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Environmental statecraft and changing spatial politics: Erhai Lake protection in China

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ABSTRACT

Studies on environmental governance have mainly focused on the relationship between local state, market, and community. However, how an environmental agenda is achieved by multi-scalar state actors and how these multi-scalar interventions reshape urban spatial politics have been understudied. This research investigates the protection of Erhai Lake in Dali, a third-tier city in Western China. Erhai Lake protection is a high-profile initiative proposed by the top leader. However, it is not only conducted through a top-down target-setting authoritarian system but has also invoked market and state interventions from various scales. Based on this case, we first reflect on statecraft in governing environmental sustainability in China, which manifested in mobilizing hybrid instruments to achieve the environmental goal. Second, environmental practices at the local scale do not municipalize environmental resources. Instead, the provincial-level state stands out in influencing local regulations and deploying state-owned enterprises to achieve environmental and economic ends. These actions peripheralize local city authorities in economic development, social management, and environmental assets management, undermining the entrepreneurial stance of the city government. This research contributes to understanding the co-evolution of urban spatial politics and environmental practices.

1. Introduction

While cities are at the frontier of dealing with wider processes such as climate change, economic downturn, financialization, and fiscal shortfalls, local governments have incorporated multiple logics rather than only for economic growth (Bulkeley & Castán Broto, 2013; Peck, 2017; Wu et al., 2022). “Municipal statecraft” emerges in various contexts and manifests in numerous forms, such as financialized statecraft, entrepreneurial municipalism, and radical municipalism (Lauermann, 2018; Roth et al., 2023; Thompson et al., 2020). The entrepreneurial stance of municipal states needs to be interrogated (Lauermann, 2018). Meanwhile, cities are the frontier of protecting the environment, achieving green goals, and implementing environmental projects (Beeson, 2010; While et al., 2004, 2010). Taking a relational view of statecraft, practices for building environmental sustainability are not just “local” but entail multi-scalar involvement and rebuild urban spatial politics (Cirolia & Harber, 2022; Pike et al., 2019). Municipal states become both the subject and the object of such transformation. Situating environmental governance in a transforming urban governance dialogue (Wu et al., 2024), this research illustrates how an environmental project

is implemented and mediated by multi-scalar state practices in China and how environmental practices transform urban spatial politics.

In China, the environmental agenda is integrated into urban governance agendas for three reasons. First, the central initiative has shifted from focusing on economic growth to green and sustainable development (Kostka & Zhang, 2018; A. L. Wang, 2013). Local governments confront top-down pressures to protect the environment and align with the central policies (Chang et al., 2016; Pow, 2018; W. Wang, Wu, & Zhang, 2023). Second, with the increasing concern about pollution and environmental quality, investors prefer locations with green landscapes and recreational facilities. This is also associated with the upgrading and industrial transformation of the Chinese economy (Chung et al., 2018). Third, growing public concerns about air pollution and environmental quality lead to environmental agendas in urban development. Although forces from both above and below exist, municipal states are dealing with more pressing environmental targets from the central state in China (Chang et al., 2016; Chen, 2022; Pow & Neo, 2013; F. Zhang et al., 2022; F. Zhang & Wu, 2022). Existing studies focus on “authoritarian environmentalism” characterized by the campaign style, target-setting, command, and control mechanism in achieving central-initiated

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environmental goals in China (Gilley, 2012; Kostka & Zhang, 2018; Lo, 2015). Nevertheless, local operations are more complicated than coercive enforcement, involving versatile practices, contradictions, conflicts, and power restructuring.

This study investigates how a centrally initiated environmental agenda is implemented through various multi-scalar statecraft and how environmental practices reshape urban spatial politics based on the protection of Erhai Lake in Dali. Erhai Lake, the seventh-largest freshwater lake in China, is in Dali City,¹ a third-tier city² in China. Since President Xi Jinping visited Dali and commented on Erhai Lake protection in 2015, improving the environmental quality of Erhai Lake has become the paramount goal of urban governance. Due to proactive environmental actions, the water quality of Erhai Lake has improved since 2016. State media reports this as an achievement of President Xi's thoughts on ecological civilization (China Economic Weekly, 2018).

We find that multi-scalar state actors are intertwined in conducting environmental protection and ecological restoration in a less-capable city. Erhai Lake protection has involved hybrid environmental actions, including stringent regulations and multiple environmental projects such as pollutant treatment, greenway construction, and ecological relocation. These projects demonstrate regulatory, financial, and marketized forms of environmental statecraft beyond authoritarian coercive enforcement (Gilley, 2012; Li & Shapiro, 2020; Tilt, 2007). Moreover, the overriding environmental goal has challenged the nature of the municipal state. Multi-scalar environmental statecraft has reshaped urban spatial politics. Environmental actions do not municipalize environmental resources but marginalize the city's control over environmental resources, economic development, and local affairs.

This paper is organized as follows. The next section reviews the literature on environmental governance and urban governance research, followed by a review of environmental governance in China. Based on the review of authoritarian environmentalism and inspired by recent studies on statecraft and eco-state restructuring, we propose environmental statecraft as a framework for understanding urban environmental governance. The empirical section explains how a centrally initiated environmental goal is implemented in Dali by deploying three types of environmental statecraft. We also reflect on the implications for urban spatial politics. The conclusion section discusses findings on environmental governance and urban politics.

2. Urban environmental governance and spatial politics

This research focuses on the co-evolution of environmental governance and urban spatial politics. First, the state becomes a focal point in studying environmental governance. Modern states are expected to carry out multiple imperatives, such as pursuing economic growth, providing public services, and managing environmental externalities. Recent studies have shown the pivotal role of the state in addressing environmental issues globally (Bulkeley & Castán Broto, 2013; Duit et al., 2016; Sneddon et al., 2022). By proposing "the environmental state," Duit et al. (2016) accentuate the "institutions and practices dedicated to the management of the environment and societal-environmental interactions" (p. 5). Performing an environmental agenda as a state project has significant implications for urban spatial politics. For instance, as environmental consensus is increasingly

¹ Dali Bai Autonomous Prefecture is a prefecture in Yunnan Province, including several counties and a county-level city of Dali. In this paper, "Dali City" refers to Dali Bai Autonomous Prefecture and "Dali County" refer to the county-level city.

² Dali is classified as a third-tier city by the National Statistical Bureau. This categorization is mainly based on cities' economic status. For example, in a recent report on commodity housing prices, the National Statistical Bureau categorized 70 cities into three tiers with Dali as a third-tier city. https://www.gov.cn/lianbo/bumen/202406/content_6957699.htm.

built at a supra-national level, environmental goals and values penetrate urban spaces from a wider scale (Bulkeley, 2005). Meanwhile, new forms of environmental governance challenge urban and regional development and lead to "eco-state restructuring" (While et al., 2010).

Second, environmental governance extends the arena of urban governance (Bulkeley & Castán Broto, 2013; While et al., 2004). Environmental goals are incorporated into the local agenda to challenge for-growth urban entrepreneurialism. Originally, urban governance emphasized the integration of market actors into urban development when facing local fiscal shortfall and inter-city competition (Harvey, 1989; Jessop, 1997; Peck & Tickell, 2002). Local governments act like entrepreneurs to cooperate with the market to pursue a growth agenda (McCann, 2017; Molotch, 1976). Entrepreneurialism has dominated urban politics worldwide, albeit with various relevance and degrees (Lauer mann, 2018). Nevertheless, the state demonstrates new interventionist strategies in urban affairs, and new municipalism emerges (Roth et al., 2023; Russell, 2019; Thompson et al., 2020). Urban governance featuring decentralization and public-private partnership has transformed to a new stage where the art of municipal states in governance, or "municipal statecraft," is stressed to achieve goals beyond growth (Cirolia & Harber, 2022; Lauer mann, 2018; McGuirk et al., 2021).

Urban environmental governance has significant political implications, as urban space is a spatial scale where multi-scalar power relations materialize (Smith, 2010; Swyngedouw & Heynen, 2003). Scale is not a pre-determined territorial or hierarchical concept. Rather, scale is socially constructed and evolving (Brown & Purcell, 2005; Cox, 1998; Swyngedouw & Heynen, 2003). Urban governance and its recent transformation seem to advocate a localized governance form to address social problems, economic issues, and environmental agendas. However, scalar politics reject anything inherent in urban or local scale to avoid the "territorial trap" and "local trap" (Brenner, 2004; Brown & Purcell, 2005). For example, in transboundary water governance, although local authorities are increasingly present in environmental governance, their decision-making power may not be strengthened (Norman & Bakker, 2009). Local-scale decision-making can lead to a more democratic city or a less democratic one (Purcell, 2006). Scale is also dynamic rather than static (Cox, 1998). The scale *per se* is unimportant, but specific processes and practices with scalar dimensions should be analyzed (MacKinnon, 2011). Reshaping spatial scales in environmental governance "is an integral part of social strategies to combat and defend control over limited resources and/or a struggle for empowerment" (Swyngedouw & Heynen, 2003, p. 913). From a relational perspective, scalar politics call for a solid understanding of the nested and hierarchical articulation of multi-level actors at the urban scale and how these articulations transform the existing scalar structures.

3. Understanding environmental governance in China

Scholars have used "authoritarian environmentalism" to describe China's environmental governance, which is characterized by a top-down system, coercive policy enforcement, and limited public participation (Beeson, 2010; Gilley, 2012; Li & Shapiro, 2020; Xie et al., 2019). China's environmental governance has its authoritarian dimension in terms of centrally initiated mandates. Recently, the central state in China has promulgated "ecological civilization" as an emerging environmental imperative (Chung & Xu, 2021; Geall & Ely, 2018; Kostka & Nahm, 2017; Pow, 2018). It was first mentioned in official documents in 2007 at the CCP's 17th Congress. President Xi's government has expanded this concept and upgraded it to a higher level in the central policy agenda since 2012. In 2015, the State Council issued an *Integrated Reform Plan for Promoting Ecological Civilization* to explain ecological civilization systematically. This initiative is advertised as the main achievement of President Xi's regime (Kostka & Zhang, 2018). The environmental agenda has become an arena to consolidate the state's power (Li & Shapiro, 2020). Authoritarian mechanisms have been

strengthened in the era of ecological civilization (Geall & Ely, 2018; Lo, 2020).

Two strands of literature complement the understanding of authoritarian environmentalism in China. First, there has been a central-local tension when achieving centrally initiated environmental agendas. The Chinese state apparatus is a complex and heterogeneous body with intra-state alignment and tensions (Peck & Zhang, 2013). Although environmental goals are usually promulgated at a higher level, they are implemented and conducted to various outcomes, contingent upon local capacities and willingness (Kostka & Nahm, 2017). Local governments used to protect local industries and conduct enforcement laxly (Lo, 2015). Dealing with non-compliance, campaign-style coercive enforcement has been strengthened recently. For example, the Central Environmental Inspection Team was devised by central authorities to exert significant control over local implementation and ensure compliance (Lo, 2020; W. Shen & Jiang, 2021).

Second, society plays a role in influencing policy-making and environmental actions (Teets, 2018; C. Zhang, 2023; Zhu et al., 2023). The so-called authoritarianism is actually fragmented, allowing societal groups and individuals to influence the political process “by adopting strategies necessary to work within the structural and procedural constraints of the fragmented authoritarianism framework.” (Mertha, 2009, p. 996) For example, Teets (2018) contends that civil society organization can access government officials to change environmental policies, challenging the previous understanding of authoritarian environmentalism. Civil activism is tolerated to monitor local officials and enhance accountability in environmental governance (Zhu et al., 2023). Scholars also notice the important role of citizens’ complaints and surveillance in reshaping the implementation of environmental regulations (Tilt, 2007). Hence, the actual operations of environmental governance are complicated by intra-state tensions and the fragmented authoritarian framework.

At the urban level, how and to what extent does the central environmental imperative dilute or divert urban entrepreneurial governance and the tensions herein? The latter, featuring place-making campaigns, urban sprawl, and land finance, has been a predominant model of contemporary urban development in China (G. C. S. Lin, 2014; J. Shen & Wu, 2012; Su, 2015). On the one hand, local governments act proactively to achieve environmental targets that are facing top-down pressures (Xie et al., 2019). Local actions are characterized by campaign-style and coercive enforcement (Liu et al., 2015). In the context of ecological civilization, local governments seek to align with the central mandates to reinforce specific environmentally friendly approaches (Chang et al., 2016; Chung & Xu, 2021). In some circumstances, environmental goals are strictly planned and implemented (Xie et al., 2019; F. Zhang et al., 2022).

On the other hand, local governments are not simply faithful allies with the central state. They utilize and deploy sources for their own purposes and carry out the central strategic will to various extents (L. Y. Zhang, 2021). For example, some local governments use environmental themes as a disguise to pursue entrepreneurial growth. Based on their study of an eco-city in Dongtan, Pow and Neo (2013) argue that an eco-city is only “a legitimization strategy for the pro-growth entrepreneurial city” (p. 2267). Besides legitimization, urban environmental projects are driven by land-based finance (Chien, 2013). Greening goals are selectively adopted to facilitate economic development, while environmental achievement is a byproduct. In environmental politics in Guiyang, the central-local relationship is interpreted as a vehicle for achieving local development-centered objectives (Chung & Xu, 2021). Although there is a significant trend of re-centralization in governing environmental issues, local outcomes vary (Kostka & Nahm, 2017; W. Shen & Jiang, 2021).

In sum, while environmental governance in China is characterized by centralized political intentions, environmental actions on the ground are more complex. First, the agenda of the municipal state is diversified rather than merely environmental or developmental. The local

implementation of “authoritarian environmentalism” is constrained by the pursuit of economic development (Lo, 2015). Second, even though environmental policy is non-participatory, local governments cannot avoid dealing with society. For example, environmental regulations may lead to social tensions that local governments have to deal with (Tilt, 2007). Tackling social discontent also reshapes local policies and actions. Third, delivering environmental goals is not only achieved through a top-down command control system. The implementation largely depends on local maneuvers and governance innovations, which are highly contingent (Chang et al., 2016; F. Zhang et al., 2022).

4. Theorizing statecraft in governing environmental sustainability

We engage with studies on urban politics and environmental governance to understand urban environmental governance in China. First, echoing recent studies emphasizing the role of the municipal state and versatile local approaches in dealing with imperatives from above and below, we find that “statecraft” is helpful in theorizing urban environmental governance (Wu et al., 2024). Statecraft was originally proposed by Bulpitt (1986) to analyze the art of elections and governing in British politics. Recent studies on urban governance have developed this concept to unpack the art of governing, especially at the urban level. According to Pike et al. (2019), city statecraft is “the art of city government and management of state affairs and relations,” which “is open to the involvement of multiple states, para-state and non-state actors” (p.89). Municipal/city statecraft incorporates multiple innovative forms such as financialized statecraft, diplomatic statecraft, and socially-engaged statecraft (Lauermann, 2018; Pike et al., 2019; Teo, 2023). It is fundamentally a relational perspective concerning multi-scalar power dynamics at the local while putting the municipal government at the core (Cirolia & Harber, 2022). Municipal statecraft highlights the operations of the local government in a nested hierarchical relation, which is also valuable for unpacking urban governance in China, featuring government-led governance innovations.

Nevertheless, statecraft at the urban level is not necessarily equal to municipal statecraft. Echoing a call from Cox (1998), local politics do not necessitate the involvement of local branches of the state. The analysis centered on the local state is problematic because there is “the tendency to relegate to the analytical backdrop the multi-scalar connections through which urban economy-environment relations are made and unmade” (Chung & Xu, 2021, p. 689). Wu (2018) uses “state entrepreneurialism” to combine two significant governance features in China: planning centrality and market instruments. Different from urban entrepreneurialism, “state entrepreneurialism” stresses the leading role of the state, both in terms of central initiatives and local state capacity. The municipal government is a “representational form of state entrepreneurialism. The territorial form represents multiple scales beyond the city itself” (Wu, 2017, p. 155). The local state space has been significantly reshaped by multi-scalar state involvement in China (Su, 2022). Hence, unlike “municipal statecraft,” which regards the municipal state as a principal body in governing local affairs, we use “statecraft” to analyze how multi-scalar state actors and agencies influence urban governance. Especially in China, multi-scalar statecraft rather than “municipal statecraft” is appropriate for addressing hierarchical influence and innovative crafts (Kostka & Nahm, 2017; Wu et al., 2022).

This framework also resembles eco-state restructuring in environmental governance, which focuses on how “environmental policy is located within the assemblage of state strategies, as well as the ways in which trajectories of state environmental regulation are shaped by processes of struggle, negotiation and compromise between different interests within and across different scales of territoriality” (While et al., 2010, p. 89). Inspired by eco-state restructuring, scholars have illustrated the important role of the Chinese state in environmental governance in terms of centralized planning and rescaling processes (Chang et al., 2016; Chung & Xu, 2016; W. Wang, Wu, & Zhang, 2023).

Nevertheless, studies on eco-state restructuring have mainly focused on regulatory tools (Chang et al., 2016; W. Wang, Wu, & Zhang, 2023). S. Y. Lin (2021) illustrates the evolution of environmental governance in incorporating diversified actors (such as SOEs) to achieve resource management in China. Eco-state restructuring provides an example of understanding environmental governance in scalar politics.

In dialogue with the literature on urban governance and environmental governance, we propose “environmental statecraft” for understanding urban environmental governance in China. By putting the state in the foci of analysis, environmental statecraft foregrounds how a state-led environmental goal is achieved through innovative statecraft, incorporating the mobilization of multi-scalar state actors, financial instruments, and market mechanisms and how these innovations reshape urban spatial politics. First, this framework highlights the assemblage of multi-scalar state(s) strategies in initiating and achieving strategic political agendas, similar to eco-state restructuring (Chung & Xu, 2016; S. Y. Lin, 2021; W. Wang, Wu, & Zhang, 2023). Second, environmental statecraft emphasizes the grounded practices of achieving environmental goals by utilizing not only regulatory tools but also market mechanisms, such as development corporations and financial techniques (Feng et al., 2023; F. Zhang et al., 2022). Third, focusing on the involvement of multi-scalar state actors in local environmental governance, we foreground the selectivity of statecraft and discuss its implications for urban spatial politics. Specific mechanisms can be mobilized to produce a certain order, while the selection of technologies is subject to specific contexts and conditions (Jessop, 2007). Grounded operations of governing technologies are critical as they broadly reflect the capacity and the limit of environmental statecraft in a particular context of environmental governance.

5. Protecting Erhai Lake in Dali

Empirically, this research studies how a centrally initiated environmental agenda—Erhai Lake protection—is implemented in Dali City. Erhai Lake is in the middle of Dali City (Fig. 1). It covers an area of 250 square kilometers. Erhai Lake is famous for its scenery and contributes to the local tourism industry. Nevertheless, ecological degradation has become a severe issue since the 2000s because of unregulated urban sprawl, waterside tourism, sewage disposal, and increasing population in the basin area.

Erhai Lake protection is a typical example of studying environmental statecraft in China for three reasons. First, the protection of Erhai Lake has strategic significance. In 2015, President Xi visited Dali and investigated the protection of Erhai Lake. He commented that “Erhai must be protected well.” He said he “will come back a few years later and hope the water will be cleaner” (China Economic Weekly, 2018). Since then, Dali’s central goal has been the ecological treatment and protection of Erhai Lake.

Second, Erhai’s ecological protection reflects the involvement of multi-level state actions, especially the prominent role of the provincial-level state, which complicates the existing central-local relationship. Following an explanation of authoritarian environmentalism (Gilley, 2012; Li & Shapiro, 2020), the central initiative of Erhai Lake protection would become effective through a top-down target-setting system. However, the protection did not progress at the first stage after President Xi’s visit. The main constraint is the governance capacity of the municipality—Dali City government. Dali has limited fiscal income and governance experience. In 2016, the water quality of Erhai Lake deteriorated compared to 2015, the year when President Xi visited. Then, the top leader of Yunnan province commented on this issue and urged the Dali City government to “take decisive measures, initiate rescue mode” to protect Erhai Lake (Yunnan Provincial Government, 2017). Since 2017, the “battle to prevent and control pollution in Erhai Lake” has begun. It includes eight categories: pollution interception, ecological relocation, mine remediation, agricultural pollution control, river treatment, watershed ecological restoration, excessive development and construction control, and water quality enhancement and improvement (Yunnan Provincial Department of Ecology and Environment, 2018). The entanglements of multi-scalar state actors are reified in this case.

Third, the protection of Erhai Lake demonstrates environmental statecraft as the environmental agenda is conducted through a hybrid of administrative, market-like, and financial instruments with nested multi-scalar state interventions rather than merely relying on coercive policy enforcement. For instance, we will show later that the provincial government intervenes both in an administrative manner and through a market form—state-owned enterprises (SOEs).

The case study is based on a thorough analysis of documents, archives, reports, and site visits in 2022 and 2023. We conducted semi-structured interviews with 32 stakeholders in Erhai Lake protection, including government officials, residents, homestay managers, experts,

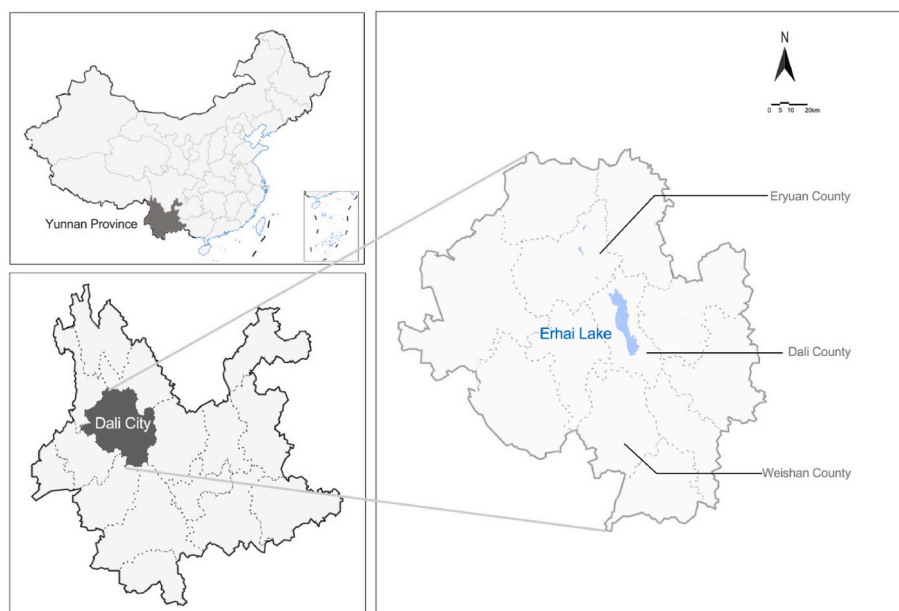


Fig. 1. The location of Dali City in China.
Source: Authors.

scholars, and urban planners. The interviews were about their experience of Erhai Lake protection and reflections on environmental practices. Several interviews were not recorded because these interviewees considered Erhai Lake protection to be a sensitive topic. In these cases, field notes were taken. We also analyzed policy documents, official reports, and relevant statistics from governments, press media, and institutions. All the data were analyzed thematically.

5.1. Regulation as an administrative form of environmental statecraft

First, regulation is an important form of environmental statecraft. While existing studies have highlighted top-down target-setting and enforcement in environmental governance (Gilley, 2012), this research analyzes local-devised regulations under multi-scalar political pressures. The Yunnan government stepped in and called for urgent action to protect Erhai Lake in 2016. In response, Dali has analyzed the source of pollution, compiled a plan for Erhai Lake protection, and implemented a series of regulations since 2017.

There were two main causes of Erhai Lake pollution—agricultural pollution and domestic pollution. The first category—agricultural pollution—is caused by the runoff of chemical fertilizers used to cultivate agricultural products. As Erhai Lake is surrounded by villages and towns, pollutants from households and agriculture nearby can be easily transferred to the lake, especially in rainy seasons. To combat agricultural pollution, Dali has enacted stringent agricultural regulations since 2017. These regulations restrict fertilizer use and change the planting structure, prohibiting the cultivation of plants that require excessive water and fertilizer. The most influential ban is about garlic. Garlic used to be the main cash crop in Dali. However, planting garlic consumes more water and fertilizers than other crops, such as rice. Therefore, garlic has been completely prohibited since 2017 on farmland near Erhai and the watershed. Eryuan County, located upstream of Erhai Lake, is an example (Fig. 1). Its pillar industry is agriculture. The prohibition of garlic is detrimental to the agriculture-based local economy. Farmers used to plant garlic and earn 30,000 yuan per *mu* (~US \$62,000 per hectare), while they can only get 3000–4000 yuan per *mu* (~US\$6200–8200 per hectare) for rice (interviews with residents, June 2023). The government gives around 1200 yuan (~US\$2500 per hectare) to support farmers in switching crops, which is far less than the sacrifice of farmers. Several ecological scholars found whether planting garlic directly leads to Erhai Lake pollution is debatable. However, “at that time, something must be done” (Interviewee 21, June 08, 2023).

The other set of strict regulations deals with pollution from tourism and households next to Erhai Lake. As the lake is famous for its breathtaking scenery, it contributes largely to Dali and even Yunnan province tourism. Most of the shoreline of Erhai Lake is occupied by villages and towns, where small-scale homestays and restaurants have developed rampantly since 2010. The most severe issue was that restaurants and homestays discharged domestic sewage directly into Erhai Lake, causing significant pollution. In 2017, Dali started to compile a protection plan to re-designate the core area for Erhai Lake protection. Together with the planning process, all the homestays and restaurants in the watershed area were forcefully closed for rectification. In total, 2498 businesses were suspended by the government. This soon intensified discontent from residents, especially from the owners of homestays. The city government solved the pollution problem by building a 129-km sewage pipeline surrounding Erhai Lake to intercept domestic discharge, accomplished in 2018. During construction, most restaurants and homestays remained closed from 2017 to 2018. Even after the sewage infrastructure was finished, small businesses could no longer open next to Erhai Lake. That is because the Dali government compiled a

plan for protecting Erhai Lake and drew “three lines.”³ Any buildings located in the protection area (15 m) must be demolished and relocated. This project was called the 1860 Ecological Relocation Plan because the plan aimed to relocate 1860 households. Homestays and residential buildings next to the waterfront were demolished and relocated. Moreover, the Dali government has suspended the issuance of permits for homestays or restaurants since 2016 for Erhai Lake protection. These regulations have severely impacted local businesses near Erhai Lake.

Moreover, the Dali City government promulgated “Regulations for the Protection and Management of Erhai Lake in Dali” in 2019, pushing Erhai Lake protection to the strictest level in the history of Dali. This document divides the watershed area into three levels of protection zones with corresponding policies. The first-level protection zone specifies the area within 100 m beyond the historical highest water level of Erhai Lake.⁴ In this area, the construction, reconstruction, and expansion of buildings unrelated to the ecological protection of Erhai are prohibited (Dali City government, 2019). It even encourages residents in the second-level protection zone to be relocated. Buildings near Erhai Lake should “only decrease rather than increase” (*zhijian buzeng*). According to the regulations, residents in the protection area would be resettled in Weishan County, a county in Dali outside the watershed (Fig. 1).

However, there are three practical issues. First, ideally, residents should be relocated far away from the Erhai Lake watershed to eliminate the pollution of human activities. However, residents were unwilling to be replaced that far (Interviewee 14, June 05, 2023). Second, relocating all the residents in the first-level protection area required enormous funds to compensate tens of thousands of people, which the Dali government could not afford (Interviewee 30, November 14, 2023). Third, the employment of the relocated people would be another severe issue. Hence, the massive relocation plan was halted, though mentioned in the policy document.

These practices demonstrate multi-scalar involvement and local pragmatic adaptation in regulatory statecraft. First, although all these policies were stipulated or enacted by the city government, they were urged and influenced by higher-level governments. For instance, the central environmental protection inspection team has investigated the issue of Erhai Lake protection several times since 2016. It inspected various problems and urged the municipal government to respond (Ministry of Ecology and Environment, 2021). Also, the regulations in 2019 were compiled by the city government but advocated and approved by the provincial government. Dali was at the receiving end of political pressures. At that time, “local in power (local officials) seemed somewhat determined to ensure that water quality improves at any cost” (Interviewee 5, May 30, 2023). Hence, strict regulations were enacted regardless of local employment or tourism industry. However, although the city government promulgated the strictest regulations on Erhai protection in 2019, massive demolition and relocation have not been enacted. The policy was promulgated to respond to political pressures, while the actual implementation requires practical considerations (Kostka & Nahm, 2017; K. Wang, Wu, & Zhang, 2023). Recently, the city government has lifted restrictions on the tourism industry near Erhai Lake because of escalating social discontent. Therefore, regulation is a form of statecraft implemented selectively and adaptively by the city government to cope with pressures from above and below.

5.2. Bond as a financial form of environmental statecraft

Erhai Lake protection demands massive funds. This section illustrates how the city government mobilizes local government bonds as a

³ Three lines are blue, green, and red lines. The blue line indicates the water area. The green line highlights green spaces (15 m to Erhai). The red line illustrates the protective area (100 m to Erhai).

⁴ Historical highest level: 1966 m.

financial form of environmental statecraft. The city government planned a series of ecological projects for Erhai Lake protection, including sewage interception and treatment, relocation, and wetland construction. However, it had a weak public finance. The city government resorted to the provincial government, borrowing widely and utilizing the local government bond for re-financing. Nevertheless, financial statecraft has deteriorated the local fiscal situation.

From 2015 to 2022, Dali invested 18.34 billion yuan (~US\$2.5 billion) in Erhai Lake protection. The environmental objective received direct central fiscal support of 2.86 billion yuan (~US\$0.4 billion) as it is a significant project with central attention. However, the major funding source is not central or local revenue but local government bonds. In 2019, Yunnan province (on behalf of Dali City) issued a bond of 3 billion yuan (~US\$0.4 billion) to protect and improve the ecological condition of Erhai Lake.

This bond was issued against 42 small environmental projects for Erhai protection. It is a ten-year local government bond with an interest rate of 3.41%. The bond covers various projects ranging from water supply, sewage treatment, waste treatment, and ecological restoration to wetland construction. It supports 33 projects in the Dali County area and 9 projects in Eryuan County (Fig. 1). It is worth noticing that all the bond-supported projects commenced before 2019 and were finished before 2021. Thirteen projects were even accomplished in 2019. Therefore, the bond issuance was not for future projects but to pay off the investment cost in ongoing projects. The bond is a refinancing tool.

According to the regulations on issuing local government bonds, special local government bonds (*zhuanxiang zhaiquan*) should be repaid by gains from specific projects. Therefore, the municipal government encountered the issue of demonstrating the profitability of environmental projects. These environmental projects are not profitable. For example, the major type of all the supported projects is sewage treatment projects (Table 1). These treatment facilities are estimated to cost 2.47 billion yuan (~US\$0.3 billion), while the estimated income from sewage treatment is only 0.46 billion yuan (~US\$0.06 billion) for ten years. The direct income from sewage treatment is insufficient to repay the bond, let alone other ecological projects without any income, such as constructing forests and wetlands.

The city government hoped to use land conveyance fees from nearby land plots to bridge the funding gap and repay the bond (China Audit Asia Pacific Certified Public Accountants, 2019). The bond was used in the projects in Dali County and Eryuan County. Within the bond period (2019–2028), Dali County can sell land to get 3.98 billion yuan (~US \$0.5 billion). Similarly, Eryuan County can receive 2.74 billion yuan (~US\$0.4 billion) from land transactions. Finally, the land conveyance

Table 1
Environmental projects supported by the special local government bond.

Category	Projects	Total investment (million yuan)	Total Investment (million USD)
Sewage treatment	15	2470.63	345.89
Ecological restoration	3	1423.56	199.30
Ecological area construction-wetland and forest	5	1392.54	194.96
Comprehensive environmental treatment	5	1238.49	173.39
Relocation	2	1044.34	146.21
Water diversion	3	620.14	86.82
Water pollutant treatment	2	196.68	27.54
Water recycle	1	150.00	21.00
Ecological monitor system	2	110.74	15.50
Water supply	3	108.14	15.14
Waste treatment facility	1	52.42	7.34
Total	42	8807.68	1233.08

Data source: Adapted from the credit rating and audit reports for the special local government bond issued in 2019.

fees, minus fees and costs, can be used to guarantee the payment of the local government bond.

This practice raises two significant issues in environmental statecraft. First, financial instruments and corresponding knowledge and criteria are mobilized as a toolkit for achieving strategic goals—Erhai Lake protection in this case. Second, there is a mismatch between what is being financialized and what is used for. The city government uses land conveyance fees rather than direct income from environmental projects to demonstrate how the bond can be repaid. The bond is actually against the land sale revenue rather than environmental projects. It differs from the previous understanding of using environmental titles to reap land sales revenue (Chien, 2013). On the contrary, the land conveyance fees serve the environmental end. Hence, the state selectively adopts financial techniques and acts through the financial market to achieve its strategic goals, a financial form of environmental statecraft.

We also find the limit of environmental statecraft when stretching to financial means. Although the city government can distort financial knowledge to issue local government bonds, investment in Erhai Lake protection exacerbates Dali's fiscal difficulties. Especially since the pandemic, the stagnancy of the real estate market has put more uncertainty on land income nationwide. According to the bond repayment plan, from 2020 to 2022, Dali County is estimated to sell 245.61 *mu* (~16.4 ha) land to get 1.86 billion yuan (~US\$0.3 billion). All the land is residential (compatible with commercial land use to various degrees). Although the designated land area for bond repayment is not accessible, we can find land transaction data of Dali County from the Wind dataset. It shows that Dali County sold 856.5 *mu* (~57.1 ha) of residential land from 2020 to 2022 to receive 1.46 billion yuan (~US\$0.2 billion). Notably, the total income from land conveyance fees is far less than estimated. The land price is not as high as expected. The actual land price is less than one-fifth of the estimated value in 2020 and 2021 (Fig. 2). Only in 2022 did the actual land price meet the estimated level. However, Dali County only sold three residential land plots in 2022, which makes its land income suspicious. For Eryuan County, the situation is worse. It has only sold one residential land plot with 10 million yuan (~US\$1.4 million) from 2020 to 2022, which is insufficient to cover interest payments. Land sales generated insufficient incomes, challenging the feasibility of using land income to finance local environmental projects (cf. Chen, 2022; Zhang et al., 2022).

5.3. State-owned enterprises as a marketized form of environmental statecraft

The state is also involved in environmental governance via state-created market instruments, especially SOEs. SOEs are entities managed by the state to accomplish various state strategic goals (Bremmer, 2009; Singh & Chen, 2018). When studying the state-market dynamics and the management of SOEs in China, Zheng & Huang (2018)

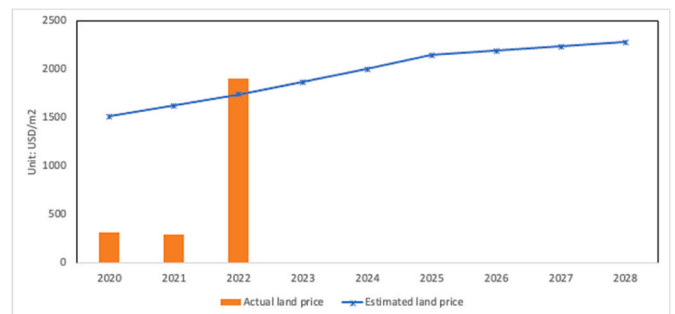


Fig. 2. Estimated and actual land prices for residential land transactions in Dali County. Sources: Data on estimated land price is retrieved from bond issuance documents. Actual land price (2020–2022) is calculated based on land transaction data released in the Wind dataset.

point out that “no matter how efficient the market can become in generating economic growth, the state consistently regards it as an instrument” (p. 297). In environmental governance, scholars find the strategic role of SOEs in ensuring food security at the national level (S. Y. Lin, 2023). At the urban level, local SOEs, mainly urban development corporations, are pivotal in conducting environmental projects in cities (Feng et al., 2022; F. Zhang et al., 2022). In this vein, we study how SOEs function as market instruments for the state to achieve its strategic goals by examining the operations of SOEs in Dali. The provincial government is involved through provincial-level SOEs when the city government is less capable of conducting environmental projects, which has scalar implications for urban environmental governance.

Yunnan Jiantou (Yunnan Construction and Investment Holding Group Co., YCIH) is leading the field in conducting construction projects related to Erhai Lake protection. It is a provincial-level development corporation affiliated with Yunnan province rather than an urban-level development corporation. With an asset level of 784.4 billion yuan (~US\$108 billion) in 2022, Yunnan Jiantou is one of the largest development corporations in China. The involvement of Yunnan Jiantou in local environmental projects is not unique but represents a universal model in Yunnan province. In 2019, the Yunnan provincial government organized a special meeting to incorporate various actors into protecting plateau lakes in Yunnan (Yunnan Net, 2020). In this meeting, the Yunnan government specified that Yunnan Jiantou would be the main entity for protecting four plateau lakes: Erhai, Lugu, Chenghai, and Yangzonghai. The operation model of Yunnan Jiantou is to establish a joint corporation with the city government of the lake area. The joint corporation is responsible for the implementation of local environmental projects.

In Dali, Yunnan Jiantou is mainly responsible for the relocation project and the construction of the Erhai Ecological Corridor. For the 1806 relocation project, the Dali City government signed a contract with a first-level subsidiary of Yunnan Jiantou, and they established a corporation called Dali Erhai Protection and Treatment Co. Ltd (Dali Erbao). The project company is a SOE with a hybrid intervention of multi-scalar governments for the shareholding structure. Yunnan Jiantou (through its subsidiary) is the controller with an equity ratio of 70%, while the minority shareholders are eventually controlled by the Dali City government and the central state, respectively. This differs from the previous understanding of urban development corporations in which city governments are the main controller (cf. Xie et al., 2019; Zhang et al., 2022). In Dali’s case, the provincial-level government takes a leading role.

Yunnan government facilitated the project financing. The relocation project was estimated to construct 1584.36 *mu* land (~106 ha) for relocation and demand 3.89 billion yuan (~US\$0.5 billion), about 40% of local budgetary income. Dali Erbao, a second-level subsidiary of Yunnan Jiantou, is responsible for seeking finance and managing the project. The major source of funding is bank loans, which are facilitated by Yunnan province. In 2019, the provincial government urged the agreement between Yunnan Jiantou and the Agricultural Development Bank of China on special financial cooperation to protect and treat plateau lakes (China Lianhe Credit Rating Corporation, 2020). Because of the agreement, loans for lake protection become a priority, and the interest rate should be limited to a basic level.⁵ Benefiting from the special agreement between Yunnan Jiantou and the strategic bank, Dali Erbao successfully and swiftly obtained bank loans with low interest for the relocation project. This coalition also reflects the strong relationship between SOEs and strategic banks in achieving state priorities.

Furthermore, the involvement of Yunnan Jiantou guarantees the delivery of the projects as it has various subsidiaries that specialize in construction. The target was to relocate 1806 residents to 5 relocation towns. Each town was constructed by an engineering and construction

corporation under Yunnan Jiantou. For example, Yunnan Construction Investment Twelfth Construction Co. (a first-level subsidiary of Yunnan Jiantou) was responsible for the relocation project in the Yinqiao town area. China National Nonferrous Metal Industry Fourteenth Metallurgical Construction Co. (a first-level subsidiary of Yunnan Jiantou) was responsible for constructing the Dali County area. These engineering construction corporations signed a comprehensive contract with Dali Erbao through an Engineering-Procurement-Construction (EPC) model. The 1806 relocation project was finished during the pandemic lockdown with the direct involvement of construction corporations.

Yunnan Jiantou has economic considerations in addition to environmental goals. For example, Yunnan Jiantou seeks to balance its costs by acquiring land for property development next to the relocation site in the name of the “industrial supporting zone.” The matching land is compensation for the investment in the relocation project (Interviewee 31, November 14, 2023). For example, next to the relocation area in Dali County, Yunnan Jiantou bought a land parcel of 40,386 m². This is an underpriced commercial-use land plot located in the most valuable area of Dali City, surrounded by low-density villa developments. Yunnan Jiantou bought it together with the relocated residential land in 2019. It aims to build a high-end health and wellness “characteristic town” for tourism and real estate development.

In 2023, a leader of Yunnan Jiantou visited this area and commented that “(the project needs to) meet the conditions for presale as soon as possible to get cash inflow” (Yunnan Jiantou, 2023). Besides a commercial-use land plot next to the relocation site, Yunnan Jiantou built more than relocated buildings to sell to the public. For instance, 176 houses were built in a relocation town, but relocated households occupy only 150. Extra houses can be sold to generate profits. The market price is about 16,000 yuan (~US\$2200) per square meter, meaning 5 million yuan a house (about 300 m²) (~US\$0.7 billion). Relocated residents can acquire a land parcel equivalent in size to their previous house sites. However, they need to pay for the relocated houses at a discounted price—about half the market price. Despite the discount, residents found their resettled housing to be expensive. Some forewent the privilege of purchasing their new houses and resold their land to Yunnan Jiantou (Interviewee 14, June 04, 2023). Therefore, the developer can sell more than 20% of the houses built to the public. Based on the operation model of Yunnan Jiantou, one can hardly say it is a non-profitable agency for the state goal. It takes advantage of the close relationship with the provincial state to get development projects in Dali and generate reasonable profits when conducting environmental projects.

SOEs conduct various projects in Erhai Lake protection. For example, the most influential project is the ecological corridor, a 129 km greenway surrounding Erhai Lake. The whole project was also conducted by Yunnan Jiantou through a PPP (public-private partnership) contract. Apart from construction projects, the Dali City government has transferred farmland near Erhai Lake to avoid excessive fertilizer use since 2018. It collected the land to develop ecological agriculture. However, farmland was abandoned for two years because everyone knew rice cultivation could hardly make profits. The city government finally resorted to Yunnan State Farms Group Co. (a provincial-level SOE) with the help of the provincial government. The agricultural corporation has been responsible for developing large-scale crop cultivation based on transferred farmland since 2020. It conducted rice cultivation in 2020 as a political task regardless of little profit (Interviewee 23, June 10, 2023).

Based on the operation of provincial-level SOEs in Erhai Lake protection, we first highlight the strategic function of SOEs in achieving the environmental agenda. Although Erhai Lake protection was facilitated and guided by the provincial-level government, neither the Yunnan provincial nor city government conducts or operates these projects, such as the relocation project, greenway construction, and crop cultivation. Second, provincial-level SOEs are involved in local environmental projects due to local governance incapacity. Dali’s fiscal income relies heavily on central transfers and subsidies, which limit its capacity to

⁵ Using PSL (pledged supplementary lending) rate, which is around 3%.

support municipal-level corporations in large-scale projects. Therefore, the provincial government encouraged provincial-level SOEs to take over. Due to the scale difference, the city government collaborates with the provincial-level SOE to cater to their interests. SOEs have diversified considerations alongside achieving environmental targets. Some SOEs, such as Yunnan Jiantou, use environmental protection as leverage to gain land development projects for profits, while others, like Yunnan State Farms Group, undertake crop cultivation as a non-profitable political mission. In either case, SOEs are used extensively in environmental governance.

6. Implications for spatial politics: the entrepreneurial local state undermined

In Dali, multi-scalar statecraft rather than municipal statecraft contributes to delivering the environmental goal—Erhai Lake protection. These practices also transform the nature of the municipal state by marginalizing it in local development, social management, and environmental assets management.

First, protecting Erhai Lake has been an overriding goal of the city government, which has undermined the routine entrepreneurial growth dynamics. In China, local states manipulate their land monopoly to receive land income and build local autonomy (Chien, 2013; G. C. S. Lin, 2014; Yang & Wang, 2008). They act like entrepreneurs to explore various land projects (for example, eco-city), leading to urban sprawl. Land is the “main vehicle for the local state to consolidate its territorial authority” (Hsing, 2006, p. 576). In Dali, the city government also relies on land sales income. It planned to expand local income by selling more land plots. However, because of the paramount environmental goal, every effort to develop the local economy must consider the environmental impact on Erhai Lake (Interviewee 2, May 17, 2023). In 2017, under the pressure of Erhai Lake protection, the planned development boundary area of Dali County was reduced from 188 km² to 138 km², and the planned population was adjusted from 1.05 million to 0.86 million.⁶ Besides, Dali’s growth plan was terminated. Dali planned to develop Haidong New Area as a growth pole (located in the eastern area of Erhai Lake). The new area was planned to be developed at 128 km² in 2016. However, the provincial government stepped in. It requires that “the construction of Haidong New Area needs to be completely halted” (Yunnan Provincial Government, 2018). Later, the plan for the Haidong area was shrunk from 140 to 9.6 km². When protecting Erhai Lake takes precedence, the economic development agenda is put aside. The entrepreneurial stance of the municipal state is reshaped in China’s environmental statecraft.

Second, environmental statecraft does not municipalize nature resources. Instead, it marginalizes the local state in managing local assets. In the literature, local governments can seize the chance of environmentalism and pursue local growth by exploring environmental value-added land development (Chien, 2013; Chung & Xu, 2021; Pow & Neo, 2013). In Dali’s case, although Erhai Lake protection has created valuable environmental assets and effectively promoted land value near the lake, the Dali government can hardly benefit from it. That is because land available for development near Erhai Lake is strictly managed. Generating revenue by selling land with enhanced environmental value is not feasible for the city government. Furthermore, using market instruments in environmental statecraft transferred land revenue and the operating rights of environmental assets from locality to provincial-level state actors. For example, the Dali City government cooperated with Yunnan Jiantou to construct the Erhai Ecological Corridor. The corridor

has become a new tourist attraction, leading to considerable income. However, Yunnan Jiantou will operate and manage the greenway for thirty years based on the contract between Yunnan Jiantou and the city government. Hence, the city government is marginalized in managing environmental resources or reaping land appreciation.

Third, besides being overshadowed in managing local development, the city government is beset by escalating social tensions because of environmental actions. For example, crop cultivation is contentious. Local farmers have doubted whether banning garlic could enhance the water quality of Erhai Lake. The crop ban has left severe controversy because farmers have a long tradition of cultivating garlic to generate reasonable profits. Especially after the pandemic lockdown, local farmers find it extremely hard to make a living based on rice cultivation. As explained by a scholar in agriculture,

“At that time (2017), environmental protection was the top priority for the city government, while the development and livelihood of the ordinary people might be secondary. But the social discontent is becoming more severe after easing the pandemic control. Government officials also empathize with the difficulties faced by farmers. But environmental protection is a firm constraint. Since the visit of President Xi and the attention of various leaders, this issue has been related to their political positions. For now, the city government is concerned with the need of farmers, hoping to alleviate their burdens while protecting the environment as well.” (Interviewee 23, June 10, 2023)

The city government is in a dilemma, facing pressures from both above and below. It has to maintain steadfastness in Erhai Lake protection to express its commitment to the party state (Pearson et al., 2021). On the other hand, the city government directly deals with social discontent. Recently, it has resorted to agricultural research institutes to explore an environmentally friendly and high-value-added mode of planting, which takes time. The position is clear that the city government wants to ease its strict regulation due to social responses.

A similar government response can be observed in the tourism industry. Dali has experienced a tourism influx since the lift of the lockdown. Referring to the regulations promulgated in 2019, the Dali government has stopped issuing homestay permits near Erhai Lake. However, around 2000 new homestays have opened recently without legal permits because of the prosperous tourism industry. To support the local economy after the pandemic, these new homestays are now operating under the tolerance of the city government (Interviews, June 2023; November 2023). However, local businesses are aware that whenever there is an inspection from the upper-level governments, their homestays will be shut down again.

7. Conclusions

Based on the case of Erhai Lake protection in Dali, this paper investigated how an environmental agenda is implemented through statecraft and its implications for spatial politics. Theoretically, we contribute to understanding environmental governance in China and the broad evolution between environmental practices and urban spatial politics.

Using environmental statecraft, we foreground the selectivity of statecraft and contingent governance innovations. We contribute to understanding how the Chinese state achieves environmental targets through various state-related crafts beyond regulatory mechanisms (cf. Gilley, 2012; Xie et al., 2019). First, the multi-scalar state relationship cannot be characterized as central-local tensions. Multi-scalar states’ negotiations, involvement, and adaptation are the nature of the environmental statecraft (Chung & Xu, 2021; Kostka & Nahm, 2017; F. Zhang et al., 2022). We offer a variant of multi-scalar dynamics in urban environmental governance in China. In previous studies, local governments were mobilized to echo a centrally initiated agenda. For example, in Chengdu, the municipal government led the environmental agenda of

⁶ The development boundary stipulated in local Land Use Planning is used to control land sprawl. Any city anticipates larger land quotas for future development, but the quota of Dali County shrunk to protect the Erhai Lake. This information was retrieved from an article by People’s Daily. <http://politics.people.com.cn/n1/2022/0716/c1001-32477200.html>.

building a greenway for creating a “Park City” (F. Zhang & Wu, 2024). In the Pearl River Delta, an environmental goal was achieved through mobilizing district and county governments (Chung et al., 2018). In Dali, the provincial-level state plays a prominent role in local environmental projects. The central state (through an inspection team) and the provincial-level state (through instructions) have repeatedly urged local action. Nevertheless, stringent regulations were promulgated under the pressure of the provincial state. The provincial state also intervened using various instruments, such as SOEs, other than regulations. Meanwhile, the city government still has discretion to determine whether and to what degree the policy is enacted (Kostka & Nahm, 2017). The complex intra-state dynamics add nuance to authoritarian environmentalism featuring top-down command and control.

Second, although outright bans have been implemented, the city government deals directly with accumulating social discontent, which forces them to adjust actions considering social impacts. Society is not fully considered in the policy promulgation, yet it is not totally ignored in environmental actions (Tilt, 2007).

Third, we contribute to understanding the operation of SOEs in environmental goals. SOEs are both state agencies and market actors (Bremmer, 2009; Singh & Chen, 2018). In China, SOEs are managed by the state to “value political discipline more than economic considerations” (Chan, 2009, p. 52). In environmental governance, the state supports SOEs in achieving strategic objectives (S. Y. Lin, 2023). Nevertheless, SOEs’ operations at the local level are more complex beyond merely being compliant with the state, particularly when multiple levels of government are involved. In Dali, some provincial-level SOEs demand reasonable profits in return when being involved in local environmental projects. The city government accommodates these demands by providing potential financial gains to facilitate environmental projects. The economic pursuits of SOEs are respected in environmental governance.

In summary, the environmental goal is not simply achieved through coercive policy enforcement in China; multiple market and financial instruments are also deployed for environmental ends (Wu, 2020b; F. Zhang et al., 2022). This reflects the state’s capacity to craft environmental governance to achieve extra-economic goals (Wu et al., 2022). While various actors, i.e., multi-level governments, institutions, and SOEs, are involved, they have various considerations and interests besides environmental ends, perplexing environmental actions, outcomes, and impacts.

Highlighting the nested multi-scalar relationship in environmental statecraft, we contribute to understanding urban politics by rethinking the nature of “municipal states” and avoiding a “local trap” (Lauermann, 2018; Purcell, 2006; Russell, 2019). We emphasize that environmental projects are not just environmental but political, creating new rules and rationalities and transforming the existing power dynamics (Yeh, 2009). Against the trend of municipalist strategies (Roth et al., 2023; Russell, 2019; Thompson et al., 2020), municipal states are peripheral in resource control along with the interference of multi-scalar processes, undermining the autonomy of municipal states. The core lies in the plurality and heterogeneity of the state, comprised of multi-scalar state actors and agencies with diversified and even opposite attitudes towards environmental governance (Cirolia & Harber, 2022; Sneddon et al., 2022).

Finally, we use Dali’s case to add a nuanced narrative of the interplay between state politics, environmental governance, and urban politics (Wu, 2020a). Unlike cities that are capable of balancing environmental agendas and economic imperatives (Chien, 2013; Chung et al., 2018; F. Zhang & Wu, 2024), the Dali City government is overwhelmed by the goal of environmental protection, undermining urban entrepreneurial governance. Furthermore, the provincial-level state extends its stretch into local affairs beyond environmental issues. Provincial-level SOEs have been involved in capturing green assets and land premiums. Benefiting from the existing scalar structure (Westman et al., 2019; Chung & Xu, 2021), this paper explores the provincial-municipality

structure and provincial-level state agencies and reveals how they deepen the influence of the provincial state. City governments like Dali can hardly build their capacity to transcend their existing scale. While the environmental agenda is generally used to consolidate state’s power over society (Li & Shapiro, 2020), the state is not a unitary actor. Dali is an example that shows how a state environmental protection project creates tremendous impacts on urban spatial politics.

CRediT authorship contribution statement

Yi Feng: Writing – review & editing, Writing – original draft, Formal analysis, Data curation, Conceptualization. **Fulong Wu:** Writing – review & editing, Resources, Project administration, Investigation, Funding acquisition, Conceptualization. **Fangzhu Zhang:** Investigation, Funding acquisition.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

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References

- Beeson, M. (2010). The coming of environmental authoritarianism. *Environmental Politics*, 19(2), 276–294. <https://doi.org/10.1080/09644010903576918>
- Bremmer, I. (2009). State capitalism comes of age: The end of the free market? *Foreign Affairs*. <https://www.foreignaffairs.com/articles/united-states/2009-05-01/state-capitalism-comes-age>.
- Brenner, N. (2004). *New state spaces: Urban governance and the rescaling of statehood*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199270057.001.0001>
- Brown, J. C., & Purcell, M. (2005). There’s nothing inherent about scale: Political ecology, the local trap, and the politics of development in the Brazilian Amazon. *Geoforum*, 36(5), 607–624. <https://doi.org/10.1016/j.geoforum.2004.09.001>
- Bulkeley, H. (2005). Reconfiguring environmental governance: Towards a politics of scales and networks. *Political Geography*, 24(8), 875–902. <https://doi.org/10.1016/j.polgeo.2005.07.002>
- Bulkeley, H., & Castán Broto, V. (2013). Government by experiment? Global cities and the governing of climate change. *Transactions of the Institute of British Geographers*, 38(3), 361–375. <https://doi.org/10.1111/j.1475-5661.2012.00535.x>
- Bulpitt, J. (1986). The discipline of the new democracy: Mrs Thatcher’s domestic statecraft. *Political Studies*, 34(1), 19–39. <https://doi.org/10.1111/j.1467-9248.1986.tb01870.x>
- Chan, H. S. (2009). Politics over markets: Integrating state-owned enterprises into Chinese socialist market. *Public Administration and Development*, 29(1), 43–54. <https://doi.org/10.1002/pad.502>
- Chang, I. C. C., Leitner, H., & Sheppard, E. (2016). A green leap forward? Eco-State restructuring and the tianjin–binhai eco-city model. *Regional Studies*, 50(6), 929–943. <https://doi.org/10.1080/00343404.2015.1108519>
- Chen, Y. (2022). Financialising urban redevelopment: Transforming Shanghai’s waterfront. *Land Use Policy*, 112(February), Article 105126. <https://doi.org/10.1016/j.landusepol.2020.105126>
- Chien, S.-S. (2013). Chinese eco-cities: A perspective of land-speculation-oriented local entrepreneurialism. *China Information*, 27(2), 173–196. <https://doi.org/10.1177/09220203X13485702>
- China Audit Asia Pacific Certified Public Accountants. (2019). *The self-balancing evaluation report of a special local government bond for ecological protection and treatment in Dali in 2019*.
- China Economic Weekly. (2018). *Bearing in mind the General Secretary’s instructions, the ecological protection of Erhai Lake in Dali has achieved initial results (Lao ji zong shu ji zhu tuo, da li er hai san nian bao hu zhi li chu jian cheng xiao) (in Chinese)*. Retrieved June 21, 2024, from <https://www.ceweekly.cn/2018/0305/219740.shtml>.
- China Lianhe Credit Rating Corporation. (2020). *Credit rating report on yunnan urban and rural construction investment Co. Ltd.*
- Chung, C. K. L., & Xu, J. (2016). Scale as both material and discursive: A view through China’s rescaling of urban planning system for environmental governance.

- Environment and Planning C: Government and Policy*, 34(8), 1404–1424. <https://doi.org/10.1177/0263774X15619630>
- Chung, C. K. L., & Xu, J. (2021). Scalar politics of urban sustainability: Governing the Chinese city in the era of ecological civilisation. *Transactions of the Institute of British Geographers*, 46(3), 689–703. <https://doi.org/10.1111/tran.12436>
- Chung, C. K. L., Zhang, F., & Wu, F. (2018). Negotiating green space with landed interests: The urban political ecology of greenway in the Pearl River Delta, China. *Antipode*, 50(4), 891–909. <https://doi.org/10.1111/anti.12384>
- Cirolia, L. R., & Harber, J. (2022). Urban statecraft: The governance of transport infrastructures in African cities. *Urban Studies*, 59(12), 2431–2450. <https://doi.org/10.1177/00420980211028106>
- Cox, K. R. (1998). Spaces of dependence, spaces of engagement and the politics of scale, or: Looking for local politics. *Political Geography*, 17(1), 1–23. [https://doi.org/10.1016/S0962-6298\(97\)00048-6](https://doi.org/10.1016/S0962-6298(97)00048-6)
- Dali City government. (2019). *Regulations for the protection and management of Erhai Lake in Dali, Yunnan Province (Yun nan sheng da li bai zu zi zhi zhou er hai bao hu guan li tiao li)* (in Chinese). Retrieved September 23, 2023, from <https://www.dali.gov.cn/dlrmzf/c101585/201911/80ac967c0564460fb07f03608a8a050d.shtml>
- Duit, A., Feindt, P. H., & Meadowcroft, J. (2016). Greening Leviathan: The rise of the environmental state? *Environmental Politics*, 25(1), 1–23. <https://doi.org/10.1080/09644016.2015.1085218>
- Feng, Y., Wu, F., & Zhang, F. (2022). Changing roles of the state in the financialization of urban development through chengtou in China. *Regional Studies*, 56(8), 1259–1270. <https://doi.org/10.1080/00343404.2021.1900558>
- Feng, Y., Wu, F., & Zhang, F. (2023). Shanghai municipal investment corporation: Extending government power through financialization under state entrepreneurialism. *Environment and Planning C: Politics and Space*, 41(1), 20–36. <https://doi.org/10.1177/23996544221114955>
- Geall, S., & Ely, A. (2018). Narratives and pathways towards an ecological civilization in contemporary China. *China Quarterly*, 236(October), 1175–1196. <https://doi.org/10.1017/S0305741018001315>
- Gilley, B. (2012). Authoritarian environmentalism and China's response to climate change. *Environmental Politics*, 21(2), 287–307. <https://doi.org/10.1080/09644016.2012.651904>
- Harvey, D. (1989). From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler - Series B: Human Geography*, 71(1), 3–17.
- Hsing, Y. T. (2006). Land and territorial politics in Urban China. *China Quarterly*, 19(187), 575–591. <https://doi.org/10.1017/S0305741006000385>
- Jessop, B. (1997). The entrepreneurial city: Re-imagining localities, redesigning economic governance, or restructuring capital? In N. Jewson, & S. Macgregor (Eds.), *Transforming cities* (pp. 25–38). Routledge.
- Jessop, B. (2007). From micro-powers to governmentality: Foucault's work on statehood, state formation, statecraft and state power. *Political Geography*, 26(1), 34–40. <https://doi.org/10.1016/j.polgeo.2006.08.002>
- Kostka, G., & Nahm, J. (2017). Central-local relations: Recentralization and environmental governance in China. *China Quarterly*, 231(August), 567–582. <https://doi.org/10.1017/S0305741017001011>
- Kostka, G., & Zhang, C. (2018). Tightening the grip: Environmental governance under Xi Jinping. *Environmental Politics*, 27(5), 769–781. <https://doi.org/10.1080/09644016.2018.1491116>
- Lauermaun, J. (2018). Municipal statecraft: Revisiting the geographies of the entrepreneurial city. *Progress in Human Geography*, 42(2), 205–224. <https://doi.org/10.1177/0309132516673240>
- Li, Y., & Shapiro, J. (2020). *China goes green: Coercive environmentalism for a troubled planet*. Polity Press.
- Lin, G. C. S. (2014). China's landed urbanization: Neoliberalizing politics, land commodification, and municipal finance in the growth of metropolises. *Environment & Planning A*, 46(8), 1814–1835. <https://doi.org/10.1068/a130016p>
- Lin, S. Y. (2021). Bringing resource management back into the environmental governance agenda: Eco-state restructuring in China. *Environment, Development and Sustainability*, 23(8), 12272–12301. <https://doi.org/10.1007/s10668-020-01168-0>
- Lin, S. Y. (2023). The rise of Asia-Pacific agribusiness in the Global South—the corporate food regime under the third regionalism. *Journal of Asian and African Studies*, 1–19. <https://doi.org/10.1177/00219096231188954>
- Liu, N. N., Lo, C. W. H., Zhan, X., & Wang, W. (2015). Campaign-style enforcement and regulatory compliance. *Public Administration Review*, 75(1), 85–95. <https://doi.org/10.1111/puar.12285>
- Lo, K. (2015). How authoritarian is the environmental governance of China? *Environmental Science & Policy*, 54, 152–159. <https://doi.org/10.1016/j.envsci.2015.06.001>
- Lo, K. (2020). Ecological civilization, authoritarian environmentalism, and the ecopolitics of extractive governance in China. *The Extractive Industries and Society*, 7(3), 1029–1035. <https://doi.org/10.1016/j.exis.2020.06.017>
- MacKinnon, D. (2011). Reconstructing scale: Towards a new scalar politics. *Progress in Human Geography*, 35(1), 21–36. <https://doi.org/10.1177/0309132510367841>
- McCann, E. (2017). Governing urbanism: Urban governance studies 1.0, 2.0 and beyond. *Urban Studies*, 54(2), 312–326. <https://doi.org/10.1177/0042098016670046>
- McGuirk, P., Dowling, R., & Chatterjee, P. (2021). Municipal statecraft for the smart city: Retooling the smart entrepreneurial city? *Environment & Planning A*, 53(7), 1730–1748. <https://doi.org/10.1177/0308518X211027905>
- Mertha, A. (2009). “Fragmented authoritarianism 2.0”: Political pluralization in the Chinese policy process. *China Quarterly*, 200, 995–1012. <https://doi.org/10.1017/S0305741009990592>
- Ministry of Ecology and Environment. (2021). *Assessing the effectiveness of inspection (Du cha zheng gai kan cheng xiao)* (in Chinese). Retrieved October 10, 2023, from https://www.mee.gov.cn/ywgz/zystjhbhd/czgz/202102/t20210202_820004.shtml
- Molotch, H. (1976). The city as a growth machine: Toward a political economy of place. *American Journal of Sociology*, 82(2), 309–332. <https://doi.org/10.1016/j.chroma.2007.12.068>
- Norman, E. S., & Bakker, K. (2009). Transgressing scales: Water governance across the Canada-U.S. borderland. *Annals of the Association of American Geographers*, 99(1), 99–117. <https://doi.org/10.1080/00045600802317218>
- Pearson, M., Rithmire, M., & Tsai, K. S. (2021). Party-state capitalism in China. *Current History*, 120(827), 207–213. <https://doi.org/10.1525/cuh.2021.120.827.207>
- Peck, J. (2017). Transatlantic city, part 2: Late entrepreneurialism. *Urban Studies*, 54(2), 327–363. <https://doi.org/10.1177/0042098016683859>
- Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode*, 34(3), 380–404. <https://doi.org/10.1111/1467-8330.00247>
- Peck, J., & Zhang, J. (2013). A variety of capitalism... with Chinese characteristics? *Journal of Economic Geography*, 13(3), 357–396. <https://doi.org/10.1093/jeg/lbs058>
- Pike, A., O'Brien, P., Strickland, T., Thrower, G., & Tomaney, J. (2019). *Financialising city statecraft and infrastructure*. Edward Elgar Publishing. <https://doi.org/10.4337/9781788118958>
- Pow, C. P. (2018). Building a harmonious society through greening: Ecological civilization and aesthetic governmentality in China. *Annals of the Association of American Geographers*, 108(3), 864–883. <https://doi.org/10.1080/24694452.2017.1373626>
- Pow, C. P., & Neo, H. (2013). Seeing red over green: Contesting urban sustainabilities in China. *Urban Studies*, 50(11), 2256–2274. <https://doi.org/10.1177/0042098013478239>
- Purcell, M. (2006). Urban democracy and the local trap. *Urban Studies*, 43(11), 1921–1941. <https://doi.org/10.1080/00420980600897826>
- Roth, L., Russell, B., & Thompson, M. (2023). Politicising proximity: Radical municipalism as a strategy in crisis. *Urban Studies*, 60(11), 2009–2035. <https://doi.org/10.1177/00420980231173825>
- Russell, B. (2019). Beyond the local trap: New municipalism and the rise of the fearless cities. *Antipode*, 51(3), 989–1010. <https://doi.org/10.1111/anti.12520>
- Shen, W., & Jiang, D. (2021). Making authoritarian environmentalism accountable? Understanding China's new reforms on environmental governance. *The Journal of Environment & Development*, 30(1), 41–67. <https://doi.org/10.1177/1070496520961136>
- Shen, J., & Wu, F. (2012). Restless urban landscapes in China: A case study of three projects in Shanghai. *Journal of Urban Affairs*, 34(3), 255–277. <https://doi.org/10.1111/j.1467-9906.2011.00577.x>
- Singh, J. N., & Chen, G. C. (2018). State-owned enterprises and the political economy of state-state relations in the developing world. *Third World Quarterly*, 39(6), 1077–1097. <https://doi.org/10.1080/01436597.2017.1333888>
- Smith, N. (2010). *Uneven development: Nature, capital, and the production of space*. University of Georgia Press.
- Sneddon, C., Magilligan, F. J., & Fox, C. A. (2022). Peopling the environmental state: River restoration and state power. *Annals of the Association of American Geographers*, 112(1), 1–18. <https://doi.org/10.1080/24694452.2021.1913089>
- Su, X. (2015). Urban entrepreneurialism and the commodification of heritage in China. *Urban Studies*, 52(15), 2874–2889. <https://doi.org/10.1177/0042098014528998>
- Su, X. (2022). Unpacking administrative rank: Intercity competition and the remaking of local state space in China. *Political Geography*, 92, Article 102518. <https://doi.org/10.1016/j.polgeo.2021.102518>
- Swyngedouw, E., & Heynen, N. C. (2003). Urban political ecology, justice and the politics of scale. *Antipode*, 35(5), 898–918. <https://doi.org/10.1111/j.1467-8330.2003.00364.x>
- Teets, J. (2018). The power of policy networks in authoritarian regimes: Changing environmental policy in China. *Governance*, 31(1), 125–141. <https://doi.org/10.1111/gove.12280>
- Teo, S. S. K. (2023). Socially engaged municipal statecraft in urban China? The Shenzhen biennale as situated planning experiment. *International Journal of Urban and Regional Research*, 47(4), 581–600. <https://doi.org/10.1111/1468-2427.13174>
- Thompson, M., Nowak, V., Southern, A., Davies, J., & Furmedge, P. (2020). Re-grounding the city with Polanyi: From urban entrepreneurialism to entrepreneurial municipalism. *Environment & Planning A: Economy and Space*, 52(6), 1171–1194. <https://doi.org/10.1177/0308518X19899698>
- Tilt, B. (2007). The political ecology of pollution enforcement in China: A case from Sichuan's rural industrial sector. *China Quarterly*, 192, 915–932. <https://doi.org/10.1017/S0305741007002093>
- Wang, A. L. (2013). The search for sustainable legitimacy: Environmental law and bureaucracy in China. *Harvard Environmental Law Review*, 37(2), 365–440. <https://doi.org/10.2139/ssrn.2128167>
- Wang, K., Qian, J., & He, S. (2023a). From campaign-style governance to multiple environmentalities: Urban political ecologies of e-waste regulation in Guiyu, China. *Urban Geography*, 44(7), 1345–1368. <https://doi.org/10.1080/02723638.2022.2092307>
- Wang, W., Wu, F., & Zhang, F. (2023b). Environmental city-regionalism in China: War against air pollution in the Beijing-Tianjin-Hebei region. *Transactions in Planning and Urban Research*, 2(1), 132–148. <https://doi.org/10.1177/27541232221144595>
- Westman, L. K., Castán Broto, V., & Huang, P. (2019). Revisiting multi-level governance theory: Politics and innovation in the urban climate transition in Rizhao, China. *Political Geography*, 70, 14–23 (January) <https://doi.org/10.1016/j.polgeo.2019.01.002>
- While, A., Jonas, A. E. G., & Gibbs, D. (2004). The environment and the entrepreneurial city: Searching for the urban “sustainability fix” in Manchester and Leeds.

- International Journal of Urban and Regional Research*, 28(3), 549–569. <https://doi.org/10.1111/j.0309-1317.2004.00535.x>
- While, A., Jonas, A. E. G., & Gibbs, D. C. (2010). From sustainable development to carbon control: Eco-state restructuring and the politics of urban and regional development. *Transactions of the Institute of British Geographers*, 35(1), 76–93. <https://doi.org/10.1111/j.1475-5661.2009.00362.x>
- Wu, F. (2017). State entrepreneurialism in urban China. In G. Pinson, & C. M. Journal (Eds.), *Debating the neoliberal city* (pp. 153–173). Routledge.
- Wu, F. (2018). Planning centrality, market instruments: Governing Chinese urban transformation under state entrepreneurialism. *Urban Studies*, 55(7), 1383–1399. <https://doi.org/10.1177/0042098017721828>.
- Wu, F. (2020a). Adding new narratives to the urban imagination: An introduction to 'New directions of urban studies in China'. *Urban Studies*, 57(3), 459–472. <https://doi.org/10.1177/0042098019898137>
- Wu, F. (2020b). The state acts through the market: 'State entrepreneurialism' beyond varieties of urban entrepreneurialism. *Dialogues in Human Geography*, 10(3), 326–329. <https://doi.org/10.1177/2043820620921034>
- Wu, F., Deng, H., Feng, Y., Wang, W., Wang, Y., & Zhang, F. (2024). Statecraft at the frontier of capitalism: A grounded view from China. *Progress in Human Geography*, 1–26. <https://doi.org/10.1177/03091325241268953>.
- Wu, F., Zhang, F., & Liu, Y. (2022). Beyond growth machine politics: Understanding state politics and national political mandates in China's urban redevelopment. *Antipode*, 54(2), 608–628. <https://doi.org/10.1111/anti.12781>
- Xie, L., Flynn, A., Tan-Mullins, M., & Cheshmehzangi, A. (2019). The making and remaking of ecological space in China: The political ecology of Chongming Eco-Island. *Political Geography*, 69(January), 89–102. <https://doi.org/10.1016/j.polgeo.2018.12.012>
- Yang, D. Y.-R., & Wang, H.-K. (2008). Dilemmas of local governance under the development zone fever in China: A case study of the Suzhou region. *Urban Studies*, 45(5–6), 1037–1054. <https://doi.org/10.1177/0042098008089852>
- Yeh, E. T. (2009). Greening western China: A critical view. *Geoforum*, 40(5), 884–894. <https://doi.org/10.1016/j.geoforum.2009.06.004>
- Yunnan Jiantou. (2023). *Zhao Xu's investigation on the industrial supporting zone of the Dali 1860 relocation project (Zhao Xu diao yan da li 1806 xiao zhen jian she xiang mu chan ye pei tao qu)* (in Chinese). Retrieved October 1, 2023 <http://www.ynurci.cn/view/yjntpc/9/494/view/4582.html>.
- Yunnan Net. (2020). *Yunnan Jiantou's campaign to protect highland lake (Yunnan jian tou gao yuan hu po bao wei zhan ji zhan zheng han)* (in Chinese). Retrieved October 6, 2023, from <https://m.yunnan.cn/system/2020/04/28/030659599.shtml>.
- Yunnan Provincial Department of Ecology and Environment. (2018). *The urgency of the campaign to prevent and control pollution in Erhai Lake in Dali (Da li zhou er hai bao hu zhi li zeng qiang jin po gan da hao gong jian zhan)* (in Chinese). Retrieved September 21, 2023, from https://www.yn.gov.cn/ztgg/yn_hbzt/zgdt/201811/t20181130_116739.html.
- Yunnan Provincial Government. (2017). *The 103 executive meeting of the 12th Provincial People's Government (Di shi er jie ren min zheng fu di 103 ci chang wu hui yi)* (in Chinese). Retrieved October 2, 2023, from https://www.yn.gov.cn/ywdt/hyxx/szfhy/szfcwhy/201612/t20161201_178573.html.
- Yunnan Provincial Government. (2018). *Notice from the General Office of the People's Government of Yunnan Province on the Establishment of the Leading Group for Erhai Lake Protection (Yun nan sheng ren min zheng fu ban gong ting guan yu cheng li er hai bao hu zhi li gong zuo ling dao xiao zu de tong zhi)* (in Chinese). Retrieved October 2, 2023, from https://www.yn.gov.cn/zwgk/zfxxgkpt/fdzdgnr/czwj/zfxxgkptyzbf/201812/t20181226_144457.html.
- Zhang, L. Y. (2021). *Conducting and financing low-carbon transitions in China*. Edward Elgar Publishing.
- Zhang, C. (2023). Energy governance in China: A mixture of democratic environmentalism and authoritarian environmentalism. *Environmental Policy and Governance*, 1–11. <https://doi.org/10.1002/eet.2089>
- Zhang, F., & Wu, F. (2022). Performing the ecological fix under state entrepreneurialism: A case study of Taihu new town, China. *Urban Studies*, 59(5), 1068–1084. <https://doi.org/10.1177/0042098021997034>
- Zhang, F., & Wu, F. (2024). Green state entrepreneurialism: Building the park city in Chengdu, China. *Transactions in Planning and Urban Research*. <https://doi.org/10.1177/27541223241253231>
- Zhang, F., Wu, F., & Lin, Y. (2022). The socio-ecological fix by multi-scalar states: The development of 'Greenways of Paradise' in Chengdu. *Political Geography*, 98(2021), Article 102736. <https://doi.org/10.1016/j.polgeo.2022.102736>
- Zheng, Y., & Huang, Y. (2018). *Market in state: The political economy of domination in China*. Cambridge University Press.
- Zhu, X., Qiu, T., & Liu, D. (2023). Resisting public monitoring in authoritarian regimes: Evidence from local environmental litigation in China. *Governance*, 36(2), 459–477. <https://doi.org/10.1111/gove.12675>