Back on the water margin: the ethical fixes of sustainable water provisions in rural China

Back on the Water Margin:

The Ethical Fixes of Sustainable Water Provisions in Rural China

Abstract

The classical Chinese novel *The Water Margin* tells the story of a group of petty officials who take a collective stance against the widespread corruption and unfairness of imperial Chinese society. At the root of this story lies the deeply ethical conundrum of redressing injustice when unchecked power prevails. This paper draws from this insight to explore some of the ethical dilemmas Chinese state bureaucrats in Yunnan face today when provisioning drinking water to rural communities. Yunnanese officials are handed out these dilemmas by the State's conspicuous retreat from rural public services in favour of market-based supply. Through their ethical interventions, Chinese bureaucrats are able to temporarily defer the collapsing of rural water provisions which is caused by the contradictions introduced by the marketization of water. However, such interventions may be followed by further damage to the environment.

The water officials I encountered during my stay in Yancong Township – a water-stressed Yunnanese agricultural community in Huize County, southwest China[1] – were nothing like what negative stereotypes of bureaucracy would have them, unscrupulous power brokers or, worse, faceless servants of supposedly rational but ultimately illegible institutions. Charged with supervising the distribution of drinking and irrigation water to local communities, the stuff of the local Water Service Office (*shuiwusuo*, WSO) appeared rather as a motley crew of characters whose plurality of human conditions and aspirations its own members ascribed to chance or fate (*yuanfen*). There were people like Mr Yong – at 29 the youngest "head" ranking cadre in any of Huize's state departments – who, thanks to his own talent and ambitions, had successfully wriggled out of poverty and escaped the life of strenuous toil his parents had endured in a mountain village near

Yancong.

The WSO crew also enrolled water experts like Jiang Kai. A hydro-engineer by training, Jiang Kai worked constantly long hours doing AutoCAD on his laptops. He would spend his working day jumping from one infrastructural project to the next, being summoned to the Land Development Office at dawn, called to attend an urgent matter by the Public Affairs at dusk. Matching the strict standards of science with the blurred lines of politics was his daily bread. Fee-collectors and plumbers, like Mengfu or Shaozhi, made up the rest of the crew. For a large portion of my fieldwork, I worked long hours in their company, filling in the gaps of some sloppily kept account book or watching the uneventful unclogging of water-pipes in some unfinished basement. Born and bred in the cluster of villages surrounding Yancong, these workers did not expect to leave their *danwei* any time soon[2], and they were very pugnacious when it came to maintaining the good reputation of their institution.

The variety of interests and perspectives hosted by the WSO came together at the building's canteen. This was on the roof-top and represented the very heart of the *danwei*. The canteen was the place for talking shop, family or technicalities. It was often invaded by delegations of extra-*danwei* party cadres, keen on booze and flattery, or more rarely by engineers with a penchant for hydrodynamics. Meals at the canteen could be spent in a broody silence, or among joking and cheering tablemates anxiously waiting to prolong the evening at the nearby karaoke bar. Being almost forced to attend all the various banquets my research participants hosted during fieldwork, I slowly developed a personal interpretation of these occurrences. I envisioned the attendees as the protagonists of the famous Chinese medieval novel written by Shi Nai'an, called *The Water Margin* (*Shuihu Zhuan*). The novel, extremely popular in China and with a strong echo throughout the Far East, tells the story of a group of petty officials headed by Song Jiang, a county clerk, who, fed up

with the state of corruption in the nation, decide to turn outlaws, banding together to deliver justice to the needy, fighting back against state oppression and corruption. They achieve this by means of trickery, defiance and cunning. When a plot succeeds, the outlaws celebrate, like most of the water officials in this paper, by binging on food and drink.

Why was this literary impression so persistent? The reason lies in the ethical conundrum both the *Water Margin* outlaws and my own informants had to face every time they dealt with the problem of how to accomplish their own collective mission (i.e. to make water available in Yancong). Indeed, the bunch of picaresque braggarts described in the novel usually find themselves caught in some sort of ethical compromise: on the one hand taking the law into their own hands, on the other submitting to the prescriptions of a higher-level authority. While the outlaws are driven by their own private morality, they usually do not fail to recognise that a greater good is possible, one delivered by the Emperor, who embodies the rightful wielding of power and authority. Similarly, for the WSO staff, delivering water today, while making sure it will still be available tomorrow, is a task requiring a compromise. To fulfil its mission, this institution needs to balance the actual water needs of the Yancong community against the constraints imposed by the surrounding political context and self-legitimising water policies, which I will discuss throughout the paper.

This paper investigates some of the deeply practical questions street level water bureaucrats in rural Yunnan ordinarily attend to while going about their job. During fieldwork, many times I observed the WSO personnel confronting the issue of how to carry out their official duties, struggling to stick to the water management book, while often working with discretion to make ends meet. Here, one might ask why the “book” would not give guidance enough for seemingly straightforward occupations such as those undertaken by my informants. For instance, what is so ethically problematic about collecting water-fees or running a water purification station? As this paper will

show, these tasks harbour their own particular ethical conundrum, one which involves a compromise between following the protocol and following one's conscience. Similarly to the 108 heroes of the *Water Margin* story, who fought to bring back an older ethos of brotherhood and mutual support in a time of slithering state corruption, my interlocutors struggled to reinstate an older ethos of office which they see being undermined by a political reform of state water provisions.

Contributing to emergent conversations in anthropology and political ecology about bureaucratic agency, the relationship between ethics and politics and the production of public goods under austerity capitalism and market environmentalism (Strang 2009, 2015; Lora-Wainwright 2013; Bear 2014; Bear & Mathur 2015; Bakker 2014; Graeber 2012; 2015; Fassin 2014, 2015) this paper is a study of the inner workings of ethics in present day Chinese local bureaucratic practices of government and public goods provision. In this respect, its main theoretical contribution will be to explore the ways in which the ethical agency of street level bureaucrats emerge in relation to and may be seen as opposing, or else reconciling, often contradictory processes of public good provisions under austerity and green capitalism. In China, these are unfinished and unstable processes of accumulation, draped in a nationalist rhetoric, that hinge on the enclosure of public goods and the de-prioritization of rural households' needs.

The pivotal moment in *The Water Margin* is when Song Jiang, the outlaws' leader, accepts Emperor Huizong's amnesty, believing that his outlaws and their collective mission would have a better chance of surviving if carried out under the aegis of the ruling authority. As I will show, Yancong's water bureaucrats perform a similar, partly self-serving move when confronted with the issue of how to keep water available to their service recipients under disabling political constraints[3].

In the remainder of this paper I will discuss ethnographically my informants' conduct of office relative to the ethical challenges of distributing drinking water in Yancong. I will start by positioning this paper discussion within emerging interdisciplinary conversations about the changing dynamics of welfare provisions under austerity politics and their link with global environmental challenges. Here I will develop the notion of 'ethical fixes' as a bureaucratic form of agency that contrives temporary, ethically driven way outs of the conflicting priorities of the state policies and the local provision of public goods. Second, I will spend some time describing the institution base of my fieldwork and discuss it in light of the recent insights of the anthropology of bureaucracy. This section will show that ethical reflexivity and creativity are components of modern state bureaucracy as much as it is its red tape mentality. Third, I will move to show how the re-regulation of the Chinese water sector is handing the thorny issue of slashed public services out to Yancong water bureaucrats.

I will then move to the ethnography and to what the incapacitated WSO does to deliver clean drinking water to Yancong and to keep its services alive. These vignettes illustrate my informants' creativity in conceiving temporary 'fixes' to contemporary problems of water allocation. The conclusions will advance an interpretation of the broader significance that these 'ethical fixes' might have for the provision of Chinese public goods, especially water, under fiscal and natural shortage. It will also point at when such fixes, while effectively circumventing issues related to the reproduction of state institutions on the short-term, make environmental sustainability on the long-term *de facto* less likely.

Ethical Fixes

Since Wittfogel's seminal work, water has been identified as a prime driver of state building in

China (1957: 8). In this country, a culturally and historically layered discourse postulates a strong correlation between water, power and social stability (Zhang 2007). Moreover, the modernist imaginary of the Chinese Communist Party and of Maoism have traditionally conceptualised water resources as a key economic asset for national betterment (Tilt 2015: 47-52), a lifeline Party cadres ought to protect and develop to fulfil their moral obligation of "serving the people" (*wei renmin fuwu*) (e.g. Ku 2003: 224-5: Feuchtwang 2013: 29; Pietz 2015: 131) and as a site for forging new types of socialist identities through collective labour on water infrastructures (e.g. Andreas 2009: 77). That is, in China water access has long epitomized a particularly culturally salient form of public good.

However, the point of departure of my discussion here is considering how in recent years state practices regulating the production of water access in China have been experiencing a process of political reform, thus considerably displacing water from its utopic lodging under Maoism. Accompanied by similar reforms in the management of water services around the globe (Webber et al. 2008: 617-618; Mollinga 2010: 513), these changes have emphasised the need to re-regulate water demand according to water availability and adjust consumption to maximise efficiency in face of present-day and future prospects of environmentally constrained supply (Strang 2009: 29; Gleick & Palaniappan 2010: 161). This paradigm change in the public provision of water – often called "market environmentalism" (*ziyou shichang huanjingzhuyi*) – discursively positioned China in a state of "water crisis" (Crow-Miller 2015: 186-7) and advocated for market-based, technical solutions to allocation issues[4] (e.g. Wang et al. 2006: 328; Liu & Speed 2009) while supporting private-public partnerships (Zhong, Mol, Fu 2008: 865-7).

This reform has been associated in China with other relevant changes in welfare provisions and in public investments (e.g. Lin 2006: 183; Teets 2011), now redirected towards more profitable sectors

and regions (Bramall 2009: 331; Naughton 2007: 105-6). Only partially addressing real fluctuations in rainfall patterns and monsoon periods linked to climate change and couched in the global language of sustainability[5] (Li 2005: 447), the reform of the Chinese water sector has been primarily driven by economic considerations relative to keeping the country's economy growing (Crow-Miller 2015: 178). For local bureaucracies mired in the underprivileged Chinese countryside – as the one object of this paper – this institutional rearrangement of state water provisions and related investments has meant deficit and indebtedness, as this paper's ethnography will show.

The social life of water is one typically charged by expectations of and desires for growth and universal enfranchisement (e.g. von Schnitzler 2014; Wagner 2013). In China as elsewhere, water policies are now becoming contentious because of the contemporary neglect of these very expectations (Ma 2009: 35: Tilt 2015: 10; Pietz 2015: 310). Particularly Yunnan has recently become a stage for the popular and organised antagonism against contemporary water policies and governance (Jun 2003, 2007; Mertha 2008; Zhu 2011: 63-6; Pia 2016). Crucially, many are those in China and elsewhere who are being directly or indirectly denied access to sufficient and safe irrigation and domestic water by these very policies (Metha 2010: 2; Wutich 2011: 23; Webber et al. 2011: 39-40; Barnes 2014: 70; Bakker 2014: 478).

Against this background, I make an effort to recuperate the agency of local water bureaucrats as they walk an administrative tightrope to cater for their clients' needs, despite fiscal and water shortages. Counterbalancing a simplifying narrative – widespread in political sciences, Chinese studies and in the study of the environmental commons – that sees local bureaucracies as inadequate, clientelistic, parasitic or detrimental to effective management of common resources (Wade 1982; Le Mons Walker 2010: 22), I shall throw a more sympathetic light on Yancong's water officials. Increasingly asked by central state policies to figure out for themselves how to accomplish

their institutional mission, while at the same time pressured by the very same policies to keep their now less secure jobs, my research participants had to constantly struggle with hard administrative choices. Rather than busy themselves with projects of self-aggrandisement, my research informants would be pondering on questions such as: "Who has to pay for drinking water? Is it the poor rural households or the state? How pure does water have to be, given the financial constraints the institution is under?

To solve such questions, the water bureaucrats of Yancong engage in a form of ethical calculus which weighs in competing liabilities to produce morally acceptable practices of public good provision under fiscal and natural constraints. Leading on from discussions in political ecology, the anthropology of policies, and science and technology studies (Harvey 1997; Bakker 2003; Law & Mol 2002), I call such form of social calculus an 'ethical fix'. In her path-breaking book on austerity capitalism in India, Laura Bear demonstrates that 'the contradictions of austerity capitalism are temporary "fixed" not through large-scale processes, but through small scale, piecemeal ethical solutions' (2014: 74-5; 2015: 131). Here I wish to expand on this notion to bring into view what further consequences such ethical solutions may have for public goods provisions and environmental sustainability in China. In this context, 'ethical fixes' are temporary, personally and reflectively contrived, organised series of behind-the-curtain techno-legal or administrative actions that patiently 'tinker' (Law & Mol 2002: 99) towards practical solutions to functional jams that would otherwise lead to institutional crisis or default (i.e. the termination of said institution and of its services). I call these fixes 'ethical', in a consequentialist sense[6], because they are shown to be informed by a form of prospective thinking about the direct consequences that the institution' own actions can have on self and others (Elster 1992: 2-4; Lambek 2010: 7).

In political ecology one could find the notion of either 'technological' or 'ecological' fixes. The

former happens when alleged technological improvements are made to bear on contradictions emerging from economic practices oriented towards capital accumulation (Harvey 2003). The latter refers to strategies of externalisation or internalization of environmental degradation (Bakker 2009). An 'ethical fix' operates on a different level, one where the dissolution of contemporary unsustainable regimes of resource accumulation and allocation are temporarily suspended and accommodated with via intimate if not mundane 'projects of self-fashioning and status' (Bear 2015: 5). This notion helps explaining how contradictory goals in the management of natural resources under austerity and green capitalism are allowed to remain in tension, as oppose to collide, thanks to the buffering and deferring effects of acts of self and other-regarding care put in place by state bureaucrats.

A Proud Bureaucracy

An 'ethical fix' is a modality of institutional thinking that cagily triangulates the interests of its own service recipients with that of bureaucratic survival and of the resources local bureaucrats have managerial control over to produce personally acceptable solutions to the contradictions of public goods provisions produced by policies of environmental and financial sustainability. Key to this definition is the notion that austerity green capitalism makes the provision of public goods such as universal water access impossible without the performance of fixes. To show this, let me first give you a small snapshot of the institutional context object of my research.

Yancong is a relative poor agricultural township of Huize county, located on the Yunnan-Guizhou Plateau. Historically a site for the mining of copper, Huize county owns a long history of water development related to copper extraction (Vogel 2008: 126). The area was further developed during the Great Leap Forward, which legacy survives today in the form of the Huize Earthen Dam

(*Wangjiacun Shuiku*), completed in 1968 and the largest of its kind in Asia. It is upon the waters stored and diverted by this dam and others in the area that the WSO operates. Two different administrative offices are located in the WSO: the Water Bureau (WB) and the Water Engineer Office (WEO).

The former is run by Mr Yong, a very talented, young party member, who supervises a team of five permanent employees and a small number of temporary members. The main functions of the WB are to coordinate the activities of the WSO with other government offices, to implement provincial and county-level regulations, to usher in higher-level officials on an inspection round, to approve infrastructural projects and to help devise their development. To a great extent, all of these activities are considered "political activities" (*shiye*) by the personnel of both offices requiring excellent negotiation skills, a stiff character and unbridled ambition. On the other hand, the WEO – formally dependent on the WB – is more of a "business" (*qiye*), selling its services to a population of customers. The office is headed by Mr Song, a man in his thirties with a penchant for water pipes and bird hunting. Mr. Song presides over a staff of eight: one female secretary and seven male technicians. The WEO covers several practical aspects of water management: it collects drinking water fees; operates and maintains the local water purification station; repairs the drinking water supply network; and provides manpower for the construction of small water cisterns or other water conservancy projects.

The WSO staff can be divided into two groups: those who were already part of the water sector prior to the "opening reform" of the 1980s (*gaige kaifang*) and those who came later. The former are Yancong born, well-known figures who are generally very accessible to the population and inclined to go beyond their duties as government workers to help out. The latter – younger and better trained – could also be locals, but approach the work at the WSO in a different way, usually

as the first step towards a better-positioned career or as a temporary stop. Both WB and WEO workers have a vocational college background (*dazhuan*), some having studied in Sichuan, others in Kunming or Huize City, and only recently have some of them attempted to gain a higher qualification such as a university degree in hydro-engineering or water management.

How did local water bureaucrats think of their own work? While the slow process of "privatization" of the Chinese water sector was making some of them feeling more insecure and isolated in their daily work[7], a more prevalent attitude among WEO water officials was one of pride and self-importance. The grandeur of vision and achievements in the development of water resources that belonged to the early socialist period (Pietz 2015: 130-93; Tilt 2015: 83-106) still permeated the ordinary ethos of water services in Yancong. Attached to this institutional and infrastructural pride however, were also more personal feelings. Many WEO workers born in Yancong used to say that part of the reason why they had decided to get into the water bureaucracy was because they still have memories of how much their families and neighbours had to struggle to bring buckets of water to their houses and farm plots.

During fieldwork, the daily routine of both offices circled around the designing, approving and financing of extraordinary measures against drought. Only in 2012, the WSO helped sending 291 water-hauling trucks to affected communities, built 18 water pumps, drilled 16 deep-ground wells and donated almost 1 million kilos of grain. If that was not enough, farmer delegations would ordinarily visit the building demanding extra help with pipes, breached ditches or floods. While these encounter were often fraught with unspoken rivalry and met by highly selective institutional negligence (Pia, forthcoming), my research participants, especially WEO members, would very often try their best to meet the many requests of their service recipients. A farmer would be assisted to convert to less water consuming crops, another allowed to water its private plot for free, a third

one given some extra days of irrigation water.

'Ethical fixes' are performed by water officials as part of this complicit and affective rapport to their service recipients. A recent rapprochement with state bureaucracy within the anthropology of China (e.g. Pieke 2010; Steinmüller 2013) and of the State (Lea 2008; Anand 2011; Bear, Mathur 2015) interprets bureaucracy as an ethical terrain inscribed with its own agents' sense of self-worth, aspirations and values. The 'ethics of office' pursued by state bureaucrats is here shown to be informed not simply by claims of rationality masking factual regimes of exploitation and private accumulation (Gupta 2012), nor by the instrumental and self-serving practices of technocratic depolitisation (Elyachar 2012), violent simplifications and absurdity (Graeber 2012, 2015: 45-104) and illegible detachment (Herzfeld 1992).[8]

In particular, safe and sufficient access to clean water pivots on petty officials, backdoor regulators and the artful ways in which these actors are able to manipulate its accompanying physical and conceptual infrastructures, such as supply networks and the price of water (Barnes 2014: 64-71; von Schnitzler 2008: 903-4; Ballestero 2015). Specifically, Nikhil Anand has recently shown how Indian bureaucrats keep water available to underprivileged customers by assuming a particular ethical conduct towards the enabling infrastructural and relational environment of Mumbai's urban water delivery system. This consists in actively "ignoring" the fact that their supply system is being free-raided by unpaying poor customers. By forfeiting any pretension of technical and bureaucratic efficiency over water service provisions, Mumbai's water bureaucrats are able to perform a triple-move: keeping access to water to the less affluent, displacing their own specialised knowledge from its traditional locus – thereby rebutting accountability when supply experiences interruption – and finally retaining their institutional role of key brokers in the production of water access for Mumbai's squatters (Anand 2015).

Implied here, is an analytical movement towards bureaucrats' own moralised characterisation of the recipients of public goods (Du Gay 2008: 136; Muehlebach 2012: 7-8; Fassin 2014: 433, 2015), whose assumed status of moral if not legal entitlement to such goods further reinforce the perceived irreplaceability of their providers. Under regimes of austerity and market-mediated environmental sustainability, this social process of signification of public goods map out a new political topography of compromised state services where the divergent projects of fiscal austerity, environmental sustainability and public access come to clash (Bear & Mathur 2015: 20; Law & Mol 2002: 100). Below, I will show ethnographically how the bureaucratic performance of 'ethical fixes' works at this juncture to appease such clashing.

How to Purify Water

Starting with the 1985 significant cut in the Water Ministry's budget, the Chinese water sector has been undergoing a process of reform aimed at making local institutions rely on locally generated funds for distributing both drinking and irrigation water, introduce competition in the workplace and professionalize its dependant bureaucracy (Nickum 2010: 541). The downsizing resonated with similar policies undertaken worldwide since the advent of "market environmentalism". Proponents of market solutions to inexpediency in water use (in China and elsewhere), reasoned that the public ownership had led to an overconsumption of water sources while failing to provide safe and clean fresh water to its users (Nickum 1998: 896; Bakker 2003: 22-33; Wang et al. 2007: 204; Pietz 2015: 297). Only by making water a commodity, its provision for-profit and its users, customers, could issues with water management be solved. In this way water will flow according to actual, measurable social demand, natural and temporary fluctuations in the supply will trigger a rise in price and local service providers will reinvest their revenues into the supply network. All this – it is

argued – will lead eventually to a self-regulating demand, averting waste and shortages.

This reform has important ethical implications for local state agents, as it forces them to turn a blind eye to the downsizing of welfare they were accustomed to provide to their fellow citizens. Generally speaking, the reform pits fiscal efficiency (i.e. provide the service you can pay for) against equity (i.e. provide the service to everyone), thus forcing those who run drinking water services, for instance, to cut insolvent customers off from the network or to save money on waste treatment, accepting the provision of a lower quality service[9]. State agencies now had to behave somewhat like private companies. If not able to make a profit, they at least had to show they were not contracting deficit. Simply put, the WSO had to relearn how to provide its services from scratch, or else perish[10]. During my stay, liquidity was running at an all-time low. There was no money for new water meters, nor for electronic registers. The motorbikes, used to reach far-off villages when fees were due, were running on low fuel or battery. Some days, it was even difficult to find a pen to write with. When higher-tier officials visited, I would often overhear their negative comments on the state of the office: 'This looks very backward' (*tai luohou le*).

On top of that, the water purification station was a liability of the WEO, and the source of constant preoccupations for its Head, shy Mr Song who was so poor at networking. The Station was built in 2001 thanks to a generous grant from the World Bank. Since then, little maintenance had been carried out. This was a shoddy building, with unoccupied dusty rooms, where only a wooden bench and a decently working TV hinted at the fact that every fortnight Shaozhi, my flatmate at the WSO dormitory, was stationed for seven days monitoring the purification apparatus. The water arrived at the station from a nearby reservoir, and carried the sediments of the open-air distribution canals as well as the fallouts of an undisclosed industrial plant. The purifier in use was outdated, and the technicians usually said that since it was plugged into the network, the station had never worked

properly.

In Yancong, it was well known that the purification station was falling behind standards. In fact, the WEO had scored badly in a series of periodical water quality tests (*shuiyang songjian*) administered by the Huize Water Bureau. The situation was so bad that it engendered tragi-comical effects. For instance, if thirsty while on duty, one had to drink water from imported water barrels. When I joked about it with Mengfu, he replied: 'This imported water costs 5 RMB per 19 litre barrel - the one produced by the station 1.5 RMB per 1000 litres. This says everything about quality'. Indeed, the station was in urgent need of amelioration and yet no state investment was on schedule. It was unclear who would pay for the work.

A possibility for improvement came in a truly unexpected fashion. One day in August 2012, Mr Song called me to his office early in the morning to ask a favour. Someone important was coming to Yancong. In his youth, this local celebrity used to live in an almost unreachable hamlet located in the mountains north of Yancong. Coming from a deeply impoverished background he received his middle school education by the village public school. After graduating with good results, he subsequently moved to Kunming as a migrant worker. By the time of my fieldwork, fifteen years had passed, a period of time which this poor boy with neither assets nor luck, spent becoming one of Yunnan's most important producers of electrical batteries. In his spare time however, he was hugely involved in fund-raising and in helping rural students get a proper education. As he later explained to me, a proper education to him mainly meant an English-based curriculum. This is where Mr Song brought me full circle: was I willing to accompany the young entrepreneur at the celebration for International Children's Day (*Guoji Ertong Jie*) to be held at his village’s primary school? Could I perhaps give a speech to the students, summarising the benefits of a British education and take a seat beside this important guest?

Few months after I decided to accept Mr Song's invitation I drove to the purification station in a huge van with the WEO people, carrying a range of kitchenware, furniture, a pair of Silkie Chickens. An especially rich chicken stew was heated up on the stoves of the newly arranged kitchen, while we patiently waited for our guests to arrive. Surprisingly, at least to me, the Kunming entrepreneur finally showed up with his family and English-speaking friends. He had brought wine from Kunming and we dined right there, contemplating the resting water contained in the station's rusty ponds. Eventually, I realised Mr Song had orchestrated something no one had expected him to be capable of. He had worked in silence for months trying to convince the wealthy man to invest money in the station. This was a crucial component of Yancong's water provisions and its renovation was both urgent and necessary. Did the entrepreneur know that the two greatest consumers of drinking water in the area were two schools? Would he contribute to his personal quest for good education by investing in the quality of water these children receive? That evening Mr Song won his guest's attention.

Before leaving the field, I paid another visit to the station. Inside were new rooms, better purification pools, and a brand new chemicals mixer. The money for the renovation came from the Kunming businessman, but instead of pouring the sum directly into the WEO account, the man decided to donate to a state-owned commercial company under which the WEO now operated. The station now appears in a commercial leaflet promoting this company's operations in Huize County, a poster child for the potential of sustainable water management. When asked about the station's successful recovery, Mr Song, smoking from his water-pipe, replied frankly: 'It is a way of preserving the government's face. Had he given us the money directly, the Huize government would have looked like it did not care about drinking water for the poor. Now I won't get any merit (*gongde*) for this, but at least we have a functioning station. When the government is not there to

help, you still need to do something, right?'

Mr Song had undoubtedly saved the station by an individual act of bureaucratic dedication. Yet, the dilemma faced by Mr Song is very common under market environmentalism. For the people at the WEO, this dilemma implies disavowing notions of equity and universal provisions in favour of efficiency and 'fiscal prudence'. When this logic is applied to institutions running a public good such as the WEO, it generates perverse incentives. One the one hand, it could force the WEO to go after insolvent costumers to pay for the renovation of key hydraulic structures. This move, in a context of pervasive fee-dodging as I will show in a moment, would inevitably lead to more resistance and to a loss of trust in the WEO thus generating more defections and eventually fewer funds available to keep the clean water flowing.

The opposite scenario however could also put the WEO in a bad light, with the WEO overlooking issues of water safety while being more accommodating of villagers' malpractices such as the unlawful drilling of water wells and fee avoidance. Again, this could tragically lead to decreasing revenues per drop of and increased levels of waste, pollution and to the overconsumption of the common groundwater, which prevention rest under the WEO's mandate. Mr Song's "ethical fix" is quite creative in this respect. By enrolling a powerful, private actor, he has de facto privatised the costs of management while socialising its benefits, temporarily escaping the equity vs efficiency cul-de-sac.

How to Collect Water Fees

While Mr Song seemed to prefer keeping his personal contribution to the successful renovation of the purification station to himself, thus seemingly missing out on an opportunity to improve his own

career prospects, the WEO proves to be also capable of performing fixes which are primarily oriented – similarly to Song Jiang's decision to ask the Emperor's forgiveness and thereby sparing his outlaws' lives – toward its own survival. This appears most strikingly when it comes to the collection of drinking water fees.

Daily, the WEO managed supply network carries 1100 m^3 of water to more than four thousands households. As Jiang Kai was always eager to tell me, a little mathematics here could help clarify an important point relevant to what kind of task the WEO members were facing when collecting fees. Had the community used up the amount of water that was supplied to it every day for a whole year, the amount of revenue generated would rest in the order of a nine-figure number. However, the actual figure for the revenues captured solely by fees-collection did not rise above 150,000 RMB per year. No matter how unrealistic the assumption made about WEO's revenue-generating capacity, the office had to run with the nine-figure target in mind if it wanted comply with market environmentalist policies to generate both fiscal and environmental sustainability. Again, the office was falling far behind what was expected from it.

To cover four thousand users' households with a staff of five was already a daunting task, not to speak of the intrinsic challenge represented by getting farmers to pay their dues. Fees collection was a time-constrained activity, which sees the fees collectors visiting the payers at home. However, one could knock at farmers' doors only between 9 and 11 am. Earlier than this, you would find no one at home, as the farmers would be working in the fields; later, lunch was prepared and eaten. In the Huize area, famous throughout Yunnan for its people' fondness of alcohol, this represented a problem as it meant that the great majority of people were not to be disturbed between 12 and 3 pm, that is while taking their drunken nap. This limited the amount of households that could be visited each day.

When fees collectors actually managed to enter the premises of a user's domicile, things got even more complicated. Domestic water use in Yancong is measured through water meters, which frequently malfunction or break. According to regulations, ensuring that utilities work properly is the household's responsibility. Therefore, many times villagers were asked to pay to replace their broken meter. When visiting poorer households, it was common to turn a blind eye to a broken meter, and fees were calculated instead according to the lower threshold given by the administrative regulations in place. Other times, collectors merely avoided reporting having visited a particular household, tactfully leaving a blank in the relevant module while giving the family relief from excessive state pressure.

Yet Yancong's villagers also purposefully avoided tax collection, in typical Scottian fashion (Scott 1989: 39-42). One way they did so was by stopping using the WEO supplied domestic water at all. Elsewhere I show how villagers relied on a second-tier drinking water distribution system made by a network of individually or collectively excavated water wells (Pia, forthcoming). Drinking water supplied by the WEO was seen as unsafe due to its colour. Moreover, the network experienced momentary disruptions. Why would anyone pay for such a service? For the WEO this was an incredibly damaging move. The water spilling from farmers' water wells in fact came from the very same reservoir that was supplying drinking water to Yancong. It was water that the Huize Water Bureau had paid for, but for which no one returned a penny. To this primary loss, the WEO therefore added the loss stemming from unmet levels of water consumption.

WEO staff was keen to stress that the expectations of the users were unrealistic. Villagers still behaved according to the logic of a fully subsidised water sector, thinking that water was a free good. 'What they don't understand is that things are different now. To pay by stamps is one thing, to pay a bill another! People know that stamps could be spent only on water, but with money, they say:

“why should I waste my money on something like water!”’, Shaozhi once commented. In August 2012, the water sector reforms started making a dent on drinking water bills. The price of drinking water in Huize County doubled, going up to RMB 3/m³. The WEO staff only partially informed Yancong’s users of this. ‘We will have to implement it as slowly as we can: we cannot alienate (*shuyuan*) the few payers we have now. The WEO needs the money’ Liao Yun, WEO's only female worker, explained to me[11]. Moreover, the WEO did not have the resources nor the willingness to punish overdrawing.

The WEO was walking a fine line to keep the expectations of water users in the area manageable, without losing support from the local community. One reason for doing so was manifestly self-serving. Under market environmentalism a WEO member's salary came directly from the revenues generated by the collection of water fees. This meant that, while the salary's upper limit was set politically from above, to get to that amount the WEO workers ought to make water users pay. Yet, WEO's workers did not push harder on fees collection to preserve their salary. The principle of making users pay according to consumption – another token of market environmentalism – did not provide any immediate way out of the chronic underfunding of local water provisions. To solve the problem, the WEO had to come up with a local short cut.

One day, Mengfu had an idea. His wife had been seriously ill for the last few years. A few weeks after my arrival inYancong, she underwent major surgery. The post-surgery treatment dictated some caution, but by the following Chinese New Year she had completely recovered. When she eventually got home, the local community celebrated with a massive feast involving the slaughtering of more than twenty goats. Mengfu's wife was one of the very few female party cadres in the area, and her surgical treatment was paid for locally, by the local party branch. That was widely known in the community, but not by Huize County's People Government. This was

Mengfu's idea: pretending that the medical bills had brought his family on the brink of bankruptcy, he wrote an official letter to the county's government, lamenting that his salary was too small to cover the bank debt he had contracted. He also mentioned that all his co-workers were facing similar situations and that if the government had not provided help, the water supply in the locality would have faced a serious threat of definitive interruption. He concluded by demanding a 200 RMB annual raise in their minimum wage. When he filed his internal complaint, Mengfu and his colleagues did not expect that the government would eventually accede to his request. Mengfu later commented: 'With this money we could finally pay for a new computer and buy an extra motorbike, it will make things more efficient (*xiaolügao*) and the service more respondent (*yingfuze*)'. Few months after, WEO staff could be seen zip through Yancong on shiny new moped.

As seen in the case of the purification station, Yancong water bureaucrats do creatively come up with ethical shortcuts to the institutional jams created by the Chinese reform of state water provisions. Here, Mengfu's fix could be termed 'ethical' to the extent that it exempts poorer households to bear the cost of a raising price of drinking water, while at the same time creatively affording the institutional survival of the WEO. Yet, such move, while temporarily slowing down the deteriorating capacity of the WEO of generating profits out of water service, may also conceal differently oriented processes of bureaucratic accumulation of wealth and power. In fact, Mengfu's intention of reinvesting parts of WEO members' newly raised salaries into the office conveniently allowed the office as a whole to look more successful to outsiders on inspection rounds, while accruing a moral debt with exempted families. This is a self-serving ethical move which, if undetected, could buy Mengfu and his office a great deal of "face" (*mianzi*) vis-a-vis the central government (e.g. Steinmüller 2013: 199) while remaining congruous with the broader projects of running public services solely through market means.

Conclusions

In the *Water Margin* stories, Song Jiang and his followers are endlessly confronted with the problem of how to redress injustice. Throughout the book, the outlaws do their best to make up for official malfeasance affecting the common people. Similarly, as they take position on practical, yet personally troubling dilemmas stemming from the friction between centrally-designed water policies and the needs of their local community, Yacong's water bureaucrats face comparably compelling ethical challenges. In solving those challenges, I contend, my interlocutors re-enact the central theme of this popular story, namely the one of the incompatibility of distributive justice and unaccountable governments. This literary comparison helped me introducing one relevant aspect of substantiating national promises of public goods, especially for those public institutions to which the attainment of sustainability is now devolved. This is the idea that the provisions of common yet increasingly limited goods such as water would be brought to an halt if it wasn't for the personal commitment and dedication of the ordinary man and women who work as small bureaucrats in service companies and state agencies. It is because of these people that the administrative contradictions introduced by the re-regulation of the water sector according to a pro-market agenda find practical, creative yet short-term solutions. It is also thanks to them if many underprivileged households might have a chance of getting the 'scarce good that they seek' (Elster 1992: 4).

In this paper I have called such imaginative, at times carefully thought-out, others characteristically improvised engagements with the provision of public goods 'ethical fixes'. In these conclusions I want to further elaborate on this concept. First, the ethics involved in the performance of such fixes is of a particular, dual kind. One could easily argue that the WEO protected its customers from waste and overprice because it thought it would not last long if it did not do so. As James Scott has poignantly noted in his work on peasant resistance to state intrusion (1985: 295-6), the coupling of

personal and principled motives is what drives the collective actions of the exploited. Here, I bring Scott's argument into the state's bureaucracy. Even when looking at how the state works from within, one has to recognise that parochial and general interests often overlap (Graeber 2010: 205). To bring about the objectives the central state sets for local administrations (i.e. increase water efficiency) local allocators have to compromise between their communities' demands and their job requirements. Avoiding "alienating" payers' support, and holding back from discharging entirely on villagers the burden of cost-recovery, are not the outcome of a disinterested ethics, rather that of running local institutions for the sake of their own reproduction. Importantly, these institutional acts of self-care allow for the momentarily resolution of the various contradictions that affect the Chinese state's provision of drinking water under market environmentalism.

Therefore, 'ethical fixes' seem to maintain a complicit relationship with the Chinese state project of increasingly managing water demand through market mechanisms. As the country's economy grows in voracity, the slow but apparently irreversible process of dispossession that many Yunnanese agricultural communities are suffering (Zhu 2011: 58-66; Harwood 2013: 71-4) seems to suggest that, no matter how hard local residents and officials might try, the near future will be one with less available water for peripheral use. The enactment of market environmentalism, as described here, seems to give priority to short-term fiscal consistency (i.e. fiscal sustainability) over long-term access to water (i.e. environmental sustainability). Yancong water workers go to great pains to secure water access for their local community, despite the unfavourable political and administrative regime under which they operate.

However, their efforts seem to do little more than temporarily fixing the problem of limited access to water for the poorest. Notably, their palliative, ethically driven re-distributional strategies are rather integral, as opposed to oppositional, to a reform that promotes private contributions to the

public good as substitutive to state welfare provisions. By making market environmentalism working in practice, these ‘ethical fixes’ affords the perpetuation of a regime of divestment from and dispossession of poor rural communities. At the same time, they help maintaining a façade of environmentally sound policies over the reality of compromised access to water and environmental degradation. It appears as if Yancong water officials are unwillingly contributing to deepening a specific form of faux sustainability that while sparing systemic critiques to fiscal prudence and the marketization of the environment, equally fails at producing real environmental sustainability, at least for those leaving in the countryside.

Acknowldegments

My unreserved gratitude goes the staff of the WSO who supported me throughout my fieldwork. A deep thanks to the Chiang Ching-Kuo Foundation, the Chinese Scholarship Council, the Universities' China Committee in London, the John Wright Memorial Trust and the LSE Financial Support Office for support of this project, for the guidance of Charles Stafford, Stephan Feuchtwang, Francesca Bray, Laura Bear, Giulia Zoccatelli and Hans Steinmüller, Matei Candea and JRAI's three anonymous reviewers.

1. Due to confidentiality agreements, throughout the essay I will replace all personal names and names of places below County level with pseudonyms.

2. The WSO is an old style communist *danwei* or work unit, a compound where workers have their own offices, dorms and a state-run canteen.

3. The *Water Margin* story dovetails with the one told by this paper on three counts. First, its protagonists entertain a conflictual relationship with the authority representing the nation's public good, in that they all deplore higher authorities for never putting their money where their mouths are. That is, they might speak of virtue or social justice but they do little to uphold such values. Second, because of this inconsistency, they believe it is up to them to live up to the official, yet unfilled promises the state makes to its underprivileged citizenry. Third, faced by the impossibility of reconciling issues of distributive justice with the reality of unchecked power, they perform an ethical turn to their own survival, partially forfeiting that of their mission. This way, the comparison shades an important light on the ethical agency of political brokers in (ancient or contemporary) China and elsewhere.

4. While climate change and prolonged droughts play a role in water shortage (e.g. Crow-Miller 2015: 175), pollution has a huge impact on the total amount of water available to the Chinese

population (e.g. World Bank 2009: 12; Gleick 2009: 82). People living in the countryside are forced to rely on a polluted supply or on unhealthy water-saving practices, exposing themselves to life-threatening diseases (World Bank 2009: 20; Lora-Wainwright 2013; Tilt 2013). The current number of Chinese people who would benefit from an increment in their daily intake of safe water is around 300 million (Gleik 2009: 91).

5. Since 2009, some parts of Yunnan have started to suffer from a diminishing availability of water (Yang, Zhou 2013). Huize County has been a major victim of this Yunnanese trend. See local media coverage at http://society.yunnan.cn/html/2011-09/04/content_1806985.htm and http://society.yunnan.cn/html/2011-09/04/content_1806962.htm (in Chinese).

6. Laura Bear's accounts of 'ethical fixes' builds on recent discussions in the anthropology of morality aimed at re-vitalizing 'virtue ethics' (e.g. Laidlaw 2014; Lambek 2010). Following Jon Elster on the morality of goods allocation (1992) and Didier Fassin on the 'ethical turn' in anthropology (2014: 432-3), I try here to move away from a discussion of moral agency as being primarily about 'self-fashioning' and 'virtue' to shift attention towards the moral appraisal of actions in light of their consequences on self and others.

7. At the time of fieldwork the WEO had just been bought by Best Water Co., a fully "commercialised" state owned enterprise which has exclusive rights to water allocation and distribution in the Huize area and behaves according to its fiscal bottom line (see Zhong, Mol, Fu 2008: 867).

8. Chinese culture has long judged the country's official by their capacity of "getting things done" (*nengli*) (Wang & Feuchtwang 2001: 122). Along with the county clerk Song Jian, there are many other popular figures of officials – Qu Yuan, Judge Bao and Zhong Kui to name a few – who epitomise the Chinese ideal of rightful government and selfless dedication to the public good. Lei Feng, the young socialist hero, would be a communist rendition of this deep-seated cultural ideal.

9. While Yancong has indeed been experiencing a lowering quality of water supplied to its

inhabitants after the water sector reform, this is not valid for all countries where market environmentalism has held sway. Water quality in England for instance has dramatically increased after the supply was sold to private entities (Bakker 2001: 150).

10. From 2009 onwards, the WSO begun to run a deficit of over 100% of its total budget.

11. At the time of fieldwork 1 RMB equalled 0.6 US. According to the United Nations Development Program (UNDP) guidelines, household annual water expenditure should not exceed 3% of its income (Ballestero 2014: 30). My data suggests that Yancong's poorest households are paying around 10% of their annual income on tap water.

References

Anand, N. 2011. Pressure: The PoliTechnics of Water Supply in Mumbai. Cultural Anthropology 26, 542-564.

- 2015. Leaky States: Water Audits, Ignorance, and the Politics of Infrastructure. Public Culture 27, 305-330.

Andreas, J. 2009. Rise of the red engineers: the Cultural Revolution and the origins of China's new class. Stanford : University Press .

Ballestero, A. S. 2014. What Is in a Percentage? Calculation as the Poetic Translation of Human Rights. Indiana Journal of Global Legal Studies 21(1): 28-53.

- 2015. The Ethics of a Formula: Calculating a financial-humanitarian price of water. American Ethnologist 42, 262-278.

Bakker, K. 2001. Paying for water: water pricing and equity in England and Wales. Transactions of the Institute of British Geographers 26, 143-164.

- 2003. An Uncooperative Commodity. Privatizing Water in England and Wales. Oxford : University Press.

- 2009. Neoliberal nature, ecological fixes, and the pitfalls of comparative research. Environmental Planning A 41, 1781-1787.

- 2014. The Business of Water: Market Environmentalism in the Water Sector. Annual Review of Environmental Resources 39, 469-494.

Barnes, J. 2014. Cultivating the Nile: The Everyday Politics of Water in Egypt. Durham & London: Duke University Press.

Bear, L. 2014. For labour: Ajeet's accident and the ethics of technological fixes in time. Journal of the Royal Anthropological Institute 20 (S1), 71-88.

- 2015. Navigating Austerity: Currents of Debt Along a South Asian River. Stanford: University Press.

Bear, L. & N. Mathur 2015. Remaking the Public Good: A New Anthropology of Bureaucracy. The Cambridge Journal of Anthropology 33, 18-34.

Bramall, C. 2009. Chinese Economic Development. New York: Routledge.

Crow-Miller, B. 2015. Discourses of Deflection: The Politics of Framing China's South-North Water Trasnfer Project. Water Alternatives 8, 173-192.

Du Gay, P. 2008. Max Weber and the Moral Economy of Office. Journal of Cultural Economy 1, 129-144.

Elster, J. 1992. Local Justice: How institutions allocate scarce goods and necessary burdens. New York: Russell Sage.

Elyachar, J. 2012. Next Practices: Knowledge, Infrastructure, and Public Goods at the Bottom of the Pyramid. Public Culture 24, 109–129.

Fassin, D. 2014. The Ethical Turn in Anthropology: Promises and Uncertainties. Hau: Journal of Ethnographic Theory 4, 429-435.

- 2015. At the Confluence of Ethics and Politics. In Four Lectures on Ethics: Anthropological Perspectives (eds) M. Lambek, V. Das, D. Fassin & W. Keane. Chicago: Hau Books.

Feuchtwang, S. 2013. Political History, Past Suffering, and Present Sources of Moral Judgement in the People's Republic of China. In Ordinary Ethics in China (ed) C. Stafford, pp. 220-241. London: Bloomsbury.

Gleick, P. 2009. China and Water. In Pacific Institute, 2009. The World's Water 2008-2009: The Biennial Report on Freshwater Resources. Washington: Island Press.

Gleick, P. & M. Palaniappan 2010. Peak water limits to freshwater withdrawal and use. PNAS 107, 11155–11162.

Graeber, D. 2010. Communism. In The Human Economy: A Citizen's Guide, (eds) K. Hart, J. Laville & A.D. Cattani, pp. 187-98. Cambridge: Polity.

- 2012. Dead Zones of the Imagination: On Violence, Bureaucracy, and Interpretive Labor. The Malinowski Memorial Lecture, 2006. HAU: Journal of Ethnographic Theory 2, 105–128.

- 2015. The Utopia of Rules: on Technology, Stupidity and the Secret Joys of Bureaucracy. London: Melville House Publishing.

Gupta, A. 2012. Red Tape: Bureaucracy, Structural Violence, and Poverty in India. Durham: Duke University Press.

Harvey, D. 1997. Justice, Nature and the Geography of Difference. Malden : Wiley-Blackwell.

- 2003. The Fetish of Technology: Causes and Consequences. Macalester Int. 13, 3-30.

Harwood, R. 2013. China's New Socialist Countryside. Modernity Arrives in the Nu River Valley. Washington: University of Washington Press.

Herzfeld, M. 1992. The Social Production of Indifference: The Symbolic Roots of Western Bureaucracy. Chicago: University of Chicago Press

Jun, J. 2003. Dams and Dreams: A Return-to-Homeland Movement in Northwest China. In Living with Separation in China: Anthropological Accounts (ed) C. Stafford, pp. 113-129. London: Routledge-Curzon.

– 2007. State Comrades and an Elderly Woman's Suicide. Critique of Anthropology 27 (2): 147-163.

Ku, H.B. 2003. Moral Politics in a South Chinese Village: Responsibility, Reciprocity, and Resistance. Oxford: Rowman & Littlefield.

Lambek, M. (Ed). 2010. Ordinary Ethics: Anthropology, Language and Action. New York : Fordham University Press.

Laidlaw, J. 2014: The Subject of Virtue: An Anthropology of Ethics and Freedom. Cambridge:

University Press.

Law, J. & A. Mol 2002, Local entanglements or utopian moves: an inquiry into train accidents. In Utopia and Organization (ed) M. Parker, pp.82-105. Oxford: Blackwell.

Le Mons Walker, K. 2010. Gangster capitalism' and peasant protest in China: The last twenty years. Journal of Peasant Studies 33, 1-33.

Lea, T. 2008. Bureaucrats and the Bleeding Hearth: Indigenous Health in Northern Australia. Kensigton: UNSW Press.

Li, T. 2005. Engaging Simplifications: Community-Based Natural Resources Management, Market Processes, and State Agendas in Upland Southeast Asia. In Communities and Conservation. Histories and Politics of Community-Based Natural Resource Management (eds) P.J. Brosius, A.L. Tsing & C. Zerner, pp.427-458. Walnut Creek: AltaMira Press.

Lin, C. 2006. The Transformation of Chinese Socialism. Durham: Duke University Press.

Liu, B. & R. Speed. 2009. Water Resources Management in the People's Republic of China. International Journal of Water Resources Development 25, 193-208.

Lora-Wainwright, A. 2013. Fighting for Breath: Living Morally and Dying of Cancer in a Chinese Village. Honolulu: University of Hawai'i Press.

Ma, T. 2009. Environmental Mass Incidents in Rural China: Examining Large-Scale Unrest in Dongyang, Zhejiang. China Environment Series 11: 33-56.

Marks, R.B. 2012. China: Its Environment and History. Plymouth: Rowman & Littlefield Publishers.

Metha, L. 2010. Introduction. In The Limits of Scarcity. Contesting the Politics of Allocation (ed) L. Metha, pp. 1-10. London: Earthscan.

Mertha, A. C. 2008. China's Water Warriors. Citizen action and policy change. New York: Cornell University Press.

Mollinga, P. 2010. Hot Water after the Cold War – Water Policy Dynamics in (Semi-)Authoritarian States. Water Alternatives 3, 512-520.

Muehlebach, A. 2012. The Moral Neoliberal. Welfare and Citizenship in Italy. Chicago: University Press.

Naughton, B. 2007. The Chinese Economy: Transitions and Growth. Cambridge: MIT Press.

Nickum, J. 1998. Is China Living on the Water Margin? The China Quarterly 156, 881-898.

- 2010. Water Policy Reform in China's Fragmented Hydraulic State: focus on self funded/managed irrigation and drainage districts. Water Alternatives 3, 537-551.

Pia, A.E. 2016. "We Follow Reason not the Law": Disavowing the Law in Rural China. PoLar:

Political and Legal Anthropology Review 39.
- Forthcoming, What Rights Can't Do: Natural Resources, Contested Development and Unmet Obligations in the Yunnanese Countryside, in Brandtstädter, S. and Steinmüller, H. (eds.), *Judgements, Popular Politics and the Quest for Justice in Contemporary China*, London, Routledge.

Pieke, F.N. 2010. The good communist: elite training and state building in today's China. Cambridge: University Press.

Pietz, D.A., 2015. The Yellow River: The Problem of Water in Modern China. Cambridge: Harvard University Press.

Scott, J.C. 1985. Weapons of the Weak: Everyday Forms of Peasant Resistance. New Haven : Yale University Press.
- 1989. Everyday Forms of Resistance. The Copenhagen Journal of Asian Studies 4, 33-62.

Steinmüller, H. 2013. *Communities of Complicity. Everyday Ethics in Rural China*. New York: Berghahn.

Strang, V. 2009. Gardening the World: agency, identity, and the ownership of water. New York ; Oxford: Berghahn.
- 2015. Water: Nature and Culture. London: Reaktion Book.

Teets, J.C. 2011. Reforming Service Delivery in China: The Emergence of a Social Innovation Model. Journal of Chinese Political Science 17, 15-32.

Tilt, B. 2013. Industrial Pollution and Environmental Health in Rural China: Risk, Uncertainty and Individualization. *The China Quarterly* 214, 283 – 301.
- 2015. Dams and Development in China. The Moral Economy of Water and Power. New York: Columbia University Press.

Vogel, H.U. 2008. Copper Smelting and Fuel Consumption in Yunnan, Eighteenth to Nineteenth Centuries. In Metals, Monies, and Markets in Early Modern Societies: East Asian and Global Perspectives (eds) T. Hirzel & N. Kim, pp. 119-170. Berlin: LIT.

von Schnitzler, A. 2008. Citizenship Prepaid: Water, Calculability, and Techno-Politics in South Africa. Journal of Southern African Studies 34, 890-917.
- 2014. Performing Dignity: Human Rights, citizenship and the techno-politics of law in South Africa. American Ethnologist 41, 336-350.

Wade, R. 1982. The system of administrative and political corruption: Canal irrigation in South India. Journal of Development Studies 18, 287-328.

Wagner, R. (Ed.). 2013. The Social Life of Water. Oxford ; London : Berghanh.

Wang, M. & S. Feuchtwang 2001. Grassroots Charisma: Four Local Leaders in China. London : Routledge

Wang, J. et al. 2006. Incentives to managers and participation of farmers: which matters

for water management reform in China? Agricultural Economics 34, 315–330.

Wang, J. et al. 2007. The Development, Challenges and Management of Groundwater in Rural China. In The Agricultural Groundwater Revolution: Opportunities and Threats to Development (eds) M. Giordano & K.G. Villholth, K.G, pp. 37-62. Colombo, Sri Lanka: IWMI.

Webber, M. et al. 2008. Pricing China's irrigation water. Global Environmental Change 18, 617–625.

Webber, M. et al. 2011. Development for Whom? Rural to Urban Resettlement at the Three Gorges Dam, China. Asian Studies Review 35, 21–42.

Wittfogel, K.A. 1957. Oriental Despotism : a comparative study of total power. New Haven: Yale University Press.

World Bank 2009. Addressing China's water scarcity : recommendations for selected water resource management issue. Washington, D.C. : World Bank.

Wutich, A. 2011. The Moral Economy of Water Reexamined: Reciprocity, Water Insecurity and Urban Survival in Cochabamba, Bolivia. Journal of Anthropological Research 67: 5.36.

Yang, F. & J. Zhou 2013. Why has water-rich Yunnan become a drought hotspot? Published online at: https://www.chinadialogue.net/article/show/single/en/5940-Why-has-water-rich-Yunnan-become-a-drought-hotspot-, accessed 15th March 2015.

Zhang, Y. 2007. Renlexuezhong de Shuiyanjiu: Du ji ben shu. [A review of the Anthropological Research on Water]. Published online at: http://www.sachina.edu.cn/Htmldata/article/2007/06/1378.html, accessed 11th March 2016.

Zhu, X. 2011. Xiaocun Gushi: dizhi yu jiayuan (2003-2009) [The Story of a Small Village: Local Histories and Life in the Gated Community]. Beijing: Beijing Daxue Chubanshe.

Zhong, L. Mol, A.P. & T. Fu, 2008. Public-Private Partnerships in China's Urban Water Sector. Environmental Management 41, 863–877.

Please accept the revised submission of my manuscript.

Here is how I have attempted to address the three points mentioned by the reviewers:

R1 mentioned the loose juxtaposition of my case and the Water Margin novel. Footnote 3 now explains in more details how the ethnography relates to my reading of the novel and argues that a good fit between the former and the latter may in fact be detected.

R1 and the Chief Editor both asked to substantiate ethnographically my claim of the existing affective rapport between the water bureaucrats and the local citizens. As most of that ethnographic material will be used in a different paper (forthcoming in 2016) and given the limited space, I have opted to add a short paragraph (3rd para, pp. 12-13) where I give a glimpse of few unsolicited acts of bureaucratic caring corroborating the above claim.

Finally, R3 requested more signposting. Bridges and signposts have been added throughout the revised text (2nd para. p. 10; end of 1st para, p.14; last-1st para, pp. 18-19).

Misspellings have also been corrected.

The final text consists of 9997 words.