

Environmental history and garden history in China and the West: Problems, Methods, and Responses

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Abstract

This article examines why garden historians of the West and China have not placed gardens within wider environmental and ecological processes, and why environmental historians have largely overlooked private gardens. Explanations for this neglect may be found in different disciplinary foundations and motivations, methodologies and perspectives. I demonstrate the benefits of combining garden and environmental history by analysing a twelfth-century garden from China using an ecocultural approach, which examines the material and cultural, ecological and ideological aspects of a particular garden. From this case study I argue that an ecocultural approach offers one way of bridging the divide separating environmental history and garden history, and by extension that spanning material and cultural analyses of gardens and wider environments.

Keywords: garden history, environmental history, methodology, historiography, Genyue, Chinese gardens, Chinese environmental history

‘He leaped the fence and saw that all nature was a garden’

Horace Walpole, 1771

Unlike William Kent (1685-1748), the subject of Walpole’s oft-cited quotation and a man whose picturesque and ‘natural’ gardening styles transformed both Britain’s environments and its people’s taste in landscape, most garden historians have not leaped the fence and regarded all nature as a garden. They seem especially reluctant to consider gardens in their wider material and ecological context. For their part, too, environmental historians have been as reticent to examine private gardens as garden historians have been to consider broader environmental processes.

This article posits several reasons for environmental historians’ neglect of gardens and for garden historians’ lack of consideration of environment. Not least, I point to methodologies and historiographies that divide, rather than bridge, that exclude, rather than include, analysis of both garden and environmental history. I also highlight the part played by different national historiographical traditions in the drawing of such a divide. By way of both highlighting these problems on the ground, as it were, and suggesting a resolution to them, I demonstrate the benefits of combining approaches from both garden history and environmental history through a case study of a twelfth-century garden in China. This I analyse using an ecocultural model to explore the cultural, material, and environmental dimensions of gardens and which offers a methodology for bridging the two historiographies.

What is garden history?

Garden history remains relatively new, only emerging as a subject in the 1980s. Even now, it flourishes only at a handful of institutions. Outside schools of architecture, it ekes out an often-difficult existence, with the odd paper sneaked into art history, covered in passing in literature, or shoehorned into broader history courses. In the twenty-first century Age of STEM (Science, Technology, Engineering and Medicine), garden history suffers from the misperception that it is the ultimate frippery, located in what university managers and governments increasingly portray as a vanity discipline (arts). This, as garden historians and all humanities scholars know, is at once absurd, ignorant and damaging. It ignores the benefits of flexible degrees that teach people how to think, as opposed to vocational qualifications that tend towards the cultivation of a narrow skill-set; such an attitude ignores current and future needs for intelligent, multi-disciplinary graduates able to respond to rapidly changing circumstances. Even among colleagues in the social sciences and sciences, I continue to encounter these ignorant attitudes.

Part of garden history's problem is paradoxically also its greatest strength: because it encompasses interdisciplinary perspectives drawn from arts and architecture as well as sciences and social sciences, garden history is sometimes difficult to place, still more to understand, especially for those unfamiliar with the turf.¹ Generally speaking, most garden history, whether flourishing in the open or furtively in academia, focuses on its art and humanities side. Although it is very much an open church, the dominance of arts and humanities approaches is apparent in any reading of leading garden history journals; is echoed in most articles, which approach gardens from a literary and pictorial perspective; and is demonstrated, still, in the themes of many articles published on the topic.²

While professional garden historians adeptly situate their work in wider cultural, political and economic contexts,³ with a handful of exceptions,⁴ most still do not consider gardens in relation to broader environmental processes or ecological changes. In a 2013 essay by one of only a handful of scholars to work across environmental and garden history, Andrea Gaynor argues that Australian garden history, 'with its focus on human agency, neglects the realities of our engagement with a dynamic non-human world (or at least does not frame them as such) in garden settings.' Garden history, she charges, needs to 'embrace its potential to provide insight into critical questions about relationships between people and "nature", interrogated with due attention to how these are shaped both by power relations within society, and autonomous organisms and forces.'⁵ This echoes the call by John Dixon Hunt some 15 years earlier in relation to European and North American scholarship.⁶

A plea for environmental historians to take seriously gardens—in this case horticultural gardens—was also made by US historian Philip J. Pauly.⁷ Yet Pauly's suggestion seems to have fallen on deaf ears, if a survey of publications on the topic in *Environment and History*

¹ John Dixon Hunt, *Greater Perfections: The Practice of Garden Theory* (London: Thames and Hudson, 2000); James Beattie, 'Special Issue: Gardens at the Frontier: New Methodological Perspectives on Garden History and Designed Landscapes', *Studies in the History of Gardens & Designed Landscapes*, 36, 1 (2016), 1-4.

² Sonja Dümpelmann, 'Taking Turns: Landscape and Environmental History at the Crossroads', *Landscape Research*, 36, 6 (2011), 625-640.

³ For example, Eugenia W. Herbert, *Flora's Empire: British Gardens in India* (Pennsylvania: University of Pennsylvania Press, 2014); Richard Aitken, *The Garden of Ideas: Four Centuries of Australian Style* (Melbourne: Miegunyah Press and the State Library of Victoria, 2010); Katie Holmes, Susan K. Martin and Kylie Mirmohamadi, eds., *Reading the Garden: The Settlement of Australia* (Melbourne: Melbourne University Press, 2008); Paul Fox, *Clearings: Six Colonial Gardeners and Their Landscapes* (Carlton: Miegunyah Press, 2004); Chandra Mukerji, *Territorial Ambitions and the Gardens of Versailles* (Cambridge: Cambridge University Press, 1997); the series published by Dumbarton Oaks, as well as the work by John Dixon Hunt, cited below.

⁴ Andrea Gaynor, *Harvest of the Suburbs: An Environmental History of Growing Food in Australian Cities* (Crawley, Western Australia: University of Western Australia Press, 2006); Andrea Gaynor, "'Like a good deed in a naughty world": Gardens on the Eastern Goldfields of Western Australia', *Australian Humanities Review*, (2005), no pages: <http://australianhumanitiesreview.org/2005/07/06/like-a-good-deed-in-a-naughty-world-gardens-on-the-eastern-goldfields-of-western-australia/>; Peter Timms, *Australia's Quarter Acre: The Story of the Ordinary Suburban Garden* (Carlton: Miegunyah Press, 2006); George Seddon, *Landprints: Reflections on Place and Landscape* (Cambridge, Melbourne: Cambridge University Press, 1997), and *The Old Country: Australian Landscapes, Plants and People* (Cambridge; Port Melbourne, Victoria: Cambridge University Press, 2005).

⁵ Andrea Gaynor, 'The Landscape of Australian Garden History', *Australian Garden History*, 25, 1, (2013), 6.

⁶ Hunt, John Dixon, 'Approaches (New and Old) to Garden History', in *Perspectives on Garden Histories*, ed. by Michel Conan (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1999), 77-90

⁷ 'Is Environmental History a subfield of Garden History?', *Environmental History*, 10 (2005), 70-71.

and *Environmental History* is anything to go by.⁸ The journal *Environmental History* at least has a category for gardens, although these are listed as ‘parks/gardens/museums’. While I realise this is hardly a robust measurement, it supports my general reading of this topic across several journals over the last fifteen years.⁹

Environmental historians, it seems, tend to be more at home writing about public gardens than private ones—something shown by the significant number of works on botanical gardens and acclimatisation gardens they have produced.¹⁰ Other popular related topics for environmental historians are agricultural colonies and plantations,¹¹ as well as gardens, health and well-being: in other words, broader topics, larger and very often public sites.¹²

Why have garden historians and environmental historians largely ignored each other’s work? Landscape historian Sonja Dümpelmann considers that for North America this is partly because of differences in training, interests, and methodology. She observes that writers examining designed landscapes—a category which includes gardens—commonly focus on human-created and cultivated landscapes, their representation and reception. In contrast, she notes, environmental historians have examined larger processes of transformation, commonly by analysing long-term, large-scale change that draw from ecological concepts and invoke non-human as well as human agency. Gardens, small-sized and usually ephemeral, human-rather than naturally created, lend themselves better to smaller scale analysis, over a shorter period, and focused more on individual or groups than on broader environmental change. As a consequence, where environmental historians use the macro, Dümpelmann observes, garden historians invoke the micro.¹³

The different disciplinary roots of Western garden history and environmental history is another important factor to consider in accounting for little dialogue between the two

⁸ In its 40 years of existence, *Environmental History*’s search engine reveals five articles on the topic. In its 21 years, *Environment and History*’s index shows four articles.

⁹ Admittedly a survey of the contents pages is hardly scientific, but it reveals that garden history has yet to grip the imagination of environmental historians in the same way as, say, irrigation, dams, and cities. Even the journal I edit, *International Review of Environmental History*, despite categorically encouraging articles on the topic, has only attracted one on garden history, of a total of eleven articles so far published.

¹⁰ Note, for example, Karen Jones and John Wills, *The Invention of the Park: Recreational Landscapes from the Garden of Eden to Disney’s Magic Kingdom* (Cambridge: Polity Press, 2005); Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1995) Richard H. Drayton, *Nature’s Government: Science, Imperial Britain, and the “Improvement” of the World* (New Haven: Yale University Press, 2000); Thomas R. Dunlap, *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand* (New York: Cambridge University Press, 1999); Fa-ti Fan, *British Naturalists in Qing China: Science, Empire, and Cultural Encounter* (Harvard: Harvard University Press, 2004); Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (New Haven: Harvard University Press, 2004).

¹¹ Ian Tyrrell, *True Gardens of the Gods: Californian-Australian Environmental Reform, 1860-1930* (Berkeley, California: University of California Press, 1999); Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999); Douglas Sackman, *Orange Empire: California and the Fruits of Eden* (University of California Press, 2007).

¹² Karen Jones, in this issue; Jo Bishop, ‘New Perspectives on Methodology in Garden History: Approaches Towards Writing about Imported Medicinal Plants in Colonial New Zealand’, *International Review of Environmental History*, 2 (2016): forthcoming; J. Beattie, ‘Imperial Landscapes of Health: Place, Plants and People between India and Australia, 1800s-1900s’, *Health & History*, 14, 1 (2012), 100-120; Beattie, *Empire and Environmental Anxiety: Health, Science, Art and Conservation in South Asia and Australasia* (Basingstoke: Palgrave Macmillan, 2011 and 2016);

¹³ Dümpelmann, ‘Taking Turns’.

disciplines. Much early garden history investigated elite private garden-making.¹⁴ By contrast, although having roots also in geography and the Annales movement, environmental history burst forth amidst the ferment of the 1960s environmental protest movement. Its own history reflected a corresponding emphasis on social and environmental justice in the public realm. Until recently, environmental historians have mostly overlooked the private spaces of the home and the ecological settings of gardens in favour of taking in the wider vistas of national parks and the conservation movement. We might say they have examined the heroic rather than the domestic.¹⁵ Symptomatic of this early divide perhaps is that, when early US environmental historians did examine elites, it was to consider elites in the wilderness movement—whose supporters defined themselves in opposition to the artifice of gardens and cities.¹⁶

Gardens have traditionally flourished in cities: from the urban gardens of southern China to the role of gardens as sites of scientific experimentation and sources of health, to take only some recent historical examples represented by this volume. Here, an important factor in retarding further studies of gardens may be urban environmental history's relatively late-development. As Sverker Sörlin and Paul Warde note, although more works have recently appeared, 'the urban/wilderness ratio in publications is distressingly low.' Despite 'American lawns now cover[ing] an area roughly the size of Pennsylvania' and notwithstanding a handful of recent works, they observe, 'the suburbs as yet have hardly registered at all' in scholarship.¹⁷ Until relatively recently, the mainstream view in environmental history was that nature was out there, not here in one's backyard.¹⁸

The different sources garden historians and environmental historians employ also shape the kinds of histories they write. Environmental historians, Dümpelmann notes, 'have only rarely used visual sources of any kind, be they paintings, photographs, graphics, film or maps.'¹⁹ In contrast, many garden historians—especially those of China, as I show in the next section—commonly use different sources from environmental historians. Although this is changing in Western scholarship,²⁰ poetry and prose, maps and paintings, photographs and film are far more commonplace among garden historians than environmental historians.

¹⁴ This focus has changed. See, for example, *The Vernacular Garden*, ed. John Dixon Hunt and Joachim Wolschke-Bulmahn (Washington, D.C.: Dumbarton Oaks, 1993); Pierrette Hondagneu-Sotelo, *Paradise Transplanted: Migration and the Making of California Gardens* (Oakland: University of California Press, 2014).

¹⁵ I thank Ruth Morgan for this suggestion. On the focus on wilderness in early American environmental history, see Cronon, ed., *Uncommon Ground*.

¹⁶ Ironically, of course, many of the movers and shakers of the wilderness movement also lavished much time and money on developing their own private gardens. See Wade Graham, *American Eden: From Monticello to Central Park to Our Backyards: What Our Gardens Tell Us About Who We Are* (New York: Harper Collins, 2011), ch.2.

¹⁷ Sverker Sörlin and Paul Warde, 'The Problem of the Problem of Environmental History: A Re-Reading of the Field', *Environmental History* 12 (2007), 109.

¹⁸ I am indebted to Ruth Morgan for this observation. William Cronon, 'The Trouble with Wilderness; or, Getting Back to the Wrong Nature', in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York & London: W.W. Norton & Co., 1996), 69-90.

¹⁹ 632 ****needs book ref.

²⁰ John M. MacKenzie, *Museums and Empire: Natural History, Human Cultures and Colonial Identities* (Manchester and New York: Manchester University Press, 2009); Andrea Gaynor and Ian McLean, 'Landscape Histories: Mapping Environmental and Ecological Change Through the Landscape Art of the Swan River Region of Western Australia', *Environment and History*, 14, 2 (2008), 187-204; Fan, *British Naturalists in Qing China*; Karen Jones, 'Hunting with the Camera': Photography, Animals and the Technology of the Chase in the

Sources and historiographical developments aside, a salient material factor accounting for differences in environmental history and garden history may relate to gardening practices themselves. While garden designers and gardeners from different places and times might have approved of Kent's attempt to incorporate vistas of the wider landscape into their own gardens—witness, for example, the 'borrowed landscapes' of East Asian gardens—they have been much less enthusiastic than Kent to welcome into their gardens other elements of the wider environment. From the ha-ha and garden wall to weeding and the application of pesticides, gardeners have devoted much time and ingenuity to keeping things out or stopping certain things growing in gardens. When we consider it globally and over millennia, humans have expended enormous amounts of energy on setting gardens apart from nature.²¹

This reminds us that gardens are a matter of classification. They are the products of delineation and definition, of (often) artificial cultural boundaries drawn between different physical spaces and their uses. Just what is and what isn't a garden?²² If in Western culture 'first nature' was wilderness and 'second nature' agricultural landscape, then gardens have traditionally constituted 'third nature', a space in which 'human interventions...go beyond what is required by the necessities or practice of agriculture or urban settlement.'²³ They require 'more concentrated effort of implementation and maintenance than do, say, orchards and vegetable gardens, which in their turn may require more involvement, activity, and perhaps even a sense of ordering than do fields.'²⁴ Garden meanings change over time. They vary by region. They differ by culture and place. Take its so-called Chinese equivalent, *yuan*, as an example. Commonly translated into English as 'garden', its enclosing frame in written Chinese delightfully evokes a sense of separateness, a boundary between inside and out. Yet *yuan* can also refer 'to open-air spaces as well as space under cover'. Its meaning 'avoids the understanding of gardens as external spaces adjacent to houses', as might traditionally be understood in a European context.²⁵

We certainly need to think about changing and contested definitions of domestic, public, and market gardens—indeed, just where to draw a line between garden and farm.²⁶ Yet as I show

Rocky Mountains', in *Wild Things: Nature and the Social Imagination*, ed. William Beinart, Karen Middleton and Simon Pooley (Knapwell, Cambridge: White Horse Press, 2013), 24-43.

²¹ Graham, *American Gardens*; Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley: University of California Press, 2006).

²² Paul Sutter recently noted with great perspicuity that *environment* is 'surprisingly undertheorized'. Paul Sutter, 'The World with Us: The State of American Environmental History', *Journal of American History* 100 (2013), 97. One exception is Sverker Sörlin, 'Reconfiguring Environmental Expertise', *Environmental Science and Policy* 28 (2013), 14–24.

²³ Hunt, *Greater Perfections*, 62, and ch. 3, 'The Idea of a Garden and the Three Natures'.

²⁴ Hunt, *Greater Perfections*, 63.

²⁵ Stanislaus Fung, 'The Interdisciplinary Prospects of Reading *Yuan Ye*', guest edited by Stanislaus Fung and John Makeham, *Studies in the History of Gardens and Designed Landscapes: An International Quarterly*, 18, 3 (July-September 1998), 211. Names for what are translated as gardens included 'pond pavilion' (*chi ting*), 'thatched hall' (*cao tang*) and 'estate' (*zhuang*). Craig Clunas, *Fruitful Sites: Garden Culture in Ming Dynasty China* (London: Reaktion, 1996), 111.

²⁶ For example, in 'Footnotes to Allegory Mountain', an account of his seventeenth-century garden, built in present-day Shaoxing, Zhejiang Province, Qi Biaoqia details his extensive planting of edible vegetables and fruits within it (Bin Vegetable Plot) and its incorporation of neighbouring paddy fields and grain fields. As Qi explicitly answers: 'If this is a garden, then why have I created also this farm? I have had it developed in order that it might be the site where I can earn my livelihood.' The site was also used to propagate new varieties and served, too, as a learning tool. Duncan M. Campbell, 'Qi Biaoqia's "Footnotes to Allegory Mountain":

below, notwithstanding often seemingly rigid definitions, there were often no set boundaries between different categories and types of land-use. Consequently, there is as a strong need to interrogate connections between different kinds of defined spaces, both conceptually and physically, as there is to interrogate transfers of ideas, biology, and matériel flowing between them.

Dümpelmann believes that the best point of contact for environmental and garden/landscape historians lies in joint study of gardens' cultural reception. I agree with her recommendation, but also suggest that an examination of both gardens' cultural *and* material dimensions can offer an equally fruitful line of enquiry. To illustrate how to do this, I use the concept of ecocultural networks to analyse an especially well-known twelfth-century garden from China. My choice to examine a garden in China is deliberate, since scholarly discussion of garden history and environmental history has mostly focused on Western gardens.²⁷ To set the scene, I first outline how characteristics particular to China's culture favoured literary readings of gardens to the detriment of others, then discuss how a material and cultural perspective might be brought to bear on Genyue (Gen Mountain) Garden.

Gardens in China and their history

'The literary productions of brush and ink are more lasting than gardens'.

Qian Yong, 1833²⁸

As this quotation illustrates, gardens in late-imperial China were highly inscribed landscapes. The productions of brush and ink as much as of rock and water, gardens usually enjoyed a longer life on paper (in books and compendiums) or on stone (as inscriptions, later transmitted as rubbings) than as actual sites. From the sixteenth-century onwards, indeed, Chinese elites seem to have accorded their representation in poetry and art greater significance than as physical sites.²⁹

China placed perhaps an unusual importance on the written word, even among early literate civilisations. In the Shang (ca. 1500-1045 BCE), diviners inscribed questions about rule, such as information about harvests or military campaigns, on oracle bones. Subjecting the bones to heat enabled Shang rules to interpose with their ancestors, whom the Shang believed

introduction and translation', *Studies in the History of Gardens & Designed Landscapes: An International Quarterly*, 19, 3 (1999), 259. I thank the author for this reference.

²⁷ Exceptions include, for example, the work of Duncan M. Campbell and Stanislaus Fung. Note: Duncan M. Campbell, "The Moral Status of the Book: Huang Zongxi in the Private Libraries of Late Imperial China", *East Asian History*, Vols. 32 & 33 (December 2006/June 2007), 1-24; Duncan M. Campbell, "Reflections on the Tower of the Crimson Clouds and the History of the Private Library in Late Imperial China", *East Asian History*, Vol. 38 (2014), 63-74; Stanislaus Fung, 'Longing and Belonging in Chinese Garden History', in *Perspectives on Garden Histories*, ed. by Michel Conan (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1999), 205-219.

²⁸ Clunas's translation of Qian Yong's colophon to Wen Zhengming's album, *The Garden of the Artless Official* (Zhuozhengyuan tuce). Clunas, *Fruitful Sites*, 38.

²⁹ This is one of Craig Clunas' argument in *Fruitful Sites*.

possessed powers to foresee and shape the future. Diviners then interpreted fractures on the heat-cracked, heaven-shaped bones and made their recommendations accordingly. The late-nineteenth-century discovery of real oracle bones verified the Shang's existence, and represents China's earliest known form of writing.

Written Chinese unified a multi-ethnic, multi-lingual society. The written language conveyed vital information about statecraft and suzerainty, religion and rites, resources and responsibilities. It also underpinned collective and self-identity through development of shared values, philosophies, religions, and literature. China's rule became synonymous with a bureaucracy staffed by highly literate scholar elites (mandarins). Literacy and knowledge of the classics shaped group identity, offering precepts and models from which to draw from in addressing problems of rule. Individually, literacy and a classical education stamped a scholar's identity and very being, to the degree that his ability to compose, as well as the style of his brushwork, represented extensions of the qualities of the person himself. Writing was rule, morality, the self, the empire. Other activities associated with the scholar elite also originated in writing. In calligraphy and painting composition, writing guided the movement of brush and ink on paper and silk. More prosaically, a Confucian education, along with a knowledge of the classics, enabled scholars to compete for highly coveted government positions through civil service examinations. For them, as indeed for their emperor, *wen* ('literature', 'culture', 'writing') granted access to China's rich past, and conveyed possibilities for interpreting it for one's own ends.³⁰

Names did not passively represent thoughts or objects. They possessed a latency, a power to change the world. As a gloss on Confucius' thinking explains (*Analects*, chapter 13.3):

When names have lost their integrity, words can no longer be trusted, and when words cannot be trusted, nothing can get done: government will cease to function, and the state will come to its demise. This is the reason why Confucius says that if he were put in charge of an administration, he would rectify names first.³¹

Given their vital importance in life and governance, names for people and names for things required careful deliberation and great care in imperial China. A name, appropriately chosen, established correct relationships between people and things. Correct naming contributed to social harmony; correct naming created an orderly and properly functioning society. Incorrect naming invited disharmony; incorrect naming risked disorder and social chaos.

That great arbiter of late-Ming (1368-1644) taste, Chen Jiru (1558–1639), famously described the naming of a garden's features as one of the 'Four Difficulties'. When appropriately named, garden features acquired poetic couplets, ideally from the brush of renowned scholars. Inscribed stones (stele) formed an important component of gardens, serving myriad purposes: they could offer a response to particularly attractive rockwork, mark the occasion of an important visit, or acknowledge a design feature taken from a

³⁰ For an introduction to a complex topic, see: Pierre Ryckmans, *The Burning Forest: Essays on Chinese Culture and Politics* (New York: Henry Holt, 1985); Mark Edward Lewis, *Writing and Authority in Early China* (Albany, New York: State University of New York Press, 1999); Lothar Ledderose, *Ten Thousand Things: Module and Mass Production in Chinese Art* (Princeton: Princeton University Press, 2000). A delightful introduction to this topic is John Spurling, *The Ten Thousand Things: A Novel* (London: Bloomsbury, 2014).

³¹ Confucius, *The Analects (Lunyu)*, trans. and introduced by Anping Chin (New York: Penguin, 2014), Book 13, chapter 3, p. 198.

particular poem.³² Over time, a garden accumulated a rich cultural history of essays, poems, records of visits, and paintings, brushed both by the owner himself and his visitors. Such records commonly circulated among literati, to reappear later in print.

Poetry composition, painting, reading and writing breathed life into a garden, giving it form and purpose. Literary endeavours, like poetry-writing competitions, cultivated the reputation of a garden and its owner, as did the magnificent libraries held within its walls.³³ The importance of the written word within gardens and circulation of descriptions of them contributed to a garden's lasting fame. An owner often adopted the name of his garden. In 1795, Qian Daxin (1728-1804) recorded that Song Zongyuan 'took the name Master of the Fishing Nets both for himself and for his garden, thus giving expression of his desire for rustic reclusion and picking up also upon the sound of the original name of the lane along which his garden was found'.³⁴ Thus, it can accurately be said that 'to wander around a Chinese garden is akin to reading a text with various levels of allusion and historical and literary reference.'³⁵

Yet I would argue that it is their very textual quality, their very association with the written word and literary endeavours that has also precluded examination of gardens and their production in China as physical objects, as sites whose construction and maintenance had environmental repercussions and ecological impacts far beyond the confines of their walls.

In some respects, the argument I am positing here echoes that of Craig Clunas and more recently, Georges Métaillé. Some twenty years ago now, Clunas somewhat controversially contended that southern Chinese gardens from the late-Ming (1368-1644), more particularly those from the southern Chinese city of Suzhou, belied their reputation as sites solely of political disengagement, artistic retreat, and aesthetic appreciation. 'The more the garden was actually penetrated by buying and selling,' he argued, 'the shriller grew the claims that it was a place absolutely apart, absolutely unlike' a productive field or orchard.³⁶ In actuality, he charged, gardens had fruit trees and raised other commercial crops. They served as tax dodges through the valuable property and goods stored within their walls. And, they were fully activated in the realm of politics.

As Métaillé has shown, for no less a figure than the historian Sima Guang (1019-1086), as for others, a garden provided a source of plants, both medicinal and economic, and a wellspring of knowledge about them. This was especially through their cultivation and the often-special

³² As a practice, garden-naming dates from the Song (960-1270 CE), but arguably reached its zenith during the Ming and Qing (1644-1911) dynasties. John Makeham, 'The Confucian Role of Names in Traditional Chinese Gardens', in 'Chinese Gardens', guest edited by Stanislaus Fung and John Makeham, *Studies in the History of Gardens and Designed Landscapes: An International Quarterly*, 18, 3 (July-September 1998); Robert Harrist, 'Site Names and their Meanings in the Garden of Solitary Enjoyment', *Journal of Garden Studies*, 13, 4 (1993), 199-212.

³³ Duncan M. Campbell, 'Reflections on the Tower of the Crimson Clouds and the History of the Private Library in Late-Imperial China', *East Asian History*, 38 (2014), 63-74.

³⁴ Duncan M. Campbell, 'Transplanted Peculiarity: The Garden of the Master of the Fishing Nets', *New Zealand Journal of Asian Studies* 9, 1 (007), 21.

³⁵ James Beattie and Duncan M. Campbell, *The Art, Culture and History of Lan Yuan 蘭園: The Dunedin Chinese Garden* (Dunedin: Shanghai Museum Press and Dunedin Chinese Gardens Trust, 2013), 75. Note, also, John Minford, 'The Chinese Garden: Death of a Symbol', *Studies in the History of Gardens & Designed Landscapes*, 18, 3 (1998), 257-268.

³⁶ Clunas, *Fruitful Sites*, 107, 169.

relationship which developed between a garden owner and a particular plant.³⁷ Yuan Hongdao (1568-1610) relates that any of the ‘ancients afflicted by the obsession for flowers’

... would either gather around him a thousand plants and ten thousand varieties in order that he may gain an exhaustive understanding of the entire process of their transformation or he would restrict himself to a single branch and a couple of rooms so that he could experience to the fullest that particular flower’s delight.³⁸

My argument, however, differs from Clunas and Métaillé by positing the need for an environmental and ecological consideration of the gardens of China. I contend that the construction and maintenance of gardens in China—especially the late-imperial vogue in northern China for southern Chinese gardens, plants, and rocks—had sometimes profound ecological and material impacts on wider environments. Gardens demanded resources and materials—rocks, plants, water, buildings—and industries catering to them, such as plant nurseries, quarries, and transportation networks. In addition, as Clunas’ work points out, especially for late-imperial southern China, gardens took up valuable and scarce agricultural land.

Below, is a case study of the benefits of adopting a cultural *and* material reading of garden history in China; a demonstration of how garden and environmental history can cross-fertilise research.

Huizong’s Marchmount

In the year 1111, Emperor Huizong (Zhao Ji, 1082-1135, reign 1101-1125) began an ambitious project. It was to develop Genyue (Gen Mountain) Garden as an imperial park,³⁹ in the-then imperial capital known as Bianjing (present-day Kaifeng). Gen Mountain represented a key component of Huizong’s ambitious project to seek out divine approval for himself and his empire, an obsession ranging from commissioning auspicious images and texts to construction of the large park itself.

Gen Mountain originated in the prophesying of a royal soothsayer. Liu Hunkang (1035-1108), a Daoist, court advisor, and renowned healer,⁴⁰ pronounced that for Huizong

to breed male heirs, which he then lacked, he needed to supply *gen*-indicated by the seventh of the Book of Divination’s (the *Yijing*) eight trigrams, literally, a *yang* line over two *yin* lines, reduplicated, and the fifty-second of the book’s sixty-four hexagrams, standing for mountain and stability-in the form of more rockery.⁴¹

³⁷ 249.*** book ref or ibid?

³⁸ Duncan M. Campbell, ‘Yuan Hongdao’s “A History of the Vase”’, *New Zealand Journal of Asian Studies* 5, 2 (2003), 88.

³⁹ A delightful account of the memory of Kaifeng is found in, Pei-yi Wu’s translation and discussion of Meng Yuan-lao’s ‘A Record of the Dreams of the Eastern Capital’s Splendor’: ‘Memories of K’ai-feng’, *New Literary History*, 25, 1 (1994), 47-60.

⁴⁰ James Hargett, ‘Huizong’s Magic Marchmount: The Genyue Pleasure Park of Kaifeng’, *Monumenta Serica*, 38 (1988-1989), 8-9.

⁴¹ Jerome Silbergeld, ‘Beyond Suzhou: Region and Memory in the Gardens of Sichuan,’ *Art Bulletin*, 86, 2 (2004), 209.

Descriptions of this imperial park resonate with modern readers familiar with the gardens of late-imperial southern China—and for whom such gardens, thanks to their ubiquity, they often erroneously regard as the very quintessence of ‘*the Chinese garden*’.⁴² Named kiosks, pavilions, rock features, groves, grottoes, islets, and water features filled Genyue. Auspicious inscribed rocks stood within it. Walks snaked up and around its artificial mountains, and meandered beside its lakes. Bamboo groves clattered in the wind. Jasmine and the sweet fragrance of flowers from all four corners of the Empire and beyond lingered heavily and lazily in the air. Nothing, it seems, was lacking in this garden, no small detail overlooked, no flower out of place. ‘Of the marvelous flowers and beautiful trees, rare birds and odd beasts, there were none that were not assembled and accumulated’, reads an account from the time. ‘Soaring lofts and outstanding belvederes, imposing and magnificent, extraordinary and elegant, reached perfection here.’⁴³

Its centrepiece was Longevity Mountain, the Northeast Marchmount (Shoushan Genyue). Built up from earth and topped with smooth purple rocks and trees, it was accessible only via rock steps and ledges cut into its face. Zu Xiu’s ‘Record of the Florescent Solarity Palace’ adds to this description: ‘The mountain ... stands prominently’ and on its ‘crest a deep pool has been built’. When the Emperor visited, engineers released a sluice gate in the pool that formed a bubbling cascade.⁴⁴

Completed after six years’ efforts in 1117, the garden’s monumental scale drained China’s human and natural resources, and eventually cost Huizong his freedom and the Empire’s unity. A specially created Flower and Rock Network (Huashi gang) mobilized China’s vast resources, coordinating what effectively became a massive redistribution of flora, fauna, and rocks from the south to the north, and from its tribute empires. As Edward H. Schafer has observed, during the Tang (618-960) southern Chinese cities would have offered abundant ‘opportunities for the introduction of new species, especially ... attractive tropical flowers and fruits.’⁴⁵

In Huizong’s time, boats moved rocks, plants, flowers, and animals on the seas, by ferry across the Yangzi River, and through openings ‘chiseled for them through ramparts and barbicans.’ They continued, as one account put it, ‘one after another, day and night, without a break’. This system, known as Divine Conveyance (Shenyun), shipped rocks from Lake Tai (Jiangsu Province) and Lingbi (Anhui Province). It moved ‘marvelous bamboos and odd flowers from the Two Zhes’. It transported ‘veined rocks from Deng and Lai, stripped bamboos from Hu and Xiang, and [took] wonderful fruits and odd trees from Sichuan’.⁴⁶

The Emperor’s insatiable and exacting demands for Genyue’s construction diverted military, officials, and civilians from their proper roles in society—borders went unguarded, taxes remained uncollected, crops spoiled in unharvested fields, or so traditional accounts testify. ‘Four commands from Guangji were depleted in order to provide hauling officers. Yet, still

⁴² Clunas, *Fruitful Sites*; Duncan M. Campbell, ‘Displaced Gardens as Sites of Chineseness: Design & Function’, talk, *Museums, Art and Cultural Diplomacy*, University of Canterbury, 28-29 April 2016.

⁴³ Zhang Hao (ca. 1180-1250), ‘Appendix: An Annotated Translation of the “Record of the Northeast Marchmount”’, trans. by Hargett in Hargett, 34.

⁴⁴ Zu Xiu’s ‘Record’ is found in Zhang Hao’s ‘Annotated Translation’, in Hargett, 39.

⁴⁵ Edward H. Schafer, *The Golden Peaches of Samarkand: A Study of Tang Exotics* (Berkeley, Los Angeles, London: University of California Press, 1963), 118.

⁴⁶ Zhang Hao’s ‘Annotated Translation’, in Hargett, 33-34.

they did not supply enough', recorded a near-contemporary account. Imperial coffers were rapidly depleted. Although Huizong realised the project's impact on China's people and economy, still the project continued unabated:

...the expenses involved in shipping specimens to the capital... are easily reckoned to be almost infinite in number. Common people were dispatched to search around cliffs and sift through swamps. Shrouded and secret locales were not disregarded. Each flower and each tree selected for later confiscation was wrapped with a yellow imperial seal. If someone was even slightly inattentive in guarding and watching over them, he was then charged with a crime. Mountains were hacked to pieces and rocks were carted away. Despite the unfathomable gulfs in the lakes and rivers, to which human efforts could not reach, every possible scheme was used in order to get the rocks out and to their destination.⁴⁷

The scale of the ransacking and redistribution of the botanical riches of the Empire—which especially from the south and its tribute empire—to Kaifeng illustrates the enormous environmental impacts of this gargantuan pre-modern mobilisation of human and natural resources.⁴⁸ As Huizong himself noted, his subjects searching for plants

transmitted loquat (*Eriobotrya japonica*), orange (*Citrus sinensis*), pomelo (*Citrus grandis*), sourpeel tangerine (*Citrus deliciosa*), sweetpeel tangerine (*Citrus reticulata*), betel-nut palm (*Areca catechu*), Chinese juniper (*Sabina chinensis*), and lichee (*Litchi chinensis*) trees, as well as gold moth (unidentified), jade bashfulness (unidentified), tiger ear (*Saxi fragaceae*), phoenix tail (*Pteris multifida*), jasmine (*Jasminum grandiflorum*), oleander (*Nerium odorum*), Indian jasmine (*Jasminum sambac*), and magnolia (*Michelia figo*) plants. Ignoring variations in geography and differences in climate, all the trees and plants generated and grew...⁴⁹

Huizong believed that the growth of these imported plants and trees—just like the development of his garden—concentrated Heaven's favours into one particular place and time. Genyue was one in a long line of imperial gardens which 'were in effect magical diagrams, vegetable cantrips binding the several natural realms of the whole world under the spiritual sway of the Son of Heaven.'⁵⁰ Yet, as every student of Chinese history is taught, the scale and nature of Huizong's garden enterprise ultimately contributed to the Son of Heaven's humiliating imprisonment, the loss of the Song capital, and the division of the Song dynasty itself.⁵¹ With China weakened by the project—and more generally by his patronage of the arts to the detriment of the economy and border forces—invading Jurchen swept into the Empire, and established the Jin dynasty (1115-1234) in the northern parts of what had been the Song dynasty.

⁴⁷ Zhang Hao's 'Annotated Translation', in Hargett, 33.

⁴⁸ On plant and animal transportation, see: Schafer, *The Golden Peaches of Samarkand*, chs. 3-5, ch. 7.

⁴⁹ "'Record of the Northeast Marchmount'", cited in Zhang Hao's 'Annotated Translation', in Hargett, p. 35.

⁵⁰ Schafer, *The Golden Peaches of Samarkand*, 118.

⁵¹ Thus, it has become hereafter known as the Southern Song (1127-1279). This portrayal of Huizong is, of course, simplified. For a reading of his reign and contribution, see Hargett, 'Huizong's Genyue Pleasure Park'; Maggie Bickford, 'Emperor Huizong and the Aesthetic of Agency', *Archives of Asian Art*, 53 (2002/2003), 71-104.

The close connection of the cultural and the material, not to mention the geopolitical, represented by Genyue forces us to move beyond literary descriptions of the garden in China. We can consider moving resource frontiers like those developed by Huizong to create Genyue as forging what Edward Melillo, Emily O’Gorman, and I term ecocultural networks. This refers to the way in which the exploitation of nature and its transformation into commodities connected people, places, and natures through environmental exchanges and the development of associated technologies, labour systems, and capital exchanges.⁵² Genyue’s demand for the natural resources of southern China especially, created moving resource frontiers that linked different places, people, and ecologies. Resource exploitation associated with the garden created new forms of labour organisation, communication, transportation, and nature, as demonstrated through the Flower and Rock Network and its myriad supporting structures, snaking from South to North, East to West.

Huizong’s monumental garden enterprise and its exemplification of ecocultural networks illustrates well my point of the benefits and necessity of combining approaches from garden and environmental history to consider the cultural and material dimensions of gardens and their wider environmental impacts. One must understand Huizong’s project in relation to his obsession with auspicious signs and his cultivation of the arts, in relation to his religious beliefs and his ideas of statecraft.⁵³ But one must also understand Huizong and his garden in relation to politics and culture, economy and environment.

Despite its infamy, Huizong’s Marchmount has received no attention from environmental historians. Instead, it has been translators, garden historians, and art historians who alone have interpreted this garden, one so rich in meaning.⁵⁴ This situation is indicative of the more general neglect of gardens by environmental historians of China, the reasons for which differ somewhat from those which underpin garden history’s disregard among environmental the historians of Europe, America, and Australia.

One important difference relates to the nature of environmental history in China. So pervasive an influence has Marxist thought been on the historical profession in the People’s Republic of China (1949-) that environmental historians trained in that country have primarily investigated material changes to the environment.⁵⁵ A contributing factor is the staggering environmental results of China’s rapid economic development that lend urgency to study of industrialisation and pollution.⁵⁶ Furthermore, and this is true of the Chinese-speaking discipline in general, it is somewhat safer politically to examine impersonal

⁵² *Eco-Cultural Networks and the British Empire: New Views on Environmental History* (New York; London: Bloomsbury, 2015). Ed. J. Beattie, Edward D. Melillo and Emily O’Gorman; J. Beattie, E. O’Gorman, and E. Melillo, ‘Rethinking the British Empire through Eco-Cultural Networks: Materialist-Cultural Environmental History, Relational Connections and Agency’, *Environment and History*, 20, 4 (2014), 561-575.

⁵³ Bickford, ‘Emperor Huizong’.

⁵⁴ See, for example, Hargett, ‘Huizong’s Genyue Pleasure Park’; Bickford, ‘Emperor Huizong’; Silbergeld, ‘Beyond Suzhou’, 209-210.

⁵⁵ James Beattie and Ts’ui-jung Liu, ‘Introduction—Environment, Modernization and Development in East Asia: Perspectives from Environmental History’, in *Environment, Modernization and Development in East Asia: Perspectives from Environmental History* ed. by Ts’ui-jung Liu and James Beattie (Basingstoke: Palgrave Macmillan, 2016), 1-30.

⁵⁶ On which, note: the special issue of: *Daedalus: Journal of the American Academy of Arts & Sciences* 143, 2 (2014); Judith Shapiro, *China’s Environmental Challenge* (Cambridge and Malden, MA: Polity Press, 2012); Elizabeth C. Economy, *The River Runs Black: The Environmental Challenge to China’s Future* (Ithaca, NY: Cornell University Press, 2005).

economic targets rather than historical figures. More prosaically, environmental history in the Chinese-speaking world grew primarily out of economic history.

Like their counterparts in China, Western scholars writing on China's environmental history also overwhelmingly focus on material changes to the environment, although some, such as Mark Elvin and Timothy Brook, have been more active than their counterparts in China in examining the intellectual dimensions of environmental history and their visual representation, a task taken up with enthusiasm for literature by Karen Thornber.⁵⁷ But it remains true that the majority of western scholars of China's environmental history concentrate on examining material changes to nature. A case in point is over debates on The Great Divergence, between China and the West, which have relied on the assembly of comparative economic and environmental data on the two areas.⁵⁸

Future directions

While I have highlighted the benefits of an ecocultural approach as a means of bringing together environmental history and garden history, other frameworks can serve a similar purpose. Micro-history could provide in-depth analysis of individual gardens in relation to large-scale environmental processes, enabling environmental historians to do to Monticello Garden what Le Roy Ladurie did to the village of Montaillou.⁵⁹

Expanding existing anthropological theories to take greater account of environmental impacts is another possible approach. For example, one fruitful approach advocated by cultural anthropologist Gene Anderson is to incorporate ecological perspectives into food systems and foodways studies.⁶⁰ Foodways have traditionally focussed on 'production, regulation, representation, identity and consumption',⁶¹ but, as Anderson notes, they neglect the ecological dimensions of these activities. Using his revised approach, Anderson's own work

⁵⁷ Mark Elvin, *The Retreat of the Elephants: An Environmental History of China* (New Haven, CT, and London, Yale University Press, 2004); Brook, for example, uses visual evidence to illustrate the impacts of the Little Ice Age in China. Timothy Brook, *The Troubled Empire: China in the Yuan and Ming Dynasties* (Cambridge, M.A.; London: Belknap Press of Harvard University, 2010). A welcome exception is the work of Karen Thornber *Ecoambiguity: Environmental Crises and East Asian Literatures* (Michigan: University of Michigan Press, 2012).

⁵⁸ Kenneth Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton, NJ: Princeton University Press, 2000); Mark Elvin, 'The Environmental Legacy of Imperial China', *China Quarterly*, 156 (1998), 749-750. Debate on the 'Great Divergence' is well summarized in E.N. Anderson, 'Agriculture, Population, and Environment in Late Imperial China', in Liu and Beattie, eds., *Environment, Modernization and Development in East Asia*, 31-58.

⁵⁹ Giovanni Levi, 'On Microhistory', Peter Burke, ed. *New Perspectives on Historical Writing* (University Park: Pennsylvania State University Press, 1991), 93-114; R. W. Sandwell, 'History as Experiment: Microhistory and Environmental History', *Method and Meaning in Canadian Environmental History* in Alan MacEachern and William J. Turkel, eds. (Nelson: Toronto, 2009), 124-138. Emmanuel Le Roy Ladurie, *Montaillou: The Promised Land of Error*, translated by Barbara Bray (New York: G. Braziller, 1978).

⁶⁰ *Food and Environment in Early and Medieval China* (Philadelphia: University of Pennsylvania Press, 2014).

⁶¹ Bob Ashley, Joanne Hollows, Steve Jones and Ben Taylor, *Food and Cultural Studies: Studies in Consumption and Markets* (London & New York: Routledge, 2004), vii. For a further discussion of foodways, see Sidney C.H. Cheung and Tan Chee-Beng, 'Introduction: Food and foodways in Asia', in *Food and Foodways in Asia: Resource, Tradition and Cooking*, ed. Sidney C.H. Cheung and Tan Chee-Beng (London and New York: Routledge, 2007), 1-9, quotation 2.

highlights the significance to China's environmental history of food-production systems, pharmacopeia, medical manuals, and cuisine.⁶²

The internet has been a boon to researchers of all kinds. Garden historians can access long out-of-print horticultural and botanical texts, as well as garden accounts, and a wealth of other material, including images and inventories. The same is becoming true of non-Western gardens. More primary sources on gardens and environment in China—often long available in various Chinese-language compendia—are becoming available in English. For example, a translated and edited account of gardens in China by Duncan M. Campbell and Stanislaus Fung, shortly to be published by Dumbarton Oaks, will be a godsend for scholars of China's environmental and garden history.⁶³

Conclusion

The pity is that garden historians have ignored environmental history as much as environmental historians have overlooked private gardens. The reasons are many and varied. Garden historians and environmental historians have different disciplinary training and commonly employ different methodologies, while their historiographies follow different foundational trajectories.

Through a case study of Genyue, I have sought to demonstrate that a combined approach, drawing from garden and environmental history, can better situate gardens in their wider ecological and environmental contexts. My particular argument is that one must understand Huizong's project in relation to culture and arts, religion and statecraft just as much as politics and culture, economy and environment. My general argument is that an ecocultural analysis, when applied to other kinds of gardens in other places and at other times, can bridge the environmental history and garden history divide, and by extension that between material and cultural analysis of gardens and their wider environments.

Realising these aims will require environmental historians to leap the fence and see that all gardens are part of nature. For the sake of enriching environmental history and garden history, we environmental historians must display a greater willingness to be led down the garden path.

⁶² For an example of this approach in relation to global environmental history, see James Beattie and E.N. Anderson, 'Environments and Empires in World History, 3000BCE-1900CE', in Peter Bang, C. A. Bayly & Walter Scheidel, eds., *The Oxford History of World Empires* (Oxford: OUP, 2018), forthcoming.

⁶³ *The Dumbarton Oaks Anthology of Chinese Garden Literature*, ed. by Stanislaus Fung and Duncan M. Campbell (Dumbarton Oaks: Dumbarton Oaks/Harvard University Press, forthcoming).