other living organisms. Cumulating these knowledge systematically and recalibrating our perception of plants will allow us to have broader imagination on future urbanism in both urban and rural landscapes.

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1 Del Tredici, P. (2010). *Wild Urban Plants of the Northeast: A Field Guide* (Second Edition). Comstock Publishing.

2 Carson, R. (1962). *Silent Spring*. Mariner Books edition.

3 Hu, S.Y. (1979). *Ailanthus in Arnoldia*. 39(2): 29-50. Hu argued that *Ailanthus*, deemed as one of the most invasive trees species in Northeast America, had its value. The different appearance of *Ailanthus* in its homeland, China and in America, which was introduced from England to Philadelphia in 1784, was largely due to people's neglect and mis-management. The original sentence writes, "The shape of a tree depends largely upon the man around it."

4 It is in fact common to mis-recognise *Emilia sonchifolia* (L.) DC. (一點紅) as *Taraxacum officinale* F. H. Wigg. (蒲公英) due to the presence of pappus for both plants.

5 Manovich, Lev (2016). Notes on Instagrammism and Contemporary Cultural Identity in *Instagram and Contemporary Image*.

6 The term "Terrain Vague" is coined by Ignasi de Sola-Morales Rubio in his publication "Terrain Vague" in *Anyplace*, ed., by Davidson, Cynthia C. (New York, N.Y.: Anyone Corp.; London: MIT Press. 1995), 122.

7 Refer to Ingo Kowarik's speech titled "Urban Nature in Climate Change" at the Next Landscapes International Conference held at Prague in 2021.

8 Kühn, N. (2006). Intentions for the unintentional: Spontaneous vegetation as the basis for innovative planting design in urban areas. *Journal of Landscape Architecture*, 1(2), pp.46-53.