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Full Length Article

Rural drinking water governance politics in China: Governmentality schemes and negotiations from below



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ABSTRACT

This paper examines the politics of rural water governance in China through a governmentality lens and village water intervention case. The China Rural Drinking Water Safety Project (RDWSP) was an attempt to control water, while also serving as a tool of power to impel the rural population towards national development goals. The authors analyzed official documents and conducted interviews in a village in Shandong Province to investigate the RDWSP's rationale and practices, as well as how water access and management were negotiated by rural water users. The paper argues that (1) confronted with a decline in local governance capacity and in an effort to rectify the mistakes of the supply-driven, technocratic paradigm, the RDWSP attempted to integrate social, environmental and economic concerns but did not achieve that goal; (2) the decline in local governance capacity and people's pragmatic everyday strategies contributed to an individualized approach to solving water problems, reflected in people's disengagement from the government project and local participation, an effect that may sustain people's marginalization and exclusion from good-quality water access and management. Using the Chinese water project as an example, the paper contributes to the debate on state-induced water control versus civil society "counter-conduct" formed by daily interactions. Furthermore, it enriches the study of politics in general by presenting the state as a site of contested institutionalization and ongoing negotiations, confronted by everyday narratives and encounters with marginalized citizens that go far beyond and are far more complex than overt resistance or covert weapons of the weak.

1. Introduction

From 2005 to 2015, the Chinese government implemented the Rural Drinking Water Safety Project (RDWSP) to improve access to safe drinking water for some 500 million rural residents. Under the project, which was a focal point of China's 11th and 12th Five-Year Plans, respectively, of 2006 and 2012, running water was installed in people's yards via centralized water supply systems. With the initiative, the government aimed explicitly to bring the "backward countryside" and "low-quality rural population" into modernity, reducing water-related diseases and improving hygiene habits, quality of life, agricultural productivity and local democracy. The project additionally sought to diminish the economic gap between urban and rural areas (National 11th Five-Year Plan for RDWSP, 2006: 58–60; National 12th Five-Year Plan for RDWSP, 2012: 66–68, own translation). These were far-reaching aims for a water infrastructure project. Indeed, the RDWSP was an attempt to reshape the very governance of rural society in China,

towards broader development and nation-building objectives (Menga, 2015; Palmer & Winiger, 2019). The water reform was implemented as an endeavor of governmentality (Foucault, 1991). Viewed in this light, the current paper uses a case study to explore the RDWSP's efforts to strategically organize and align rural residents, institutions, infrastructure and practices in order to steer and control societal development (Dean, 1999; Foucault, 1991; Rogers et al., 2016). The outcomes of these efforts were diverse and unpredictable, mirroring those of other hydro-technological interventions (see, e.g., Birkenholtz, 2009; Hommes et al., 2020; Huxley, 2007; Menga & Swyngedouw, 2018; Zenko & Menga, 2019).

In the case study, people's responses to the RDWSP diverged primarily in association with the specific socioeconomic conditions of their household, their livelihood/water access strategies and their life experiences. By delving into these, this paper contributes to a broader discussion of state-induced water control and "counter-conduct" by civil society. It demonstrates that beyond open and organized political

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resistance, and beyond everyday forms of resistance (Scott, 1985) - both modes of resistance much discussed in the literature - there is an "unmarked mass of non-contested water interactions in social life" (Cleaver, 2018, p. 247). This unmarked mass encompasses myriad forms of not-resisting while neither conforming nor complying, in which people try to gain access to water. The paper first introduces a multilayered governmentality framework for investigating the various power modalities involved in Chinese rural water governance. Specifically, it presents the RDWSP's top-down design, intended to build coherent compliance by integrating social, environmental and economic concerns all at once through socio-technocratic engineering. Second, it examines the inherent confrontations and misalignments that manifested through the micropolitics of everyday water practices. These demonstrate people's ways of going beyond "resistance". We investigate why and how local villagers disengaged from water control participation, and prioritized pragmatic approaches to solving water problems. Without romanticizing localized and grassroots action, we explore how this disengagement may work to sustain people's marginal position and exclusion from water access and management.

This paper is based on field research on the RDWSP in Village L, in Shandong Province. Names and the location of the village, township, county and actors were anonymized to protect the respondents. Village L is typical of the "development paradox" observed across China (Wang et al., 2016), in which rapid economic development is accompanied by a degradation of public services. The fieldwork was conducted in 2018 and 2019. During that time, the first author gathered the primary data through interviews, participant observation and life stories. She lived in Village L until age 17. She migrated to Europe a decade ago and has since maintained connections in the village, paying yearly visits to relatives, neighbors and friends there. This relationship with the village served as an entryway to the village, while being a native researcher provided valuable contextual knowledge and site-based networks. The first author's relatives in the village were smallholders without governmental or economic power positions. However, having family in the village facilitated contact with the committee director (in 2018), enabling the researcher to expand the interviews to other officials during the fieldwork. The second and third authors have worked on vernacular water management, water governmentality, user-designed systems and grassroots/hybrid co-governance alternatives on different continents for three decades. Their experience facilitated the wider positioning of this study's findings in water governance debates and practices.

We selected respondents based on an inventory of various drinking water access forms in order to understand why and how stakeholders interacted with the government project in different ways. Respondents thus represented as many different ways of accessing drinking water as possible, and informants differed in economic status, age, household size and geographical spread at the fieldwork site. In total, 70 people were interviewed and re-interviewed in the Shandong dialect. They consisted of (1) a township official and two village leaders, (2) families drinking borehole water, (3) families drinking filtered or bottled water and (4) families drinking RDWSP water. In addition to the primary data obtained through interviews and observations, secondary resources were used, including a literature review on water resource management in the context of a strong state, governmentality in natural resource management, and governmental policies in contemporary China.

Following a brief overview of state-rural society relations and state policies in China (section 2), section 3 presents the theoretical framework of the research. Section 4 introduces the empirical case. Section 5 examines RDWSP rationalities through the lens of four types of governmentality. Section 6 discusses the negotiation responses of water users in the village. Section 7 concludes the analysis, finding that the governmentality of rural water management in China is an incomplete process in which the state exists as a field of negotiations and contestations, both from within as well as at its margins.

2. State-society relations and water services in rural China

Rural China experienced three distinct periods of state-society relations. The first was the Mao era, during which the people's commune served as the foundation of government administration in the countryside. It was through the people's commune that the state intervened in people's lives, in the form of political mobilizations, campaigns and so on (Zhou, 2000). Rural water services were organized primarily via mass mobilizations of citizen labor. These laid the groundwork for most contemporary irrigation works in China (He & Guo, 2010). Rural drinking water, however, was not included in such government action. Most rural Chinese drew their drinking water from sources such as ponds, springs and rivers (He & Guo, 2010; Wang & Hu, 2011).

The reform era, starting in 1979, was the second period. The household contract responsibility system was introduced (jiatinglianchanchengbaozerenzhi, 家庭联产承包责任制), and the township government replaced the people's commune. Furthermore, villagers' committees, autonomous self-governance organizations, were established to provide services and coordinate production activities, as well as to manage public affairs and convey opinions and demands from the village to the government (Organic Law of the Villagers' Committees of P. R. China, 1998). Aside from assisting in collection of the agriculture tax, villagers' committees were authorized to charge peasants for public services. Village cadres, working under flexible and autonomous arrangements, contributed to local mobilizations to construct public works. In the reform era, compared to the people's commune epoch, the state withdrew from the countryside (Zhou, 2000), governing rural society at a distance through the villagers' committees. During the reform period, however, many previously collectively owned water conservation and irrigation projects collapsed or were purposely destroyed due to lack of dedicated management funds and personnel. Later, the "two-labors" policy (lianggong两工) (State Council, 1991) was introduced as the main channel of investment in rural water conservation and flood control. Herein, peasant families were required to contribute labor. This policy exemplifies the central government's emphasis at the time on rural self-reliance in public service provision. Thus, it was local villages' own responsibility to raise the needed funds, materials and equipment for drinking water projects (State Council Gongbao, 1984). It is worth noting that, beginning in the mid-1990s, the state attempted to reform rural water management in line with the global trend of neoliberalism. Property rights reforms were implemented and a decentralized approach was introduced to the organization of water users' associations, and the concepts of sustainable economic development and water conservation emerged (see He & Guo, 2010; Jiang et al., 2020).

The third period of state-rural society relations began at the turn of the century, when the Chinese government released a new integrated urban-rural development strategy and vision of "building a new socialist countryside" (No. 1 Central Document, 2006). Abolition of the agriculture tax was a particularly significant measure at this time, intended to alleviate the severe tax burden on peasants (Zeng, 2020). Abolition of the agriculture tax fundamentally altered the relationship between the state and rural society, as well as the relationship between rural citizens and their township government and villagers' committee. As the state now prohibited any charges and taxes from being levied on peasants, township governments and villagers' committees were no longer able to extract income from peasants. As a result, they gradually abandoned their responsibilities in regard to agricultural production and public affairs. This created a rupture in relations, which undermined trust between rural citizens and local government. Referred to in the literature as "suspension regime" (xuanfuzhengquan 悬浮政权) (Zhou, 2006), this loss of trust has been directly associated with citizens' (un)willingness to participate in collective and public undertakings (see, e.g., Suhardiman et al., 2017; Harris, 2020; and Manosalvas et al., 2021 on the crucial, inner workings of "trust" and "collective social reciprocity contracts" in local water systems).

When the township governments and village committees abandoned

their roles in local agricultural production, peasants began to take individual responsibility for water provision. Many small water conservation and irrigation projects sprouted up. This resulted in "an individualized (or privatized) supply mode of public goods" with "every family having a well and every household owning a pond" (Zhao, 2011, own translation).

In response to the rural public service crisis, the government began to increase rural investment. "Fiscal transfer payments" (Caizhengzhuanyizhifu, 财政转移支付) became an important tool for the central and provincial governments to supply rural public goods that had previously been arranged locally. These transfers, in addition to subsidies deposited directly into peasants' individual accounts, also took the form of "projects" that villages, townships and counties could apply for. This "project system" has remained a highly influential mechanism for the construction of infrastructure for rural public services in China (Chen, 2013; Zhou, 2015), affecting state-rural society relations and producing a local reliance on massive infusions of funding from the state (Habich-Sobiegalla, 2018). The RDWSP was a foremost special funding project. Under the 11th and 12th Five-Year RDWSP Plans, provinces were authorized to award rural water projects with goals to be set according to locally specified targets, priorities and methods. Following the same discretionary logic, the province required municipalities and counties to formulate development goals according to their local situation. The administrative rationality of rural water development policy therefore positioned central government as the primary driving force, but with implementation depending on local-level entities (county and township governments and villages). Referred to as "fragmented authoritarianism" (Mertha, 2009), this rationality implies that Chinese central government policies were shaped by the functional and territorial bureaucracies that were charged with policy implementation (Clarke-Sather, 2012; Mertha, 2008, 2009), leaving ample room for adaptation by local actors (Ahlers & Schubert, 2015). The result was localized water management rules, practices and forms of decision-making (Hoffman, 2009; Jeffreys & Sigley, 2009).

Nevertheless, the central state sought to maintain strong control, through laws and technology standardization. Considered "a new rural governance mode" (Qu, 2012), via these, all "projects" embodied the state's will. After 2004, the state leveraged its "scientific development view" (kexuefazhanguan科学发展观) to influence the way polices were implemented (Qu et al., 2009), mainly by bringing in experts and scholars to evaluate public service projects. As such, central government supervised all investment down to the village level. Village cadres became heavily involved in this state system, imposing standards and regulations and acting as the government's lowest administrative level (He, 2019). This marked a significant change in roles (Meyer-Clement, 2020). Instead of governing at a distance through the autonomous villagers' committees, state influence now reached individual families through the village cadres. These cadres had access to central funds for rural public service projects, and thus no longer needed to mobilize villagers for these. As a result, the public, or collective, nature of the village faded (He, 2007).

The 11th and 12th Five-Year RDWSP Plans divided the country into six regions: Northeast, North, East, South-Central, Southwest and Northwest. RDWSP water supply methods ranged from large-scale infrastructures and supply systems serving multiple villages or towns, to single village or individual household supplies, depending on administrative divisions, geographical location, climate, topography, water resources and the safety of existing drinking water practices.

The state mandated that all provincial governments include RDWSP progress in their annual performance evaluations. Solving the problem of safe drinking water provision in rural areas thus became a key responsibility of all government levels. Funding was provided by government as well. Between 2005 and 2015, China spent 281.68 billion RMB (approx. 43.81 billion USD) on rural drinking water projects (Ministry of Water Resource China, 2016). Government funds accounted for 85% of the total investment at the time, the remainder being borne

by rural households via labor and small cash contributions. The RDWSP budget was 24 billion RMB (approx. 3.7 billion USD) in 2014, accounting for 33% of total funds for rural water infrastructure construction (Ministry of Water Resources, 2015).

County governments were required to issue public tenders for the hire of companies for infrastructure design and construction. Water projects were to be managed by a local water users' association (if such existed), or the villagers' committee, a private company or investors. The five-year plans stated that water supply projects at the village level were to be owned by the beneficiary village collective or a water users' association. Water tariffs were to be based primarily on the cost price of water, and could be adjusted in relation to changes in expenses.

The government expected the RDWSP to produce a number of socioeconomic, moral and political outcomes, in addition to provision of safe drinking water. It thus promoted a vision of "a new socialist countryside", with actions geared towards "advancing a sense of civilization, a scientific mindset, hygienic habits and transforming traditional lifestyles" (All-ChinaWomen's Federation, 2006; own translation). The government attempted to combine water supply improvements with moral-building activities: "changing water access and promoting clean kitchens and toilets" (All-China Women's Federation, 2006; own translation). Furthermore, the central government required strong local participation in water project implementation and management, expecting that local participation in the process would improve local democratic management abilities, while also enhancing relations between the peasants, village cadres and party (National 11th, 12th Plan for RDWSP, 2006; 2012).

The current research explores the rationality and power dynamics embodied by the RDWSP using a governmentality lens, which is introduced below in the context of previous work on the politics of water governance and in China.

3. The politics of water governance and the governmentality framework

Various researchers have addressed the politics of Chinese water governance, discussing the interactions between water, power, hydraulic technologies and sociopolitical structures. Clarke-Sather (2012, 2017), for instance, adopted an explicit hydro-social and scalar approach, while Rogers et al. (2016) examined a mega-infrastructure project using a governmentality lens. Each demonstrates how water projects attempt to render water, humans and space governable through dispersed governance practices. In Danjiakou, Rogers and Wang (2020) investigated the state's creation of a "hydro-social territory" (Boelens et al., 2016) by mobilizing administrative interventions, displacement and discursive imaginaries. Moore (2014, 2018), Habich-Sobiegalla (2018), and Shi and Li (2021) examined the negative impact of the central-local or "Tiao and Kuai" (条块) mechanism on inter-jurisdictional and local water governance. Jiang et al. (2020), Sheng and Webber (2019), Sheng et al. (2021), and Li et al. (2011) scrutinized the role of market forces and rationalities and their relationship to Chinese water policies and governance.

These critical studies, among others, focus on governmental rationale and institutions, but pay less attention to everyday village-level water politics and practices. To address this gap, we draw on Foucault's governmentality notion, particularly, Foucault's four "arts of government" (governmental rationalities), to examine everyday water supply practices and see how ordinary people have dealt with the state water project at the village level.

"Governmentality", the art of conducting populations' conduct (Foucault, 1980, 1982, 1991), has become an important lens to analyze environmental management and policy practice, including in water governance studies. In the Birth of Biopolitics (2008), Foucault revisits his own previous work. As others have observed (e.g., Boelens, 2014; Fletcher, 2010, 2017; Hommes et al., 2020; Valladares & Boelens, 2019), Foucault's initial conceptualization gradually broadened,

becoming more generic and hybrid, intertwining four mentalities and techniques of "government", which subsequently give shape to multiple reactions to government or elite control. Whereas in Foucault's earlier works the notion of "truth regimes" and power (relational, normalizing and morally disciplining) was opposite to (even exclusionary of) Weberian understandings, in Biopolitics he gives credit to other, complementary power modes, even those he had previously criticized. Governmentality, according to Foucault (2008: 313), includes interactions among different government rationalities that "overlap, lean on each other, challenge each other, and struggle with each other: art of government according to truth, art of government according to the sovereign state's rationality, art of government according to economic agents' rationality, and more generally, according to the rationality of the governed themselves" (see also Boelens, 2014; Boelens et al., 2015; Fletcher, 2010, 2017; Fletcher & Cortes-Vazquez, 2020; Hommes et al., 2020, 2016; Mills-Novoa et al., 2020). These four modes of subjectivation and governing people (and society as a whole) each has a different rationality or logic - "truth", "sovereignty", "discipline" and "neoliberalism" (Foucault, 2008) - though these are commonly entwined in myriad forms.

Traditionally, hydrosocial (re)territorialization has often been imposed top-down, explicitly manifesting coercive forces of governments, aiming to govern territory by compelling subjects' obedience to sovereign will. Classically, laws, regulations and violence legitimized by dominant rulers (Dean, 1999) would order territory, behavior and governance. Foucault (2008: 313) called this "government according to sovereign power". This has often been combined with dogmatic mythical-religious representations. The truth of traditional religious texts, of revelation, and of the order of the world - or the "art of government according to truth" (Foucault, 2008, p. 311) - prescribes and follows supernatural or fixed ideological beliefs that establish permanent norms and rules. There is thus an unquestionable order of things according to which people must behave (Boelens, 2014; Valladares & Boelens, 2017, 2019). Modern forms of government rationality aim to control subjects principally through more subtle techniques, such as social norms and ethical standards to which individuals conform due to fears of deviance and immorality (Agrawal, 2005; Fletcher, 2010). This "disciplinary governmentality" produces self-correcting subjects by invoking guilt, morality, conformity and compliance (Boelens et al., 2015; Li, 2007; Lukes, 2005). Market rationality-based "neoliberal governmentality" (Foucault, 2008, p. 313) seeks to install external incentive structures by which individuals, understood as self-interested rational market actors, are motivated to exhibit appropriate behaviors aligned with cost-benefit calculations (Duarte-Abadía et al., 2021; Fougner, 2008). Though analytically and politically-ideologically distinct, the four governmentality modes overlap and entwine in governance practice. Particular rulers/governing systems, however, tend to give color and put particular emphasis on some modes more than others, constituting highly specific "art of governance" assemblages, as in China.

We focus on the four modes of governmentality to understand the ways in which truths, rationalities and technologies act as a form of power to shape people's subjectivities and behavior (Hellberg, 2014; Meehan, 2014). However, the people targeted by these modes have a role too; they may accept, negotiate or contest governmentalities. For example, they might openly resist a state effort to supply piped water (see Loftus, 2006; Swyngedouw, 2004) or deploy everyday resistance using "weapons of the weak" (Scott, 1985).

Of equal concern are the common ways in which water injustices are routinized, accepted and reproduced by those who suffer from them (see Cleaver, 2018; Funder et al., 2012). To study the everyday practices of small-scale cooperation, accommodation and attempts to be incorporated into unequal distribution systems, we use what is known as the "micropolitical ecologies framework" (Horowitz, 2008). It considers communities to be heterogeneous, and everyday interactions are studied as differentiated (see Cleaver, 2018; Horowitz, 2002, 2011; Rasch & Köhne, 2016; Funder et al., 2012). Such studies highlight the complexities of social groups, while also emphasizing the structural context that increases this complexity. Overcoming the binary of domination and resistance, understanding such everyday dynamics is important to discern the complexity of water injustices and see if interactions in this sphere might produce positive changes or sustain inequality (Cleaver, 2018). Against this theoretical backdrop, we now introduce the case study village, with emphasis on how everyday politics were expressed in different reactions to the state water project and its governmentality modes.

4. Village L and the arrival of the RDWSP

4.1. Background

Village L, in Shandong Province, China, is flanked by mountains on three sides, with the fourth side facing a man-made reservoir. Despite the mountainous terrain, it is easily accessible via provincial road. The village has a 2,000-year history and is populated by a single ethnic group, the Han (hanzu汉族), which is China's majority ethnicity. Every family owns land under the household contract responsibility system, by which land is allocated based on household size. Since the early 1990s, the village has experienced economic growth and poverty reduction, owing primarily to lucrative peach cultivation.

The village is heterogeneous in terms of income, age and educational level. In general, young people earn more in nonagricultural jobs, and most can be categorized as relatively well-off. Young people tend to have more formal schooling than their elders, and are eager to improve their living conditions. Older people tend to maintain a more traditional lifestyle. Poverty in the village is usually caused by serious illness, such as cancer, which prevents the sufferers from working, drains them of their savings and puts them into debt.

Compared to previous decades, the village is currently managed quite loosely by the villagers' committee. Prior to 2000, the villagers' committee was involved in agricultural production, tax and fee collection, village public affairs and mobilizations for tasks such as land allocation, road maintenance and water services. The peach growing economy was organized by the villagers' committee in accordance with the county's development plan. However, the committee's main task nowadays is to carry out administrative duties assigned by higher government levels; the committee's tasks no longer include economic and agricultural production. Public services are provided through a process of applying for projects from the government. Collective mobilization and participatory meetings are uncommon. The committee director said, "I don't organize village events and meetings. Messages are spread orally" (Interview conducted on August 16, 2019). This loosening connection between the villagers' committee and the villagers and the diminishment of local governance and collective village undertakings are broadly representative of current state-rural society relations across China. Several respondents expressed a distrust of and indifference to the villagers' committee. The attitude expressed by Mrs. Song, a 57-yearold respondent, is typical in this regard: "As long as they don't ask me for money, it is none of my business what they do" (Interview conducted on July 22, 2018).

4.2. Water access transformation in the village

From the 1950s to the 1970s, large-scale irrigation systems were built by collective mobilizations under centralized command to provide for irrigated agriculture and prevent water disasters. During this time, a water reservoir for irrigation was built in Village L. Nonetheless, during the collective era and the first ten years of economic reform, people drew their drinking water from a public spring well. Beginning in the 1990s, a running water system was constructed by converting the spring well into a running water source. The villagers' committee mobilized community labor for this task through the "two labors" system. The running water system delivered public well water to households' individual yards.

Village L is located in a county that served as a pilot area for farmland water conservation property reform. The county began the reforms in 1998 by auctioning and contracting rights, infrastructure and services to private entities. This was much earlier than the national reform program launched in 2003 for small rural water conservation projects and also predated a mechanism launched in 2005 for farmland water conservation infrastructure construction. As a result, water for irrigation and the village's collectively owned drinking water system were auctioned off to some peasants. The running water system was soon abandoned, however, due to poor maintenance. Instead, people reverted to drawing water from the now expanded spring well. The villagers became convinced that the well had been polluted by nearby poultry farms and floodwaters at the turn of the century. Individually, they struggled to ensure their access to safe drinking water. Many families invested in boreholes. Some worked together to construct a conveyance system to pipe in water from another small spring. Many poor and elderly people had to rely on their children or neighbors for water.

In late 2014, the RDWSP arrived in the village to establish a villagewide tap water supply system. Pumping from an underground water source, the system conveys running water to individual yards, with a control room located at the village entrance. The water project was managed by the villagers' committee, as there was no water users' association in Village L. The villagers' committee, however, did not hold meetings to discuss the application, implementation or management of the project. Mrs. Liu, a villager representative, burst out laughing when asked if she had been invited to any meetings about the water project. "No, there aren't any such meetings", she said, "I only attend important events, such as the admission of new party members" (Interview conducted on August 18, 2019). Her laughter demonstrated that her role as "representative" was merely titular, and she had no real responsibility to voice the demands of her fellow villagers.

However, the villagers did have to contribute labor, and spent some 100 RMB (15 USD) - about a half day's wages - to purchase the necessary pipe. Most households installed a connection to the new running water system, while keeping boreholes as a backup in case of water interruption or for household usages. After connecting to the pipe, some households did not use the running water for several years, until their borehole failed. Those who were satisfied with their boreholes did not install a connection to the main pipe. Because of the distribution system's low capacity, several families on the edge of the village were unable to get water from the tap. The basic water tariff was set at 120 RMB per year (approx. 18 USD). Initially, the villagers' committee collected water fees according to meter readings, with users required to pay an additional fee if the amount exceeded 12 cubic meters. Later, the director stopped reading the meters. He said it was overly complicated (Interview conducted on August 16, 2019). In recent years, people in the village have become more concerned about water quality, citing a high incidence of cancer. Families who can afford it install water filters or purchase bottled water to assure themselves of a safe drinking water supply.

Drawing on the experiences in Village L and the RDWSP, we used the governmentality framework to analyze the state's water policy rationalities and practice. This is presented below, followed by an interpretation of villagers' reactions to the project.

5. Framing the RDWSP in China: Four governmentalities

Water governance in China is a highly interesting case because of its unique combination of the fourfold "arts of government" – both explicit and implicit. Nationwide, the RDWSP was a deeply strategic individualizing and (at once) totalizing subject-making force. It built on particular (officialized) Chinese history, culture and institutional frameworks. The vision of "building a new socialist countryside" had five formal objectives: advanced production (*shengchan fazhan* 生产发展), a rich life (*shenghuo kuanyu*生活宽裕), a civilized (local) atmosphere (*xiangfeng*

wenning乡风文明), clean and tidy villages (cunrong zhengjie村容整洁) and democratic management (guanli minzhu管理民主) (No. 1 Central Document, 2006). The RDWSP sought to contribute to these objectives in a variety of ways (National 11th and 12th RDWSP Plan, 2006; 2012). It served as a multiform governmentalities endeavor, employing a variety of tactics to productively direct rural society, achieve political control and economically bridge the socioeconomic gap between the urban and rural areas. This section examines project mechanisms in relation to the four governmentalities of "truth", "sovereignty", "discipline" and "neoliberalism".

Truth governmentality. Construction of a modern state in China relies heavily on the imagination of modern technology (Clarke-Sather, 2012; Cook, 2005; Yeh, 2013). Government discourse promulgates a profound belief in modernist progress, technology and expert knowledge, claiming the indisputable authority of scientific experts to promote national development. Deng's slogans "development is the absolute truth" (1992) and "science and technology are the primary productive forces" (1988) laid the groundwork for reform and the technocratic vision of China's political and economic elite. Thus, according to Andreas (2009), in the reform era, the "dictatorship of the proletariat" gave way to rule by the "technocratic elite" to develop productive forces. Water management is an important tool in the technocratic interpretation of national development (Crow-Miller et al., 2017). Up to the present day, the Chinese government's efforts to improve water governance remain largely dependent on state investment in engineering projects reliant on the construction of large-scale infrastructure to control water resources (Crow-Miller, 2015; Crow-Miller et al., 2017; Mao et al., 2020). In Chinese water management, a techno-scientific rationality and "engineering as panacea mentality" (Chen, 2011) influence most decisions (Sigley, 2006).

The 11th RDWSP plan (2006) emphasizes the importance of faith in science and technology for the realization of water infrastructure. The plan includes new infrastructures to supply running water to townships, villages and schools in 29 provinces, so as to solve drinking water safety problems and spur rural economic development. A large portion of the 11th and 12th RDWSP planning documents were used to introduce technical standards for water supply selection, water purification and infrastructure construction.

In Village L, the RDWSP was established by professional teams hired by local government to build the infrastructure according to the mandated technical standards. The plans reflect a near-religious faith in engineering norms and high-tech water science.

Sovereignty governmentality. China's central government used administrative command and legal control to strengthen its influence over water projects and guide villagers' behavior. Government authority, laws, regulations and standards were invoked to realize and sustain rural drinking water infrastructure. A 2013 RDWSP policy document emphasized the importance of obeying the "chief executive responsibility system and local governmental overall responsibility as well as the central governmental guidelines" (National RDWSP Construction and Management Measure, 2013; own translation). In 2015, national guidelines were released for protecting rural drinking water sources, further emphasizing the ability of government to organize and lead. Given the threat of water pollution, the central government, for example, prohibited establishment of poultry farms near drinking water resources. These commands, laws and large-scale central government interventions in regional and local socioeconomic processes aimed at securing rural drinking water supplies, while also confirming state order and stability.

Lower administrative levels, however, adapted state power when implementing "projects" in their own jurisdictions. Local governments and villagers' committees, concerned with their own survival, allowed projects to function in rather flexible ways, improving people's access to water while conforming to strict annual evaluation and stability maintenance mandates (Clarke-Sather, 2017). However, local governments were not permitted to combine RDWSP special funds with other projects. According to Gui (2014), local government officials had little incentive to push special fund projects, which led them to adopt a passive attitude toward them.

In contrast to the immediate closure of poultry farms, the RDWSP's advent in the town and residential connections to the water project were loosely managed and little promoted. This allowed for a relatively flexible timetable of up to 10 years for implementation of the water project here. According to the committee director, the project's timing was dependent on the committee's application: "I applied for the water project for the villagers in 2013", he said, "which was three to five years later than some of the neighboring villages" (Interview, 2018). When asked why Village L was later in applying than other villages and if there was a mandatory timetable, he explained that the township government had indicated it preferred to wait for a more stable village management before supporting the application. The project was eventually established, just before the 12th RDWSP planning deadline. There was no mandatory timetable for each household to connect to the running water. As the analysis will show, strict top-down rules and laws became flexible and loosened under the influence of local practices.

Disciplinary governmentality. Several scholars have observed that, since the reform era, Chinese discourse has presented peasants as "low quality and passive" and the countryside as "backward, traditional and ugly" (Schneider, 2015, pp. 6, 8; Jacka, 2009). Government has thus sought to "discipline" the rural population through training, education and moralization. Throughout this process, government has created new imaginaries and subjectivities to legitimize national development plans. Both the 11th and 12th RDWSP plans aimed to raise awareness of the need to protect water resources through a variety of educational forms and by gradually improving villagers' participation (in line with China's notion of participants as state-obedient acceptors) as well as supervision mechanisms in water management.

The plans advocate a "three-in-one" education model: to strengthen health awareness, to popularize knowledge on drinking water safety and to advocate for water conservation (National 11th and 12th Five-Year Plan for RDWSP, 2006; 2012). Furthermore, the Women's Federation promoted activities to cultivate civilized and model citizens. Installation of running water was expected to change hygiene habits and the rural population's lifestyle, which was viewed as important to bridge the socioeconomic gap between rural and urban areas (National 11th Five-Year Plan for RDWSP, 2006).

However, such education and moralization work was not fully implemented in Village L. The villagers couldn't say where they learned about the links between water quality and health. Neither had the Women's Federation's efforts reached the villagers; and local people did not link individual hygiene habits to public affairs. Thus, disciplinary and moralization tactics devised at government desks appear not to have trickled through as expected according to government rationalities.

Neoliberal governmentality. The key to understanding neoliberalism is not whether the state withdraws or intervenes in the market, but rather whether the social sphere is redefined as a subset of the economic domain (Fougner, 2008). The neoliberalism mode thus aspires to extend the type of government rationality that operates in the market to other areas. All realms are viewed as spaces in which rational actors compete to maximize their use of scarce resources. Therefore, governance should entail the development of incentive structures in all such areas, to beneficially direct actors' behaviors. In China, introducing market institutions into water management is a means of reconciling efficiency and control goals, and includes measures such as property rights reform, participatory management and others. The new century has seen promotion and implementation of water rights, water markets, water-saving interventions and agricultural water use price reforms (Rogers & Wang, 2020).

The RDWSP prioritized property rights reform and emphasized the role of market mechanisms while increasing government support (National 12th Five-Year Plan for RDWSP, 2012), demonstrating state control and marketization to be complementary rather than

contradictory (Jiang et al., 2020; Rogers & Wang, 2020). Indeed, the Chinese government committed to market forces in RDWSP management and operations, clarifying property rights and management structures, establishing reasonable water prices and attracting social capital.

According to the national RDWSP plans (2006, 2012), the central government also expected external incentives to drive "rational" rural people's behavior. By making significant financial investments in infrastructure, the water project attempted to boost local labor productivity and incomes. The reasoning went like this: Running water would free up rural labor previously spent fetching water, allowing people to find paid work in the city. People's consumption, hygiene habits and lifestyles would improve as their incomes increased, while migrant workers would bring ideas about modern life back to the village, breaking through the closed-off traditional lifestyle in the countryside and narrowing the urban-rural gap.

The RDWSP approached the rural population as rationally calculating agents who would benefit economically from water development and contribute to the overall economic development of the country. Economic growth was simultaneously to provide a means of addressing concerns about social justice. Thus, neoliberal governmentality, as internalized by decision-makers and water planners, was materialized in the drinking water project. Aside from addressing rural needs, the RDWSP's overarching goal was to promote economic growth and facilitate governance through market arrangements.

Unlike the radical auction of the 1990s, RDWSP property rights and ownership are held by the villagers' committee in Village L. Pricing did not influence water allocations and connections, as explained later. The "rational" rural people did prioritize economic growth to solve water problems, but they did so in a pragmatic way, through individual efforts that contradicted the state's intention to involve villagers in local management and state-induced participation.

The framing of the RDWSP manifests how hybrid rationalities can play out in rural water governance. The RDWSP addressed economic, environmental and social concerns simultaneously. Next to the truth and discipline rationalities, a neoliberal rationality of government coexisted with administrative command, fiscal transfer and central supervision. This echoes findings from other studies on the complexity of China's water governance, involving the state and market (Jiang et al., 2020; Rogers & Wang, 2020). Altogether, China's rural water governance integrates particularly "socialist" techniques of government (Palmer & Winiger, 2019) - based on discipline and moralization as well as sovereign-force techniques (e.g., family and collective labor contributions to "national progress and collective wellbeing", and the use of institutionalized village cadres) - with techniques based on neoliberal subject-making and reasoning. These again entwine with particularly Chinese cultural and belief systems, with a growing emphasis on the Truth of technological plans and the make-ability of objects and subjects and their active co-shaping into governable techno-political networks. As a socialist regime, China's techniques of government are "connected up to diverse types of governmentality" (Foucault, 2008, p. 92).

Beyond conveying a state-national ethos, changing people's morals, thinking and behavior is fundamental here. Local water users are aware of this; a safe response is (overt or covert) ignorance of state-aligned water projects and reliance on oneself. As such, governmentalities are exercised not only as a form of power by the state but also by many other actors according to their particular interests (Agrawal, 2005). In Village L, local government actors adapted state power in their implementation of the water project. Outcomes of the project were negotiated and often unpredictable, due to the complexity of the targeted territories and people. The question then is to what extent and in what ways did actual outcomes differ from the state's intentions.

6. Negotiations and practices from below

In the fieldwork village, everyday interactions and practices of water

politics were not instances of struggle or resistance, but rather of smallscale cooperation, accommodation and taking advantage of the ambiguous aspects of local political reality. Zooming in on such everyday micropolitics can provide a better understanding of how diverse factors, including livelihood/water access strategies, particular socioeconomic conditions, subsistence needs, experience and memory, knowledge, identity, age, and structural context all inform how marginalized groups respond to governmentality.

The respondents in the field demonstrated different ways of relating to the water project. Particularly, people's attitudes towards the government project were influenced by their strategy of ensuring access to water. Around 10% of them did not install a connection to the project water, continuing to drink borehole or surface water as before. Another 10% did install a connection, but did not use the tap water for drinking for years, until their borehole failed. Yet another 10% installed a connection to the project water, but drank bottled or filtered water instead. The remainder installed a connection and also used the project water for drinking. Most families kept a borehole as a backup and for household uses. Some abandoned use of the project water after a period, reverting to their borehole or other water sources. We examined why villagers responded so differently to the government project.

When the RDWSP was established in the village, one of the primary reasons for people to install a connection to the water system was to meet basic subsistence needs. A 75-year-old woman, one of the poorest in the village, suffered from several diseases, and her son had experienced a heart attack. Both had lost the ability to work, and fell into economically hard times. They couldn't afford a borehole, so for several years the lady had to ask neighbors for water. She did managed to gather the 100 RMB to install a connection to the project water. "I am very happy to connect to the tap water", she said, "In the past, I borrowed water with a little can. I used to take the can everywhere I went. Now I am relieved" (Interview conducted on July 17, 2018). Neighbors showed understanding and sympathy to her, and gave her water without any expectation of return. However, the lady preferred having her own tap, to reduce such dependency and be "less of a bother" to others. For another villager, Mrs. Gao, a 50-year-old woman whose borehole water tasted salty and bitter, a connection to the project water brought a substantial improvement in water quality: "Water is life. I am satisfied with the tap water as it tastes sweeter. I can't believe how I could swallow the borehole water before" (Interview conducted on July 21, 2018)

But many households that already had access to other water sources did not connect to the running water. Mr. Liu, 75 years old, did not install a connection. Though he was a former village director and a party member, he did not think it was necessary for him to set an example in the government project: "The tap water costs money. I continue to use surface water conveyed from a nearby small spring well" (Interview, 2018). He added, "I think people are hesitant to do laundry with the tap water. It's money. We still go to the water reservoir to wash clothes" (Interview conducted on July 19, 2018). When it came to the RDWSP and decisions on water usage, he prioritized economic considerations.

Mr. Xu, a 50-year-old man with a good income and health knowledge, installed a filter in his borehole, making him one of the first in the village to use filtered water. He said, "The filter provides us with clean water. The running water frequently shuts down and cannot supply enough for all the villagers, particularly in the summer" (Interview conducted on July 16, 2018). He did not install a connection to the project water because he already had access to water of sufficient quality, and because he had doubts about the reliability of the government project.

Mrs. Zhang is another villager who did not install a connection to the project water. "We drilled a borehole just before the start of the RDWSP. Our borehole is around 100 m deep. The project also delivers groundwater from about 100 m deep. It is not disinfected and purified, so it is the same as our borehole's water" (Interview conducted on July 15, 2018). Mrs. Zhang's husband worked for a local construction company

and was well paid. She stayed home and tended the peach orchard. Mrs. Zhang's rationale is less about economics and more about timing and knowledge of water quality issues. Because the village leader applied for the RDWSP without involving other villagers, Mrs. Zhang had no idea that a government water project was on its way when she paid to have the borehole drilled. Neither was the public informed about the quality testing of the project water. Mrs. Zhang thought the quality of the two sources was probably the same.

There were also examples demonstrating the role of family ties in villagers' interactions with the government project. One old couple's son did not install a connection to the water project because he had already drilled a borehole and installed filters. The old couple said, "Our connection to the water project is enough. If our son needs tap water, he can use ours" (Interview conducted on July 26, 2018). An 89-year-old woman drank borehole water because she lived in her son's house-hold, and her son had not installed a connection to the project water. Her dependence on her son limited her water options.

Interestingly, about 10% of the respondent families did install a connection, but did not use the project water for an extended period of time. Many only switched to the tap water when their borehole failed. Mrs. Zong connected to the tap water but did not use it, saying, "The borehole still has water and we drink it. It doesn't cost any money" (Interview conducted on July 18, 2018). Mrs. Han said, "We keep our borehole, because the tap frequently freezes in winter" (Interview conducted on July 25, 2018).

According to our interviews and the examples above, some 20% of households owned private boreholes or had other avenues of water access, making them less dependent on the government project. For them other factors, such as economic considerations and knowledge (understanding), entered the picture in determining their relation to the RDWSP. For some households, the government water served as a means of diversifying and backing up water access, in addition to privately owned water sources.

As Franks and Cleaver (2007) pointed out, apart from the water resources available to users, the outcome of water governance is also determined by the structural context. In Village L, the local political context had significant impact on people's strategies. An important contextual factor was the rupture in relations between the villagers and the villagers' committee. The director applied for the water project without involving the villagers, and the people were excluded from decision-making. The director simultaneously aimed to improve water access and get a positive annual evaluation from the township government. Conflicts and disputes were avoided by taking a loose approach to requests for connections and requiring only low financial input from the villagers. The sovereignty rationality of administrative command was thus adapted in the context of fragmented authority, especially at the township and village levels.

Nevertheless, such ruptures of relations can lead to pragmatic riskavoidance strategies vis-à-vis local authorities when the villagers encounter water problems. For a long time, when people faced a water shortage or poor water quality, they solved the problem by shifting to other water sources or markets to access water. They continued to apply this strategy after the RDWSP's arrival in the village.

For instance, several respondents living at the fringe of the village were unable to draw water from the tap due to insufficient distribution capacity. According to one villager, "There isn't any water coming out of the tap because the pressure is too low. The borehole is our only choice" (Interviewconducted on August 14, 2019). Another respondent whose tap was not working assumed the pipeline was clogged, so he reverted to using the borehole. When asked why, he said it was no use asking for help from the village director and it would be time-consuming. With a low trust in the committee, people turned to boreholes to solve their water access problems rather than querying the villagers' committee.

Water quality was another aspect that had become a grave concern in the village, because of the perceived high incidence of cancer in recent years. Although not proven, the villagers attributed this to the possible pollution of groundwater by herbicides, pesticides and chemical fertilizers. Indeed, at the time of the 2019 fieldwork, use of filters and bottled water had increased dramatically over the previous year. Young people paid more attention to their health and to water quality: "I don't dare use running water or borehole water to make formula for my baby", said a 27-year-old mother, "There is too much scale flake. I bought a water dispenser and use bottled water. It is safe and convenient" (Interview conducted on August 14, 2019). In contrast, "old people don't need to drink safe water" (Interview conducted on July 21, 2018; August 14, 2019) generally expresses how the more elderly were perceived and how elderly people identified themselves in the countryside. "My children only drink bottled water when they come back from the city", said a 65year-old woman, "We don't need to drink good water as we are old" (Interview conducted on August 14, 2019). Such beliefs were common among the elderly.

A 30-year-old woman explained that she bought bottled water to be sure of good water quality, rather than relying on the villagers' committee to resolve the water quality issue. "No one [governmental actors] is responsible for our lives. You can't wait for the villagers' committee to do anything. It would take 30 years" (Interview conducted on August 16, 2019). She gave an example: "When I was a child, the village said it wanted to build a road. When I was 30 the road was finally built" (Interview conducted on August 16, 2019). She continued, "You can't trust anybody. The guns shoot the first bird. If the villagers said tomorrow 'let's go to the committee to discuss some issue', you would be the only one showing up the next morning" (Interview conducted on August 16, 2019).

Related to "maintenance of stability", people considered open political and collective action to be "costly, ineffective and often counterproductive" (Li et al., 2012, p. 210). Following the arrest of petitioners in 2005, state suppression became even more significant in curbing the "tide" (Benney, 2016). Most villagers were afraid to confront the government, preferring to avoid such political risk even when confronted with injustice.

The villagers' committee's long-term ineffectiveness, which spanned throughout most villagers' life experiences and memories, influenced how they related to state actors, avoiding the risk of collective action. Their attitude toward individual action can be characterized as pragmatic. According to Cleaver, "They are painfully aware of the structurally unequal dimensions of their situation. This awareness includes the understanding that such relations are hard and costly to change, and that it is in their overall livelihood interests to maintain rather than challenge them" (Cleaver, 2018, p. 250).

In this context, people prioritized income generation and turned to the market for water filters and bottled water to ensure adequate quality drinking water, as the cost of confronting powerful actors to demand access to better resources was too great. Many respondents expressed the idea that "nowadays it is a market and economic society" (Interviews conducted from July 14-26, 2018; August 12-19, 2019). "Making money is first" was a sentiment frequently heard, "[because] without money, you can't do anything", and "If you have money, you can get anything" (Interviews conducted from July 14-26, 2018; August 12-19, 2019). Consequently, people developed a vocabulary to avoid "participating", pragmatically side-stepping top-down plans to develop state-directed "participation and democratic management" in the village via the water project. Respondents expressed their indifference to the committee-organized events using phrasing such as "too busy making money", "no time" and "I don't know anything about that" (Interviews conducted from July 14-26, 2018; August 12-19, 2019).

Findings from Village L highlight some important points related to how the targeted people receive and negotiate governmentalities. For example, governmentality endeavors cannot be understood as forms of hegemonic domination but as processes of negotiation involving different local actors. People approach and react (consciously or not) to the four entwined government rationalities to meet their objectives in everyday life, resulting in outcomes that might well diverge from the state's intentions.

Applying a positivist belief in science and technology, many villagers sought to ensure adequate water quality, consuming filtered water or bottled water. Many respondents agreed that water treated through technology (bottled or home-filtered) could be trusted and was a better and safer way to ensure quality than blindly trusting the government project. The disciplinary governmentality which problematized peasants and sought to improve their hygiene habits, civilization and participation in management, worked differently for different people. Young people were normatively inclined to "pursue modern life" and improve their quality of life with modern conveniences such as washing machines, solar water heaters and flushing toilets. The elderly, however, sometimes internalized the discourse of "backwardness" and "low quality", remaining silent in the village. In addition, embedded in the context of fragmented authority and under the current state-rural society relations, the people took advantage of the grey area of local political governance, and pragmatically negotiated the sovereign power by engaging or disengaging from the water project. Entwined with these rationalities, the neoliberal governmentality contributed to villagers' internalization of their responsibility to solve water quality problems through their own individual action. This demonstrates the typical neoliberal mode of subjection, which seeks to solve social problems through economic means. Tangled in such a mix of rationalities, the villagers regarded "participation", open inquiry and questioning as unnecessary, impossible or unsafe, prioritizing pragmatic individual action instead. By disengaging from the project and from collective management, however, villagers might sustain their own marginalization in terms of water access and water management, while countering the state's intent to conduct the rural society through the water project.

Examining the villagers' diverse reactions to the water project enables us to understand everyday water control practices as a means by which marginalized groups respond to state power. Water access and water quality were crucial issues in the village. Yet, the ways in which they manifested proved profoundly different for different households, even within the same village. Some villagers opted for pragmatic livelihood strategies that, at the same time, unwittingly obstructed the state's governance-mentalities. In practice, the top-down design of the RDWSP, with which the state sought to integrate social, environmental and economic concerns in order to replace the supply-driven paradigm with a demand-driven one, existed mainly at the technocratic, engineering and construction-oriented level. It was misaligned with the demands of the people, who all reacted in their own ways.

7. Conclusions

This paper applied a governmentality lens to a village water intervention case to better grasp the politics of rural drinking water governance in China. The analysis advances our understanding of the rationalities of government that underlie state water policy and its implementation, and how these may be negotiated from below. Zooming in on a specific case helped us to discern how water, technology, the state and rural society are related. In particular, water access and management were produced and negotiated within the historical and sociopolitical context. The key contributions of this research are two.

First, the governmentality framework served to deconstruct the nature of RDWSP policy and to investigate decentralized governance practices and control efforts in rural water governance. The governmentality analysis revealed that the RDWSP water governing rationale incorporated a positivist technocratic vision, sovereign command and a disciplinary discourse of participation, while problematizing the rural population and asserting neoliberal control principles, all at the same time. The analysis also demonstrated the means by which ordinary villagers can frustrate the power of the state. Despite the RDWSP being an attempt to strengthen state power in rural society through special project funds, the complex and hierarchical adaptation of the policy by authorities, as well as the ruptured relations between the people and the local government and villagers' committee, resulted in incompletion of this state intent, and relative ineffectiveness of the governmentality scheme.

Second, the paper contributes to the study of the politics of rural water control, especially by bringing the micropolitics of everyday practices of water users into the debate. Overcoming the binary of dominance and resistance, it demonstrates how the (local) political context, the need to maintain livelihoods, unequal resource distribution among households, family dependency relations and strategic knowledge, as well as identity, experience and memories, all work to shape responses in and of local reality. It is critical to investigate such common responses and everyday dynamics in order to reveal the complexities of water injustices and determine if interactions produce positive change or perpetuate inequality.

In our case, embedded in a complex and fragmented authority system and with a deep rupture between the village collective and local households, the multifaceted governmentalizing design of the RDWSP did not integrate the people into local participation and governance as was foreseen and planned by the state. At the same time, the villagers' pragmatic strategies may ultimately sustain their marginalization in access to quality water and democratic participation. In the end, the state water governmentality scheme was a profoundly contested project, continually negotiated through people's everyday practices, which went far beyond and were far more complex than overt resistance or covert weapons of the weak.

Declaration of competing interest

The authors hereby declare that there is no conflict of interests.

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