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“Small Sacrifice for the Greater Good”: Decoding Just Transition in a Chinese Peripheral Region

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Abstract

The notion of just transition is important and debated in discussions about climate change and low-carbon shifts. This study aims to refocus on just transition from a spatial perspective. We investigate perceptions in Chun'an, Zhejiang, to redefine just transition beyond Western ideas. Our case offers one key yet under-explored dimension in the interpretation of justice: spatial scale. First, the green transition of Chun'an can be regarded both as a sacrifice of economy from a local perspective (Chun'an county) and as a valuable social contribution from a broader regional perspective (Hangzhou city area). Second, the multi-scalar interaction of the transition process shapes the perceptions of justice. It is represented by the growing local tensions between developmentalism and environmentalism. Such a process is aimed at generating a wider scale of well-being, contributing to a process of/for justice. We argue just transition is about a spatially sensitive process towards (rather than of) justice. In China, realizing transition is the way towards justice, and justice itself is transition in the long run.

Keywords

China; Chinese periphery; just transition; multi-scalarity; perceptions; transition practices

1. Introduction

In the field of international climate politics, there is a growing emphasis on social justice, coupled with the narrative of a “just transition” (JT; see Heffron & McCauley, 2018; McCauley & Heffron, 2018). The central idea is that major structural changes will reinforce existing inequalities and/or introduce new ones (Curran & Tyfield, 2020; Huang & Liu, 2021; Miller et al., 2013). As cautioned by some scholars (Newell & Mulvaney, 2013), the adoption of green technologies in existing social-technical systems can lead to unexpected forms of injustice. Consequently, there is a growing consensus among key stakeholders to ensure fairness in the processes of transitioning to a low-carbon future (ILO, 2015). Undoubtedly, this has brought about new challenges for global climate governance.

In the existing literature, Western conceptualizations of JT are rooted in the democratic ideology and political legitimacy-seeking for absolute, preconditioned, decentralized justice before transition practices unfold. They remain normative and aspirational policy discourses (McCauley & Heffron, 2018). Moreover, the Western concept of JT offers a holistic framework to capture the preconditions, processes, and outcomes of socio-technical transitions. It mainly involves labor-oriented governance and perceptions of social justice and equality (Stavis & Felli, 2020). In short, JT focuses on geographically certain and industrially targeted vulnerable groups during transitions, seeking compensation and skills training for their particular “justice” (Cha, 2020). Some scholars argue, however, that injustice emerges not because of transitions. It may be rooted in long-lasting social relations, collective interests/identities, and power inequalities, and it is also highly contextual and place-specific (Evensen et al., 2018; Motz, 2021). Providing justice governance to certain groups in certain localities may present injustice to others elsewhere (Wang & Lo, 2021). Recent research has pointed out that JT is a multi-dimensional, multi-scalar, multi-actor, and context-sensitive process, calling for more grounded elaboration on the role of scalarity in JT (Huang & Liu, 2021; Malakar et al., 2019).

China plays a significant role in the global transition toward decarbonization (Huang et al., 2021). It is pursued through the “dual carbon strategy,” which has evolved into both a government-led top-down initiative and a growing number of grassroots greening projects. Various stakeholders on the ground interpret and implement this strategy through green transition practices to not only address climate change but also promote “ecological civilization” (Huang & Westman, 2021). Furthermore, these practices are deeply rooted in Chinese socialist ideology and cultural philosophy, emphasizing social justice. However, there has been relatively little scholarly research on the connection between transition practices on the ground and the concept of JT in China.

In recent years, China aimed to create a more socially balanced and environment-friendly growth model, which is a pivotal component of the country’s modernization strategy (Hansen et al., 2018; Zhou, 2021). The implementation of transition projects is not about creating green industries and technologies, but about a system-level change that shapes Chinese society. This involves the process of social learning among various actors, encouraging the wider social acceptance of a new development model in the social-technical system. This envisioned model is centered on achieving concrete goals of development, which are supported by on-the-ground policy actions (Huang et al., 2021). In this sense, JT in China may differ significantly from Western interpretations. Therefore, several questions remain unclear: How do China’s transition practices align with JT in theory? How do concrete transition initiatives on the ground generate JT, and JT of what kind, for what, and for whom? What does JT look like in China from a spatial perspective?

This article thus investigates who learns and accepts JT, how, and for what, focusing on concrete transition initiatives in China. To bridge JT theory with transition practices we zoom in on Chun'an, a designated ecological county with a troubled economy and also a peripheral region of Hangzhou municipality, Zhejiang. Through an examination of green transitions and the perceptions of local stakeholders and residents, we uncover JT's true meanings on the ground. Our case investigates how the transition that has been practiced in Chun'an generates divergent scales of (in)justice. It highlights the multi-level governance dynamics that contribute to justice, and we explore the tensions between exclusivity and inclusivity from a multi-scalar perspective.

The article is structured as follows: Section 2 establishes our conceptual framework connecting China's transition strategies and JT. Section 3 outlines our research region, methodology, and data. Section 4 presents the transition story in Chun'an and shows the tensions between justice and transition. The final section concludes and places our findings in the broader context of understanding JT in China.

2. Putting the Concept of JT Into the Chinese Context

2.1. Understanding the Concept of JT

The concept of JT holds a prominent place in Western scholarly discussions. Its formal introduction was facilitated by the International Labor Organization and the United Nations Framework Convention on Climate Change. In its original concept, JT aims to prevent negative consequences for workers and communities during the transition to a low-carbon economy. It emphasizes protecting labor rights, job security, and skill development in certain industries (e.g., mining) affected by environmental policies to achieve a transition with social justice (Sweeney, 2019). In other words, transitions require a balanced approach that can manage to align environmental goals with socio-economic inclusiveness (Agyeman & Evans, 2003; Burke & Stephens, 2017). In essence, JT is about striking a balance between economic stability, labor rights, and social and environmental justice as societies embrace the structural shift toward more sustainable practices.

Recently, the notion of JT has quickly gained attention from an array of global policy stakeholders. Particularly in Europe, it has captured policy design, cutting across different sectors and encompassing a wide spectrum of principles, aims, and visions. Despite increasingly becoming a "policy buzzword," JT has received insufficient scrutiny in terms of its core meaning, involving "just," "transition," or "just transition" itself (Snell, 2018). Present policy interpretations primarily revolve around labor rights and community assistance during transitions, potentially trivializing the concept or, conversely, elevating it to a utopian ideal (Evans & Phelan, 2016).

Addressing the challenges of JT also involves making it relevant in non-western contexts. JT assumes Western notions of justice, whose core narratives and meaning may not be applicable to countries with varying resources, development stages, cultures, and socio-political structures. Normative and politically standard "justice" ideas are certainly insufficient to address concrete (in)justice issues that are often deeply embedded in specific contexts on the ground (Jamal & Hales, 2016). It is particularly the case when mainstream global climate politics with the idea of JT travel to developing countries. JT projects, likely, fail to unfold on the ground or overlook localized rights and unfairness for the sake of global interests in sustainability.

In this regard, JT raises a persistent question: What does “just transition” practically mean, so that its realization on a global scale in various locations is feasible? This requires a departure from adopting a normative definition of JT and then applying it to specific instances. Such an approach runs counter to the challenges associated with JT, including its unsettled nature, diverse components, contextual variations, and the need for a concrete, rather than abstract, approach (Huang & Liu, 2021). Instead, the true meaning(s) of JT should be based on empirical analysis of specific examples, made from the collective insights drawn from these cases on the ground (Wang & Lo, 2021).

Moreover, questions of “just transition for whom” and “for where” remain understudied (Cha, 2020). On the one hand, the politically right answer to “JT for whom” is that it should be “JT for all” (Stevis & Felli, 2020). Existing research often focuses on who is involved in and who benefits or disadvantages from transition projects in certain places. However, less attention has been paid to long-term structural injustice from a multi-actor and multi-scalar perspective (Avelino & Wittmayer, 2016; Luke, 2023). Transitions often involve a spatial and socio-economic restructuring at the systemic level. Vulnerable skills, knowledge, and workers are interconnected within broader supply chains spanning various geographical spaces (Garvey et al., 2022; While & Eadson, 2022).

The spatial dimension is critical for rethinking JT. It is, however, unclear how decisions at one scale affect others, creating trade-offs, compromises, and conflicts among stakeholders at different scales. The multi-scalar approach acknowledges that JT involves complicated and interconnected causes, perceptions, and governance across various geographical contexts (Gürtler et al., 2021; Raven et al., 2012; Wang & Lo, 2022). Regardless of a transition’s origin, mechanism, and pathway, it’s essential to consider “just transition for whom” and “for where” to understand and reflect on the multi-dimensional, relational nature of JT. The concept of space in JT has received attention in the literature (Malakar et al., 2019). However, research on spatial aspects and its constellation of JT ideas in non-Western contexts is lacking. JT deals with a social balance among heterogeneous groups of interests whose socio-economic concerns are at and involve multiple geographical scales, but question about “JT for where” and its theoretical implications remain unclear.

All in all, considerations of scalarity offer insights into justice during transitions as contextually responsive and conceptually adaptable. The meaning of justice in transition is dynamic and rooted in real-life situations. This implies that by prioritizing the real narratives and interpretations of various stakeholders within their specific spatial settings, the conceptualizations of JT can be enhanced in practice.

2.2. The Interpretations of JT With Chinese Characteristics

China is now harnessing ecological civilization and dual carbon strategies to address the Chinese-specific pattern of socio-economic transformation, differing from Western capitalist models. These strategies are being implemented across the country by a series of top-down well-designated transition policies, regulations, and investments. In line with these national strategies, stakeholders are allowed to address localized needs and practice grounded transition projects accordingly. These transition practices aim at achieving economic and political tasks while simultaneously addressing environmental and resource challenges with social justice (Huang et al., 2021). In other words, sub-national regions and cities are the key players in China’s JT practice and experimentation (Wang & Lo, 2023).

China's concept of JT not only implies a commitment to global climate justice, but it also demonstrates a solution-based and action-led interpretation of Chinese-style modernization, or indeed, of a new and distinct development model that China can show to the world. Its JT embodies two pivotal facets: Firstly, JT does not go against or exclude socio-economic development. In this sense, justice is read as a dynamic and relative definition that can change with the context, while transition should maintain or empower the right of development. This is different from Western JT ideas on de-growth and anti-development. Secondly, JT emphasizes a "transition" that fosters continuous development while upholding environmental justice (Sovacool et al., 2020). Unlike the Western focus on "just" elements, China values more what JT actually delivers by striking a dynamic balance between environmental sustainability and socio-economic development. To sum up, the term "just transition" is formed and interpreted by doing transitions in actual contexts, which is neither a policy terminology nor a jointly accepted concept itself. It is regarded as, probably, a never-ending process toward a new development path.

China's JT discourse and ongoing practices differ from what the Western concepts explain. China's "transition" leans towards a decentralized governance system, in reality, a technologically advanced approach, and the realization of both national strategies and local needs. It seems to be both strategic and pragmatic but also contextual, whose actual implementations are diverse in processes, pathways, and consequences. Such JT is not comparable to the deliberative, democratic process and procedural/absolute justice with which Western JT is usually associated (Lo, 2015). This Chinese view of JT-as-process and JT-as-context may align with the demands of governments and citizens in the Global South. That is, JT shall generate actual changes in promoting the model of techno-economic development.

Yet significant questions remain. The geographically diverse, institutionally fragmented, and economically decentralized nature of the country raises the question of how JT is being realized through transition practices. While the central state's stance on socio-technical transition is becoming clearer, much remains to be explored about its actual impact on the ground. The contextualized cases of transition practices are expected to reshape and guide the future discourse of JT in China and beyond.

To sum up, China's low-carbon transition provides an ideal arena to explore JT on the ground for two reasons. First, despite China's experiencing a recentralization of power with top-down interventions on environmental governance and economic transition, its governance system is still a combination of economically fragmented (and decentralized) administration and political adaptability (and accountability; see Xu, 2011). This unique political landscape empowers various geographical scales and contexts, making the role of spatial interface and governance highly relevant to the understanding of JT (Coenen et al., 2012; Mjörner & Binz, 2021). Second, although there is a lack of public participation in Chinese society, this does not mean there is no critical voice and perceptions regarding transition practices. Transitions not only affect stakeholders but also impact everyday life for ordinary people. A JT perspective in China raises crucial questions about justice in dimensions that may not naturally align, such as outcomes, procedures, recognition, and capacity.

3. Research Area, Methodology, and Data

3.1. Regional Background

Chun'an is a peripheral county under Hangzhou's jurisdiction. It is Zhejiang province's largest county by size, covering 4,427 km². Notably, Chun'an houses Qiandao Lake, spanning 573 km², formed as an artificial reservoir after the completion of China's first indigenously designed hydroelectric station—Xin'an River Station—in 1959. Qiandao Lake became a tourism destination during the 1980s. In the 1990s, Chun'an embarked on a path of industrialization, capitalizing on its water resources to attract manufacturing industries like steel, chemicals, coking, and papermaking. This endeavor, however, contaminated Qiandao Lake and Qiantang River, which also traverses Hangzhou (Figure 1). Consequently, since the 2010s, Hangzhou has urged Chun'an to enhance environmental protection by carrying out the enforcement of an act of de-industrialization. This enforcement has pushed nearly all contaminative sectors and factories out of Chun'an (Chun'an County Government, 2022).



Figure 1. The locations of Chun'an county and Hangzhou in Zhejiang Province, China.

Chun'an's development trajectory shifted after 2003. Zhejiang's then CCP Chief Secretary Xi Jinping introduced a development strategy for Zhejiang known as the Double Eight Strategy (Hu et al., 2021). This strategy particularly designated Chun'an, a periphery, as a demonstration region for fostering green transition. Moreover, Xi Jinping visited Chun'an on many occasions, underlining the importance of safeguarding Qiandao Lake as a prerequisite for the envisioned transition. Empowered by this impetus, Chun'an established an explicit environmentalism regime, focusing on maintaining Qiandao Lake's water quality.

However, overemphasizing environmental protection hindered Chun'an's economic growth. From 2011 to 2020, its GDP grew modestly, from 2.2 to 3.78 billion US dollars. This placed Chun'an among Zhejiang's economically weaker regions. In response, Chun'an shifted focus to tourism and real estate sectors.

However, in 2018, nationwide environmental regulations forced the closure of lakeside establishments like hotels, golf courses, restaurants, small farms, and factories. These regulations prompted provincial government action. In 2019, Chun'an was designated by the Zhejiang government as a "special ecological functional area." Stricter environmental actions were introduced. Recognizing Chun'an's economic decline, the Zhejiang government also designated it as a pilot area for ecological and low-carbon development, offering more administrative flexibility for transition strategies. By 2021, Chun'an's economy rebounded to its 2017 level (Chun'an County Government, 2022).

The transition story of Chun'an serves as an illustrative case to examine the concept of JT in China due to four key factors. First, Chun'an's transition towards sustainability is both influenced by local dynamics and motives and guided and mediated by local, municipal, provincial, and central government interventions. Second, the environmentalist-led practices in Chun'an have raised questions about the implications for local economic development, emphasizing key considerations of transition within the JT concept, such as who/where the transition is being targeted at and who/where it impacts. Third, the county balances the need to protect a critical national water source through environmental actions to improve economic prospects and livelihoods for residents, aligning with the fundamental principle of JT in China: promoting socialism and fairness among people. Finally, Chun'an's transition projects involve multiple levels of governance, leading to complex interplays and potential conflicts among stakeholders with varying interests at multiple geographical scales. This complexity highlights the scalarity of the JT concept. It showcases the complex trade-off between environmental preservation and economic development and is behind JT nuances of grounded transition practices in a non-Western context.

3.2. Methodology and Data

We collected both first-hand and second-hand data for our case study. First, we conducted a desk analysis of secondary materials, including (a) statistical data and government reports released by public agencies, (b) digital materials in media agencies, such as historical documentaries, website articles, and newspaper reports, and (c) published academic papers.

We conducted a two-week on-site fieldwork in Chun'an, including semi-structured interviews and informal conversations with stakeholders. The fieldwork, carried out by our research team between 17 and 28 January 2022, involved 12 formal interviews with 20 key informants from government authorities (three of which were from Hangzhou), enterprises, and a CCP academy. We also had informal discussions with 19 residents in Chun'an. Each interview or conversation lasted from 10 minutes to one hour, covering three main areas of inquiry: (a) stakeholders, key tasks, purposes, and their narratives related to transition practices/projects; (b) the actors and their motives for transition practices, including those who facilitate or hinder transitions for different parties; and (c) the impacts, outcomes, and perceptions of transitions about (in)justice. To ensure the reliability of our findings, we cross-referenced all primary data with secondary sources. Moreover, all interviews were conducted with the consent of the interviewees and were treated anonymously. We only refer to the identities and positions of the interviewed stakeholders generally to avoid potential ethical concerns.

4. Practicing Green Transitions in Chun'an: Local Loss Yet Regional Gain

4.1. *The Perceptions of Transitions on the Ground*

Transitions in Chun'an are rooted in two narratives that reflect the county's unique context and needs: environmental protection and economic development. While green development is emphasized as a crucial path for transition, the reality leans toward prioritizing environmental protection. Residents hold varying and often ambiguous perceptions of this transition. They generally agree that the concept of transition is closely linked to "environmental protection" and "development." Most interviewees possess a logical and rational understanding of transition, perceiving it as synonymous with "green development." As illustrated by a key official from Chun'an's Development and Reform Commission:

In Chun'an, even though our primary focus is on environmental protection and eco-construction, we also require economic development. In my view, transition involves creating a development pattern that brings both ecological and economic benefits.

Besides, several interviewees provided similar explanations from a historical development perspective, arguing that transition is practically not new to Chun'an. One faculty from Chun'an CCP academy offered a critical point of view:

Even though the concept of transition is gaining attention due to climate change today, Chun'an has been implementing it since the early 1990s. In our efforts to protect Qiandao Lake, we started de-industrialization much earlier than other regions in Zhejiang. We have had a strong focus on green economic development due to various environmental policies and regulations. So, for Chun'an, transition means promoting green development.

More specifically, a government official working in the Ecological Monitor Department of Chun'an defined the transition of Chun'an as "development with a precondition of environment protection of Qiandao Lake." He added:

Thirty years ago, both the Zhejiang and Hangzhou governments considered Qiandao Lake as a crucial water source for Zhejiang. This decision shaped Chun'an's entire development direction, emphasizing the importance of going green. It means that we must prioritize environmental protection as a prerequisite for development.

However, other interviewees, including government and firm institutions, hold contrasting views that differ from the "transition as green development" cognition. They suggest that development, even a green one, is not the core of Chun'an's transitions. Instead, they propose the idea of "environment protection as transition." Some interviewees view environmental protection and development as a zero-sum game, highlighting the difficulties and even impossibilities of balancing them. As described by a senior official from the Chun'an Government Office:

Here, transitions primarily focus on environmental protection. We have not received significant support for boosting our economy, neither from Hangzhou nor Zhejiang province. That is the reality. Transitions

do emphasize economic development, but the prerequisite of economic development is the protection of the environment. Overall, I believe transitions mean shifting towards eco-friendly, low-carbon, and sustainable development. But as a national-key drinking water place, taking care of the environment is the primary goal. That is to say, ensuring the preservation of Qiandao Lake's eco-system is the most important and biggest transition for Chun'an....This is a must-do obligation given by the state.

These interviews show that transition narratives and interpretations are intimately embedded in the unique context of Chun'an, addressing place-specific practical challenges and needs relating pragmatically to the development issue. In Chun'an, it is clear that the idea of JT delves deeper than merely industry decarbonization and responding to global climate change. It reflects a nuanced approach to the local development trajectory and history, where a strong focus on environmental preservation takes precedence. Although the current transition projects are designated by national strategies and the tightening of environmental regulations, local stakeholders treat the idea of "transition as green development" with equanimity mainly due to the long history of Qiandao Lake protection. By bridging the concept of JT, even though views on transitions may differ, a holistic view reveals a congruence between the pursuit of development and environment preservation, embodying the essence of JT's vision with strong Chinese characteristics for a sustainable future.

4.2. The Losses and Sacrifices of Chun'an's Transition: A Local Perspective

Chun'an, designated as a special ecological functional area by the Zhejiang government in 2020, places the topmost priority on environmental protection in its nearly everyday governance. The Qiandao Lake Great Protection Initiative, as a central aspect of Chun'an's green transitions, revolves around environmental conservation and the nurturing of the Qiandao Lake ecosystem. This initiative is recognized as a crucial political undertaking at various governmental levels, including the county government of Chun'an, the city government of Hangzhou, and the provincial government of Zhejiang. Indeed, it is closely tied to a significant project known as the Qiandao Lake Water Diversion Project, which was planned in 2011 and completed its construction in 2019 (Figure 2). This project aimed at diverting natural water directly as drinking water from Qiandao Lake to downtown Hangzhou. This required the establishment of higher-level environmental protection standards in Chun'an. For instance, the closure, in 2014, of 220 farms and the relocation of 918 farmers for fish farming highlights the rigorous measures that were undertaken, according to an official from the Chun'an government. Besides, in 2020, the Zhejiang Development and Reform Commission introduced stringent regulations on industry entry, prohibiting 101 types of manufacturing industries from establishing operations in Chun'an. These measures, however, have had adverse effects on potential economic development, as explained by a senior official from the Chun'an Government Office:

When Hangzhou chose to get its drinking water supply from Chun'an, it marked Chun'an as a critical water source area. This led to the implementation of new environmental protection regulations. It increases the compulsory financial costs associated with investment in ecological projects and deters new investments in manufacturing sectors.

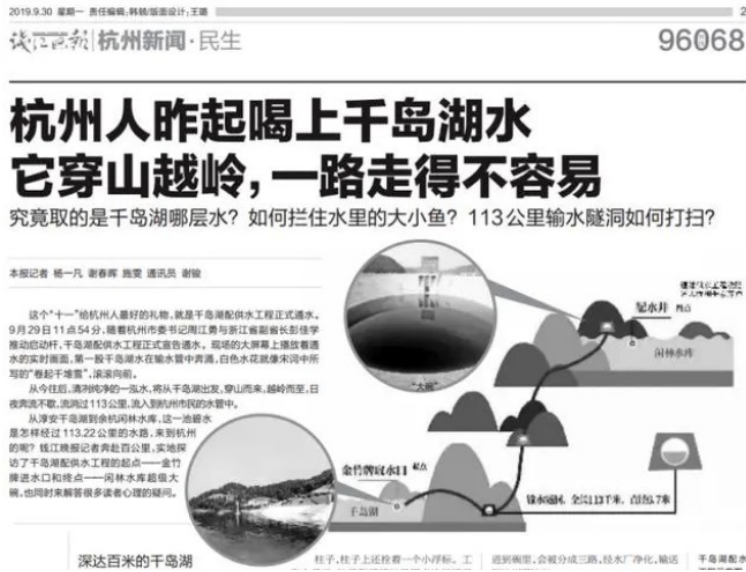


Figure 2. A Hangzhou-based newspaper article from 2019 celebrates that Hangzhou residents get access to drinking water from Qiandao Lake. © Qianjiang Evening News.

Despite the opportunities presented by Qiandao Lake for water-related industries, eco-tourism, and real estate, Chun'an's economy remains weak. It contributes only 1.5–2% to Hangzhou's GDP and has become a peripheral county for a decade. Chun'an grapples with limited economic prospects. This challenge is amplified by Chun'an's peripheral status and the absence of a robust industrial base. Yet the limited opportunities and scope of economic development encouraged Chun'an to embrace green transition. From a local perspective, the commitment to transition has required significant sacrifices and costs. As emphasized by a local official:

We're stuck in a paradox: We have a strong will to develop, but our options and opportunities are restricted. The long-term lack of competitive industries, coupled with the difficulties of attracting inward investment due to increasingly added environmental costs, has left local people feeling disheartened. From 2010 to 2020, our population decreased from 450,000 to 320,000 due to economic instability under increased environmental regulatory pressures from upper governments. The substantial financial burden of ecological protection has led to a prolonged economic slowdown. To me, this transition feels like a loss and pain.

Since 2018, the Chun'an government has allocated around 10 billion RMB to compensate lakeside businesses that were severely affected by strict environmental regulations. Despite receiving an annual transfer payment of two billion RMB from the provincial government, the spending on transition practices significantly surpasses these funds. Besides, several government officials expressed their dissatisfaction with the lack of ecological compensation from the Hangzhou municipal government. As one of them criticized:

Hangzhou's municipal government did not care about our difficulties in development. Instead, Hangzhou allocated specific funds to Chun'an Water Resources Bureau only for the management of the Water Diversion Project. The funds involve a one-off payment of 250 million yuan to ensure people's livelihoods. An additional annual fund of 250 million yuan is divided into pollution control

initiatives and incentives for the environment-related government departments of Chun'an. That means there is no money really oriented to industry development projects.

It is evident that there's a lack of a people-centric ecological compensation system related to the water diversion project. Financial transfers from higher levels of government primarily focus on environmental protection and management, with limited allocation for economic development. While there's acknowledgment of ecological compensation for Chun'an from various government bodies, there's no well-defined policy framework, and the sustainability and sources of these funds remain uncertain.

More interviews with residents further demonstrate a strong sense of sacrifice and compromise on green transition. Some express grievances against giving up economic development opportunities for the sake of maintaining/enhancing higher-level environmental preservation. Others, while acknowledging the value and need to improve ecological conditions, believe that the emphasis on transition practices has overshadowed the improvement of people's livelihood standards, including job opportunities and income. One elderly resident expressed concerns:

Chun'an's history, dating back to the 1950s, is marked by sacrifice. Approximately 300,000 residents were compelled to leave their homes during the construction of the Xin'an River hydropower station. Today, Chun'an carries the responsibility of environmental conservation, which has deprived us of development rights.

Several interviewed residents echoed this sentiment, expressing significant concerns regarding the justice of the water diversion project for Chun'an. They believe that making Chun'an environmentally friendly is not worth the sacrifice of economic development and income growth for ordinary people. Their typical reasoning includes:

The water diversion project hasn't directly compensated Chun'an's residents. It appears that our environmental efforts primarily benefit the people in urban Hangzhou by providing clean drinking water. In other words, we sacrifice our economy for their [Hangzhou residents'] social and economic benefit.

Despite the prevalent critiques, approximately 70% of the residents we interviewed possess a broader vision, comprehending the prevailing "sacrifice only us, benefit more others" (舍小家, 为大家 in Chinese) paradigm. This very Chinese-specific view certainly captures the core meaning of China's socialist ideology and particularly of the long transition of social/cultural norms—namely, the spirit of "collectivism" or the "minority yielding to the majority" perspective. This, in turn, reflects how Chun'an's transition is regarded as a process toward a wider scale of social justice, though the local economy is likely in trouble. One resident articulated a forward-looking stance:

Considering Chun'an's future dependence on the lake and its ecological significance, our sacrifices in the economy, though substantial, contribute to a greater purpose. Since Qiandao Lake not only belongs to us but also to Hangzhou, Zhejiang, and even China. Our green transition generates greater benefits to the whole Xin'an river basin region, whose development and growth are more important than we are. I think our sacrifice is worthy and strategic for the greater good.

Moreover, two individuals highlighted the intrinsic relationship between development and environmental protection. One resident argued that it is not right to blame local sacrifice only for environmental protection. Transition practices are not merely for our “own development” but granted as a strategic mission or a contextually dependent obligation for the greater development and higher value-added creation of Hangzhou. As he put it:

At present, Chun’an’s strategic significance and historical value within Zhejiang is well clarified, with its pivotal role in demonstrating a sound transition model of cross-regional cooperation by delivering greater ecological and economic benefits to Zhejiang’s capital city—Hangzhou.

Another respondent put a rationale note that Chun’an’s sacrifice for JT is not solely due to recent strict environmental regulations themselves but also largely to the long-term lack of endogenous capacity to establish a developmental mechanism of green economy.

Despite the focus on green development and transition, residents haven’t seen significant improvements in their incomes and living standards. Many believe there’s a trade-off between economic growth and ecological well-being in the current situation. The question of whether these sacrifices are justified at multiple scales and who benefits from them remains a topic of ongoing discussion in the next section.

4.3. The Contribution and Gain of Chun’an’s Transition: A Regional Perspective

From a broader regional standpoint, Chun’an’s transition practices have been continuously supported and jointly governed by multi-level governments, with a greater purpose beyond the local ones. Back in 2003, Xi Jinping visited Chun’an, which has since been marked a historically pivotal moment. There he outlined significant development pathways and laid the foundation for the core principles of today’s transition in Chun’an. In particular, he stressed that the environmental protection of Qiandao Lake was central to Chun’an’s tasks, as it not only matters for its future development but for the wider interests of Zhejiang as well. Since then, Chun’an has been entrusted with the solid responsibility of conserving Qiandao Lake, a duty directly given by Zhejiang province. In response, the Chun’an government proactively raised its environmental standards to surpass all other counties in Zhejiang. Furthermore, many extraordinary efforts were made to exceed the national first-class water quality standards for Qiandao Lake. These practices, in turn, resulted in explicit socio-economic benefits for downstream regions—namely, allowing them to significantly save environmental costs and to focus more on economic development. An official leader from Chun’an Ecological and Environment Protection Bureau noted:

Qiandao Lake is the core of the whole ecological system of the Qiantang River basin. This means that its environmental condition or our performance of action on protecting the environment can directly impact Hangzhou’s sub-ecosystem. What we do is worthwhile. Extending beyond our own interests, our efforts benefit the entire region.

Chun’an’s investments in environmental protection for Qiandao Lake—as one of the key transition projects—have resulted in cost savings for Hangzhou in terms of environmental governance. An official from the Chun’an Government Office explained further:

The more we invest in environmental protection on Qiandao Lake, the less Hangzhou pays for environmental governance. So, it is a win-win game: It saves money while benefitting broader regions.

Notably, Chun'an stood out by being chosen for Hangzhou's "Beautiful Hangzhou" Initiative in 2013 and Zhejiang's "Five Water Governance" in 2014. This made it a role model for environmental governance. In 2015, the central government granted Chun'an the status of a national key ecological functional area, with the mission of raising local environmental standards. Chun'an aimed to surpass Hangzhou and Zhejiang standards by developing its unique environmental governance. This was emphasized by a senior director from the Chun'an Government Office:

Thanks to our ongoing efforts in ecological construction, our environmental metrics consistently surpass the benchmarks established by the Hangzhou and Zhejiang governments. We've also been shaping our own environmental standards and associated governance practices, setting an example for neighboring regions to follow.

The implementation of the Qiandao Lake water diversion project holds significant importance beyond Chun'an. This project has a substantial impact, transferring a substantial annual volume of freshwater—978 million cubic meters—from the lake to Hangzhou's urban area. This supply is crucial for meeting Hangzhou's water needs. It supports its urban expansion and enhances the quality of life for its residents. The project represents an innovative solution that transcends administrative boundaries, reflecting Chun'an's commitment to sustainable resource management. It effectively addresses a pressing environmental challenge not only for Hangzhou but also for the broader region, including Zhejiang province. One key official from the Chun'an Government Office emphasized:

This initiative highlights the crucial role of environmental protection in Chun'an. It transformed Hangzhou's urban water supply, shifting from sole dependence on the Qiantang River to a secure, cost-effective, multi-source supply from Qiandao Lake. This change ensures high-quality drinking water for Hangzhou at a low purification cost.

In 2019, the Zhejiang government designated Chun'an as a special ecological functional area—the sole experimental area of its kind in China—further translating the principles of green transitions into practice. As previously mentioned, Chun'an was thrust to the forefront of a new environmental protection initiative by national authorities. The enduring practices of transition in Chun'an have not only been upheld but revitalized as well with potential wider political gains. With a profound, rational, and culturally reflective voice, if not common sense, what was repeatedly heard from various stakeholders and ordinary residents was that "we make our small sacrifice for the greater good." This, at least, demonstrate a broader, relative, spatially related idea of justice.

5. Discussion and Conclusion

In this article, we explore the grounded transition practices in China into the framework of JT, revealing a notable divergence in the understanding of justice between the multi-level Chinese government and its residents. Within China, there is a prevalent belief, if not a cultural norm, that large-scale social justice hinges on continued socio-economic transitions, despite the emergence of small-scale conflicts and injustice which

itself is a part of any form of transition. The practice of transition is seen as a means to deliver new dynamism for green development, as well as, as we have shown in our case, new value and positive elements for wider social justice in a broader scale. Our study also shows that while transition practices unfold and occur locally, they are legitimized and implemented by multi-scalar governance involving multiple authorities. Such governance is characterized by the trans-local strategic balance of both positive and negative factors of transitions at and across multiple geographical spaces.

The case of Chun'an serves as a clear illustration of this perspective. At a regional level, guided by state-led environmental governance, Chun'an shoulders significant ecological responsibilities, particularly in safeguarding freshwater resources, even at elevated costs. However, when viewed from a local standpoint as a left-behind peripheral county, Chun'an also faces the imperative of improving people's livelihoods and fostering economic growth. Despite the challenges, local endeavors are still concentrated on forging a green economy. We argue that Chun'an's transition practices are translated by various stakeholders as a process of multi-scalar governance for socio-economic development. The process is specifically designed and implemented to deliver much greater justice, in a broader scale, although small-scale sacrifices, injustices, and compromises in Chun'an still emerge. Moreover, the perceptions of most interviewees on JT are rooted in the Chinese-specific mindset associated with socialist thinking and collectivist cultural norms (Huang et al., 2021). They are also well contextualized to serve China's current national-level strategies such as "ecological civilization" and "regional integration development" for modernization. Moreover, such a mindset reflects an intriguing interpretation of JT with a spatial perspective, which differs from most Western JT conceptualizations (Jones et al., 2019). This perspective regards local initiatives as strategic instruments for social justice on a much broader scale, transcending local small-scale needs and injustices. The case of Chun'an certainly demonstrates a pragmatic process of transitions in which the delivery of justice is more important than keeping justice itself by its normative meaning.

We propose one key element in interpreting JT on the Chinese ground: scale. Scale in transition refers to the magnitude and geographical scope of the transition, as well as the interplay of governance processes and geographies. The significance of scale in JT is apparent due to the intricate nature of multi-level governance (Liu et al., 2022). The absence of a just ecological compensation mechanism for the water diversion project exemplifies the diverse and conflicting perceptions, interests, and actions of various stakeholders. Therefore, environmental protectionism in Chun'an is seen as a means to ensure sustainability transitions. It also serves as a green development pathway both at the local and regional scale, with social justice naturally generated and achieved in the broader sense. The spatial perspective of transition influences justice perceptions, leading to tensions and conflicts between developmentalism and environmentalism at the local level. While this can generate local injustices by sacrificing the economy, it has the potential significance to deliver wider well-being and greater social justice at a larger scale, namely so that the whole region and the majority of people could enjoy socio-economic gains and dynamics for a bigger green economy. To put it more explicitly, realizing transition is justice (as an effective way towards justice), justice is transition (Huang & Hu, 2023).

To sum up, the Chinese government takes a pragmatic yet visionary approach to transition, focusing on its implementation on the ground. Because transition inevitably incurs social injustices and creates winners and losers, the focus is placed upon the actual delivery of transition in a way as just as possible. However, as transition deepens, tensions between local development and top-down environmental conservation policies may intensify, giving rise to social justice issues. This dilemma is evident in the Chun'an case and is likely to

be present in other cases as well (Huang & Hu, 2023). Since 2020, a higher-level and nationally designated JT strategy, the Common Prosperity Strategy, has been implemented in Zhejiang to put more transition projects into practice (Dunford, 2022). Zhejiang is expected to act as a role model for China in terms of establishing a comprehensive JT mechanism. The provincial government is now building twinning partnerships between core and peripheral counties for economic cooperation, rural-urban integration, resource sharing, and JT (Hu et al., 2022). The key question is how can a healthy balance between transition and development for sustainable spatial and social justice be achieved (White, 2020). This is a question yet to be answered, and hopefully, China's transition experimentations with profound political accountability and flexible local innovations with dynamic leadership and contextual sensitivity may offer insights in the near future.

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Conflict of Interests

The authors declare no conflict of interests.

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