those of two lesser wives. After comparing the plan with the actual archaeological remains, Wu argues that "the bronze ground plan was made ... to maintain the established political order and thwart potential political profiteers who would emerge after Cuo's death" (177). Wu supports his argument with evidence he has found in one of the three long inscriptions made on the round hu vessel. This text states that the successor of Cuo was a son by a qie (concubine). This suggests "the status and well-being of Cuo's queens and other consorts could be in jeopardy after his death" (177). Following this reasoning, Wu argues that the planning of the mausoleum as an immortalization of the status of the queens, who wanted to consolidate their political status after the death of the old king.

In sum, I very much welcome the publication of this new book which provides a comprehensive, up-to-date, and refreshing interpretation of one of the most important archaeological sites in early China. The results and achievements of the book make us marvel at how many more secrets we can unlock from an even closer look at just one individual site such as the Zhongshan royal burials.

The River, the Plain, and the State: An Environmental Drama in Northern Song China, 1048–1128

By Ling Zhang. New York: Cambridge University Press, 2016. xix + 319 pp. \$99.00.

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With its well-known cast of writers and statesmen it is hard to believe that the history of the Northern Song could be substantially rewritten, yet Ling Zhang's *The River, the Plain, and the State* has succeeded in doing just that. In an astounding shift of perspective, Zhang foregrounds the three-way interaction between a flooding Yellow River, a flooded Hebei Plain, and a Song government desperate to impose political and administrative order on these unruly forces. Rather than the familiar institutional and political periodizations, Zhang's study is constructed around the eighty-year period when the three entities in her title were brought into a mutually constructive (and mutually destructive) interplay. And while the familiar *dramatis personae*—including Sima Guang, Ouyang Xiu, and Wang Anshi—are present and accounted for, Zhang's wide-ranging and precise reading of this "environmental drama" forces us toward a new accounting of their historical roles, as well as those of the Yellow River, the borderlands of North China, and the Song Dynasty itself.

The outlines of this story are simple, if surprisingly absent from prior histories of the Song. In 1048 the Yellow River left its millennia-long course separating Henan from Hebei and burst into the Hebei Plain, inundating a huge expanse of fields and settlements, displacing hundreds of thousands of people, and demanding the immediate attention of an imperium responsible for the stability of the social, political, and environmental order. For eighty years emperors and high officials, mid-level "hydrocrats"

(*shuiguan*), and local residents strove to restore order and stability to regional hydrology, society, and economy, only to be repeatedly stymied by their political opponents and by the unruly power of the river itself. In 1128, in a desperate attempt to stop the Jin invasion, Song generals breached the dykes, leading to another wave of catastrophic flooding before the Yellow River settled into a new course to the south where it joined the flow of the Huai. Never again would the Yellow River impinge on the Hebei Plain.

Yet Zhang's study is far more than a simple account of these events. Instead, she sets out to rewrite the histories of her three protagonists. First, Zhang wants to recover the regional history of Hebei as it emerged in the first century CE, and the particular role it played as the Northern Song's northern borderlands. Second, she demands a reexamination of uncritical celebrations of the power and accomplishments under the Northern Song. Third, she adds deep context to other studies of the desolation left in the Yellow River's wake, including Ma Junya's Bei xisheng de "jubu" [The Sacrificed Portion], Kenneth Pomeranz's The Making of a Hinterland, and Micah Muscolino's The Ecology of War in China. Finally, Zhang's most significant theoretical contribution is a critique of Karl Wittfogel's notion of a "hydraulic mode of production." Instead, Zhang explores the river–plain–state nexus as a "hydraulic mode of consumption" that drained, rather than swelling, the power and resources of the state.

Following a Prologue on the year 1048, when the river first flooded into Hebei, The River, the Plain, and the State is divided into two main parts, a "Prelude to the Environmental Drama," before 1048 and "The Unfolding of the Environmental Drama" after the floods. Chapter 1, "Before the Yellow River Met the Hebei Plain," documents the hydrology and history of the Yellow River before the Song, bringing together significant historical and environmental scholarship to set the stage for the drama of the rest of the book. Zhang shows that the Yellow River stabilized in a course between Henan and Hebei in the late Han. Thanks to the long-term stability of the river for the next 800 years, the region north of the river, Hebei, became the most densely populated region of the Tang Empire and developed a distinctive and fiercely independent regional culture. The next three chapters follow changes brought to the governance of Hebei and the Yellow River in the early Northern Song. Chapters 2 and 3, "The State's Hebei Project" and "The 1040s: On the Eve of the Flood" document changes in the regional culture and institutions as the Song moved to turn Hebei into an extension of imperial power rather than a semi-independent region, and on the experience of malaise and crisis emerging in the 1040s.

Chapter 4, "Creating a Delta Landscape" is the most significant chapter of Part I. Here, Zhang shows that "the river's course shift into Hebei was not an 'act of God'" (109). Instead, the floods of 1048 were probably the outcome of a century of acts to direct the river northward. This literally one-sided hydraulic policy was the result of pragmatic attempts to protect the valuable regions to the south, and of an ideology obsessed with recreating the landscape of Yu the Great by diverting the Yellow River through the Nine Rivers of Hebei. The net result of these pressures was that the south-side dykes were better reinforced, and the Yellow River exploded northward into Hebei in 1048.

The next four chapters of Part II take up the political, social, economic, and long-term effects of the flooding of Hebei. Chapter 5 "Managing the Yellow-River-Hebei Environmental Complex," advances Zhang's clearest articulation of the "hydraulic mode of consumption." Much like the Hebei landscape itself, factions of high officials, locals, and mid-level hydrocrats shifted repeatedly in the late eleventh century in the face

of continued flooding. As Zhang convincingly argues, the combination of the River's hydraulic power and the bureaucrats' equivocations "made the state into the supplier and servant of the needs of the Yellow River-Hebei environmental complex—rather than the other way around" (142). Instead of a Wittfoglian cycle of power and environmental stability, the hydraulic works fed a downward spiral that drained resources and state power.

The next two chapters document the devolution of life and livelihoods in the flooded landscape of Hebei. Chapter 6, "Life in the Yellow River Delta," reflects on the deprivation of Hebei society, where Zhang suggests "at least a million of Hebei's five million people were disturbed" (194). Chapter 7, "A Subsistence-Oriented Agriculture," shows that Hebei did not undergo an "agricultural revolution" in the Song, focusing instead on subsistence in the face of potential loss. Indeed large segments of Hebei were forced to rely on food imports from the South to sustain themselves, largely by joining the swelling ranks of the military and public works. Yet while I am quite convinced by both of these arguments, Zhang may be guilty of rhetorical overreach when she argues that "from the perspective of resource flows and consumption, disaster-ridden Hebei became the *de facto* center of the empire" (217).

Finally, Chapter 8 suggests that even after the Yellow River left Hebei, it was subject to "A Thousand Years of Environmental Trauma." The after-effects of the eighty years of flooding included destabilization of local rivers, salinization and sandification of large swaths of the landscape, and excessive logging that only worsened local hydrology by further increasing runoff. Indeed Zhang suggests that these effects contributed to the long-term poverty that affects segments of Hebei to this day. As she concludes in the Epilogue, the degradation of Hebei was itself a prelude to the effects that the Yellow River and its hydraulic works would bring to its later courses in the Ming and Qing, that "the eighty-year environmental drama in middle-period China supplied both the beginning of and the model for a peculiar vision of Chinese history throughout the second millennium" (288).

Zhang's major theoretical contribution—her response to Karl Wittfogel's Oriental Despotism—is quite useful, but there is another elephant in the room—Mark Elvin's The Retreat of the Elephants. A core contention of Elvin's work is that through its water conservancy program China became "locked-in" to the high "costs of system sustainability" (123). Yet Zhang shows us that there were other options available than propping up the failing dykes, options that had their own constituencies. Like Pomeranz and Ma, Zhang shows the possibility of abandoning the flooded region to its own fate; like Muscolino, she shows that long-term investments could be destroyed in the pursuit of short-term stratagems. In my reading, this forms an implicit critique of Elvin's assumption that either states or rivers could fall into stable path-dependencies. Other policies were always available, and the unpredictable turns of state affairs injected as much randomness into the system as did the complex hydrologies of the river itself. Ultimately, scholars will have to read Zhang's work in conversation with Elvin as well as Wittfogel, Pomeranz, Muscolino, and Ma, and I wish she had anticipated this discourse head-on. Nonetheless, I found the "hydraulic mode of consumption" theoretically persuasive in this context and perhaps more generally.

Overall, Ling Zhang's work in *The River, the Plain, and the State* is both grounded and ambitious, focusing on the eight-decade experience of Hebei, yet with implications for our broader understandings of both the Yellow River and the Northern Song. She deploys well-known sources like the *Xu zizhi tongjian changbian* and *Song huiyao jigao* in the service of a novel and convincing argument on how state power became

imbricated with hydrological forces that remained partially outside its control. Aside from some minor quibbles with phrasing, I am quite convinced. Indeed, my main desire is for even more ambition and critical engagement, especially with the literature on water control. Nonetheless, this is a transformative work of Song history, environmental history, and the places where they meet.