The Chinese State and the Political History of the Yellow River

A Comparison of Two Episodes

(Working Draft. Please do not cite, distribute, or copy.)

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Introduction

This paper presents some preliminary work from my book project, China’s Sorrow or the Yellow River’s Sorrow? An Environmental History of the Yellow River. This project examines millennia-long contests between the flooding waters of the Yellow River and Chinese states’ intentions, efforts, and often failures to curb the floods. It will be a book about exchanges of power (power from various sources, like the power of humans and the power of nature), and the long-term environmental consequences such exchanges have triggered.

In the present paper, I would like to introduce two episodes of this history that show one facet of the intricate relationship between Chinese states and the Yellow River during the first half of the Northern Song Dynasty (960-1048) and during much of the Jin Dynasty (1128-1215). This particular facet of the river-state relationship reveals how each of these two states perceived the tension between its geopolitical landscape and the actual physical landscape as defined by the floods of the Yellow River. It articulates that in both
cases the state’s demand for a beneficial geopolitical landscape overshadowed its concerns about flood control. Such demand led the state actively to modify the physical landscape to meet its geopolitical needs. It motivated rulers and officials to employ political rhetoric and rationales to conceptualize the state’s territory in terms of core and periphery, and to run cost-benefit analyses to justify their decisions to guard certain regions and sacrifice others. My paper argues that this process of conceptualization, rationalization, and decision making determined the state’s hydraulic polices for dealing with flooding problems along the Yellow River. These policies dictated the hydraulic practices that both states applied to various sites along the Yellow River. In the case of the Northern Song the practices caused the river’s course to shift to the northern part of the North China Plain (Hebei), while in the Jin they stabilized the river’s course in the southern part of the Plain (Henan).

These two historical episodes seem to present two sets of opposite hydraulic ideas and activities. In the first episode, the hydraulic ideology and its practices protected the river’s southern bank and tried to cause the river to flow northward. In the second episode, ideology and practices protected the river’s northern bank and tried to direct the river and its disasters southward. The geographical dynamics and the political dynamics between the river and the plains lying on both sides—Hebei and Henan—took a 180-degree turn between the Northern Song period and the Jin period. By asking why so dramatically different these two episodes appear to be, my paper reveals how fundamentally similar their relationships between the state and the river were. This similarity lies in both states’ political interpretations of the existence and significance of geographical components, and in their utilitarian efforts to deliberately change the environmental relationship among these components to maximize their political interests.

I do not claim that state’s decisions and hydraulic activities acted as the sole reasons for causing abrupt environmental changes (such as the river’s violent northward shift into Hebei in 1048), or for producing more stable environmental conditions (such as the river’s remaining in Henan during the Jin period). We know that geological conditions both underground and on the surface, as well as intensive geological movements like
earthquakes, define a river’s basic course and the range of its drainage area. Various environmental conditions, including climate, topography, water resources and long-term human economic activities like agriculture and deforestation, constantly change the river’s hydrological mechanism (for the Yellow River, the water-silt ratio in particular) and roughly determine when and to what scale the river would overflow. Most of these factors are buried in the historical past and cannot be accessed through our limited source materials.

Amid all these puzzles and mysteries, my research reveals one crucial fact: we often look at a river as a part of natural history and study its floods as natural disasters, but often both the river and its floods are highly politicized. On the one hand, they influence political activities. On the other, they are incorporated into the game of human politics and manipulated and changed by it. To understand the history of the Yellow River, or to ask why the river is particularly disastrous to certain human communities, we must search for the political causes.

I think it is important to distinguish two different types of politicization and manipulation of the environment. First, in the case of the Yellow River, the role of politics can be easily seen in dramatic events, especially in military actions. For instance, in 1128 a general of the Northern Song dynasty breached the Yellow River’s dyke to provoke a flood in order to stymie the invasion of the Jurchen army. Similarly, in 1938 the leader of Republican China, Chiang Kai-shek, ordered his army to breach the Yellow River’s dyke to create a flood in order to stop the Japanese army. In both cases, the decisions were made and acted upon in order to cope with urgent crises. The abrupt nature of these events and the way in which the historical record records them make it obvious that these are man-made disasters brought about by political decisions and actions.

My own research seeks to develop the second type of politicization and manipulation of the environment. It looks at the long-term, subtle process by which the state’s environmental ideas gradually come into shape, encounter resistance within or outside its power structure, get enriched or modified, and influence policy making and actual
practices. The gradual pace and subtlety of the process obscure the causal links between
the state’s conceptualizations and actions and their consequences on the environment.
Readers of the history of the Northern Song and the Jin periods—and even people who
lived in those particular historical times—might easily take what happened for granted.
They might believe that the river’s northward shift in 1048 was a pure natural disaster, or
the river’s ravaging the plains of Henan for most of the twelfth century was just as a
matter that happened to be. By paying more attention to this less obvious process in Song
and Jin history that connects political motivations, intentions, policies, and hydraulic
practices with their long-term consequences, my paper not only reveals parts of the
historical truth, but also confronts moral value judgments that any talk on the
environment cannot avoid if we human beings truly wish to be responsible for what we
have done to the environment and not blindly blame nature for producing ‘natural
disasters’.

Below I shall proceed to the narratives of the Song and Jin historical episodes. In each
narrative, I shall begin with a survey of the flooding problems by the Yellow River and
the contemporary geopolitical circumstances that the state encountered in the early years
of its rule. This survey reveals the political tension caused by the incompatibility between
the state’s will for a more desirable geopolitical landscape and the obstacles posed by the
physical landscape. Then I will analyze how political discourses shaped and rationalized
certain hydraulic polices and practices, and how such polices and practices functioned to
change the conditions of the Yellow River and its surrounding environment.

Episode 1: 960-1148 in Northern Song Dynasty

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1.1 The Yellow River and Late Tenth-Century Geopolitical Circumstances

The Northern Song state inherited from its predecessors a land constantly plagued by the Yellow River’s floods. After eight hundred years remaining in a tranquil (anliu) state,\(^1\) the river began to provoke occasional overflows and bank ruptures in the ninth century. Its flooding events became more often (nearly once every three years) and more serious in the tenth century. In at least the years of 918, 923, 931, 932, 939, 941, 944 and 954 it inflicted major flooding disasters.\(^2\) Most of these floods surged southward to affect the plain on the southern side of the river, which was historically known as Henan.

Flood control efforts at the state level were not in place until the occurrence of a serious flood in 954, because political instability, frequent rises-and-falls of regimes and extensive civil wars discouraged any consistent, systematic treatments to the river issues. In 954, the contemporary regime had unified most of the territory of the North China Plain and showed a strong desire to bring peace and safety back to its people. More importantly, the state as well as its imperial court was founded in Henan – the plain south to the river. Hence, the state was motivated to engage in flood control in order to protect its political core against the flooding disasters. Its concrete methods in dealing with the floods were two: first, rebuilding and strengthening flood-control infrastructures along the river’s southern bank; and second, allowing the flooding water to spread and wander around on the land on the river’s northern side, which was known as Hebei.\(^3\)\(^4\) The latter practice resulted in a waterlogging situation on the northern side of the river for more

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\(^1\) Chinese historical geographers, like Tan Qixiang and Shi Nianhai, offer extensive discussion on the river’s tranquil state between the Eastern Han and the later Tang times. See various articles in: Tan Qixiang 谭其骧, *Huanghe shi luncong* 黄河史論叢 [Essays on the Yellow River History] (Shanghai: Fudan daxue chubanshe, 1986); Shi Nianhai 史念海, *Heshan ji* 河山集 [Collection of Rivers and Mountains], vol. 2 (Beijing: Renmin chubanshe, 1981) and vol. 3 (Beijing: Renmin chubanshe, 1988).


\(^3\) Cf. *Songshi*, 91.2256–57.

\(^4\) Loc. cit., 91.256–2257. The text reads: “The flooding river [more likely meaning ‘flooding water’] does not return to its old river course, but diverges to become a chi river.” Here, the term chi is better interpreted as ‘being naked/exposed’, suggesting the water remains in a vagrant state, rather than formed a deep, configured river course.
than a decade. It is apparent that the contemporary state chose to protect its core area in the south against the comparatively less significant, peripheral region in the north.

Established in 960, the Northern Song state continued to suffer from frequent river floods. In 965, a series of bank ruptures and floods affected multiple prefectures in Henan and even submerged many of their seats, including the metropolitan area of Kaifeng, the capital of the state. Similar flooding disasters occurred in 966, 967, 971 and 972, mostly affecting the south as well. The newly established state hastened into flood control works. A scrutiny of historical records shows that the state adopted the same methods its predecessor did in 954, meaning, protecting the southern bank by blocking its bank ruptures, while allowing or by means of strengthening the southern bank forcing the flooding waters to extend northward.

Here, I am not questioning about the fact that the river became more problematic in the tenth century than before. Nor am I questioning the incentive of the Northern Song state for its passionate engagement in flood control activities. Rather, I ask why the state, like its predecessor, chose to act in one way instead of another, or why it did not treat both sides of the river banks equally. To understand this incentive for treating the two sides of the river differently, we need look closely at the tension between the contemporary geopolitical circumstances and the ‘harmful’ physical landscape defined by the Yellow River.

Here is the geopolitical layout of the Northern Song China. From the beginning of the tenth century, the city of Kaifeng was appointed the capital of various dynasties (Map 1). It was located about eighty miles south to the Yellow River. The city was penetrated by the state’s prime transport vein, the Bian Canal. By connecting with the Huai River at its southern end, the canal shipped wealth from the lower Yangzi to supply the heavily populated capital. Its northern end was connected with the Yellow River to receive water from the latter and its tributaries; this means that the canal’s navigational function was

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5 Loc. cit., 91.2257.
6 Cf. Songshi, 91.2257–58.
toned and sometimes determined by the circumstances of the Yellow River. The plain surrounding Kaifeng, Henan in the south of the river, was the economic, political and military foundation of many regimes, including the Northern Song. In the early 970s, the Song’s territory was much confined by external rivals. The Wuyue and Southern Tang kingdoms in the Yangzi valley still stayed independent from the Northern Song. The Sichuan area just surrendered to the Song, but was yet fully cooperated within its rule. In north China, Shanxi remained in the hands of the Northern Han kingdom, which allied itself with the Khitan and in 969 defeated the invasion of the Song troops. Hebei on the other side of the Yellow River was better controlled by the Song state. Yet, its centuries-long autonomous tradition still remained strong, and its local warlords could easily swing to side the Khitan in the farther north. The nomadic Khitan built up their powerful empire, the Liao, over the Eurasian steppe, and nearly every year up to 972, its cavalry matched southward to plunder northern Hebei and pose constant threats on Chinese regimes. All in all, the geopolitical landscape like this suggests one thing: by the early 970s, Henan was almost the sole region solidly controlled by the Northern Song state, and the sole region that the state depended on to survive its young, difficult years.

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7 A detailed account on how the early Song confronted its rivalries and created its imperial landscape can be found in: Mostern, Ruth, *Dividing the Realm in Order to Govern: The Spatial Organization of the Song State (960-1276 CE)* (Cambridge and London: Harvard University Asia Center, 2011), 103–65.
Unfortunately, this core area of the state happened to be the region that suffered most from the Yellow River’s floods. Constant strikes from the river, coupled by military contests with the political rivals from multiple directions, could easily kill the young state in its infancy. Therefore, controlling the Yellow River’s floods was significant not just for conventional disaster control purposes. It was crucial to the state’s survival and its state formation process. Thinking in this way, we can easily understand why the state engaged passionately in flood control efforts from the early stage of its rule. Furthermore, it is comprehensible why the state treated two sides of the river differently, meaning, choosing to invest its resources (finance, labour, constructing materials, technology, and legislation) in guarding the southern bank and neglect the northern bank.8 Such

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8 For detailed studies on the water management institutions in the Northern Song, see: Yoshioka Yoshinobu 吉岡義信, Sōdai Kōgashi kenkyū 宋代黃河史研究 [Studies on the Yellow River History in the
differentiation in hydraulic practices did not occur randomly; it must have resulted from the state’s deliberate political decisions.

Intentions, however, do not necessarily produce satisfactory results. Historical records show that such decisions and hydraulic practices not only failed to effectively curb the floods; they also disappointed the state’s wish to better the geopolitical circumstances. The Yellow River continued flooding its southern bank and threatening the capital. In 972 in particular, a bank rupture caused serious floods in much of north China and nearly drowned the city of Kaifeng. The disaster claimed a high toll of mortality and displacement, and was worsened by an extensive famine across the country. To the state, as literature of this period reveals, in comparison with its sentiment of frustration and pessimism in pursuing the goal of permanently controlling floods, its concerns about the river’s threats on the regime’s political stability appeared to be stronger and more urgent. Despite all of the hydraulic activities the state conducted, the tension caused by the incompatibility between the state’s geopolitical demands and what the physical landscape actually offered was deepened.

Against this background, there emerged an urge among rulers and their bureaucrats that called for more active interventions in the river problems. First, they tended to admit that the river floods could not be controlled permanently and ubiquitously. Second, the disasters, however, were transferrable from the core area to less important, peripheral regions through aggressively modifying the physical landscape, meaning, changing the geographic composition of the river and the plains. Between 972 and 1048 we read the political discourse that advocated moving the river out of Henan and into Hebei to produce a disaster-free core area of the state, and employed cost-benefit calculations to rationalize its choice of sacrificing Hebei. The following sections analyzes how political figures pursued and presented such discourse, and how their ideas shaped the state’s hydraulic policies and guided its flood-control practices that led to the river’s course shift in 1048.

In 972, the year when the devastating flood occurred, Emperor Taizu issued an edict to reflect on the conventional flood-control practices and opened a new way of thinking of the river problems. He reminded his ministers that the lower reaches of the river were directed to flow northward through Hebei in antiquity, a landscape wisely designed and created by ancient sage kings. The creation of such landscape not only pacified the Yellow River’s floods but also brought unity and safety of the land of China and its people. Rulers of later periods destroyed this landscape. As results, the river flew southward through Henan and caused enormous disasters there; in the meantime, China failed to gain territorial unity and prosperity. The emperor hinted that, in order to permanently cure the river’s problems, to release the people from disasters, as well as to defeat enemies and build a strong, unified Chinese empire, the state had to restore the ancient landscape in accord with sage kings’ design, meaning, bringing the Yellow River northward to Hebei. In this edict, the emperor blended together ancient mythology and history, and posed moral and value judgments (e.g., benefits vs. harms, public interests vs. private interests, significant affairs vs. small affairs) on the relationship between the pattern of the Yellow River and the imperial governance. In a subtle way, his edict lent moral power and authority to any ensuing political and hydraulic discourse that argued about shifting the river’s course to the north. We may consider that the emperor’s edict in 972 laid an ideological tone on which basis many officials drafted their concrete hydraulic polices and technical measures to bring the river northward.

Li Chui, a major advocator of Emperor Taizu’s idea, proposed his hydraulic plan twice in 1015 and 1019. Both years saw dramatic river floods and their damage to the metropolitan area of Kaifeng, providing a perfect ground to the talk of shifting the river’s course. Li’s proposals developed Emperor Taizu’s rather simple, obscure ideological rhetoric into a realistic, workable, and cost-benefit calculable technical project.
Furthering Emperor Taizu’s idea about the moral value of a northerly-flow river, Li elaborated the river’s actual geopolitical value by pointing out Henan was more strategically important than Hebei to the state. A northerly-flow river could echo this north-south difference and best guard the core interests of the state. Moving flooding disasters to Hebei would neither permanently solve the river problems nor equally benefit people on both sides of the river, but Li’s cost-benefit analysis on political and socio-economic circumstances suggested that similar floods would cause less harm in the north than in the south. Moreover, shifting the river northward would produce a water-based defence system, a huge bonus that, once again, served the state’s core interests. With lengthy writing and maps, Li depicted an ideal route through which the state’s hydraulic works should divert the river in Hebei. This route was supposed to be the river’s ancient route designed and created by sage kings, which was emphasized in Emperor Taizu’s edict in 972. (ideal geopolitical landscape vs. actual physical landscape)

The government put Li’s proposals for court debates, sent Li to Hebei to conduct geographical survey, and calculated budgets to see the financial feasibility of his project. At the end, financial concerns, technical complexity and perhaps the resistance from Hebei’s regional governments stopped his proposals from being carried out in reality. Nevertheless, Li Chui aligned his hydraulic proposals with Emperor Taizu’s idea, and attracted a group of followers, like Yao Zhongsun and Guo Zi in the 1040s, who in various ways carried out his proposals in the field of the Yellow River’s flood control.

As to be analysed in the next section, the state’s protecting-the south hydraulic practices provoked a bank rupture and consequential flood on the northern bank of the river and caused a significant amount of the river water to flow into southern Hebei in 1034. For years the central government could not decide how to deal with this change in the river.

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13 Loc. cit., 91.2261.
15 According to Christian Lamouroux, one explanation of why Li’s proposal was rejected, is that Li’s hydraulic plan would potentially disrupt the frontier water systems in Hebei and thereby disturb the status quo of Hebei’s strategic geography—an unstable situation the government would least want to see. Cf. Lamouroux, Christian, “From the Yellow River to the Huai: New Representations of a River Network and the Hydraulic Crisis of 1128,” in Sediments of Time: Environment and Society in Chinese History, edited by Mark Elvin and Liu Ts’ui-jung (Cambridge: Cambridge University Press, 1998), 554. This explanation is plausible, but still it is only one of many possibilities leading to the dismissal of Li’s proposal.
Yao Zhongsun, regional governor of Hebei who was just promoted to a high-rank court position in 1041, strongly recommended to keep the river inside Hebei and fixed its southern dykes to prevent the river from shifting back to Henan. In his proposal, we read the cost-benefit and geopolitical concerns that Li Chui articulated two decades ago. Yao readdressed such concerns by anticipating many advantages of keeping the river in the north. Among these advantages the most important was to keep the capital and Henan safe and to treat the river as a strategic barrier in the frontier region Hebei.

The central government not only approved Yao’s proposal to stabilize the river’s course in southern Hebei, it even sought to take a step as ambitious as Li Chui’s proposals. In the early 1040s territorial disputes and consequential military tensions between the Northern Song state and its northern enemy the Liao dynasty soared, and Hebei would most likely turn into battlefields. This political circumstances prompted Guo Zi, a commissioner in charge of inspecting various Yellow River embankments and previously a frontier general in Hebei, proposed the idea to shift the river course thoroughly into the central part of Hebei. Guo’s proposal resonated with what Li Chui planned two decades ago, but emphasized more on the state’s urgent military needs. The Song court approved Guo’s proposal and commanded to “store up materials to carry out the project”. The actual hydraulic practices about this project seem to have not gone very far. Nevertheless, it is apparent that in this situation, the state’s desire for a beneficial geopolitical landscape outweighed the obstacles the actual physical landscape presented.

1.3 Hydraulic Practices and Environmental Consequences

Some may argue that according to the extant historical records, Emperor Taizu’s edict did not yield any explicit hydraulic policy, Li Chui’s both proposals failed to pass the

17 Cf. Xu zihitongjian changbian, 131.3109.
political debates at the court, and Guo Zi’s project did not go further beyond the initiation stage. The desire and intention to dramatically change the physical landscape in order to produce a beneficial geopolitical landscape seem to have merely remained in idea rather than in actual practices. This impression will be proved false, because a scrutiny of the hydraulic practices indicates that they carried out these ideas and gradually, at small scales diverted the river water to flow northward, and eventually led the river to shift its entire course into Hebei in 1048.

The hydraulic practices between 972 and 1048 exhibit the government’s different attitudes and technical solutions to both sides of the Yellow River. Whenever flooding problems occurred on the river’s southern bank or affected the land in the south, as in 982, 983, 984, 1000, 1004, and 1019–21, the central government took instant reactions to the disasters, which included fixing bank ruptures, strengthening the southern dykes, building up fascine sites to guard strategic locations, recruiting corvee labourers, gathering construction materials, raising flood-control budgets, and performing religious rituals. To the river’s northern bank, the hydraulic efforts focused on opening diversionary channels whose function was to share water from the river’s mainstream to keep the latter’s water level low. The first channel as such was opened in 993, the second in 994, the third in 1012, the fourth in 1015, and several more during 1019–21. The purpose of creating these diversionary channels, in particular in 1015 and 1019-21, was obvious; it was to reduce the hydro-pressure the river posed on its southern bank and Henan.

This technical difference in treating both sides of the river led to the concentration of tremendous hydraulic pressure on the river’s northern bank and left it vulnerable and under-protected. As a result, “the river’s flow gradually turned toward its northern bank” in 1021.\(^{20}\) In 1034 when summer storms provoked a serious flood, the water crushed the much fragile northern bank and surge northward into southern Hebei.\(^{21}\) Instead of fixing this bank rupture immediately as it normally did to any southern bank rupture, the state

\(^{20}\) Cf. *Xu zizhitongjian changbian*, 97.2247.
\(^{21}\) Loc. cit., 114.2682, 115.2691.
left the problem to extensive court debates over years, until in 1041 it approved Yao Zhongsun’s proposal. The hydraulic policies made at the time were not to fix the 1034 rupture and to allow the river to stay in southern Hebei; in the meantime, to open another diversionary channel toward the north to direct more water into Hebei, and to strengthen and build more embankments along the southern bank of the old river course to prevent the water from shifting bank to Henan. The hydraulic efforts guided by the policies as such successfully repressed the river from inflicting serious floods, especially southward floods, between 1042 and 1047, which may explain the absence of historical records of big floods during these years.

To the land of Hebei, these efforts led to rather negative consequences: over years the river water was pushed northward and its hydropower was amassed on its northern bank, the heavy silt load the river carried quickly raised the riverbed and invited soon-to-come floods, with various northward diversionary channels the river would find almost every chance to flow further north, and if things like these happened, the poorly protected northern bank and the land of Hebei would more likely be hit than the river’s southern bank and Henan. On the sixth day of the sixth lunar month in 1048, after years of drought attacks, north China welcomed heavy storms. The massive amount of water rapidly filled up the Yellow River and caused its torrent to surge. The flooding water breached the northern bank and surged northward into the central part of Hebei, creating a river course known by the contemporary as the ‘northern course’ (Map 2). Since then, for most time during the next eight decades till the fall of the Northern Song dynasty in 1127, the river remained in central Hebei, just as how ancient sage kings designed the north China landscape, how Emperor Taizu wished the river to be, and what Li Chui and Guo Zi proposed.

22 Cf. Xu zizhitongjian changbian, 133.3160.
In the previous narrative, the tension between the Northern Song state’s desire for a beneficial geopolitical landscape and the constraints posed by the existing physical landscape aspired decision makers to formulate rationales that favoured the Yellow River to flow northward. Such rationales justified and shaped the state’s strongly biased hydraulic polices and practices, which protected Henan by sacrificing Hebei and resulted in the river’s northward shift into Hebei. In talking about the second historical episode, we will see how the changes in political regimes and geopolitical circumstances determined that the Jin state tried its best to keep the Yellow River as well as its floods inside Henan, and prevent them from affecting Hebei. The physical landscape that the Jin
state strove to maintain and the concrete hydraulic efforts it made were completely opposite to what the Northern Song state did. But the fundamental logics behind their different treatments to the river were same: the state’s geopolitical concerns overweighed its sense of obligation for flood controls, how the state perceived and rationalized the core-periphery relationship within its territory, and how the state employed cost-benefit analysis to justify its efforts in manipulating the environmental setting.

2.1 The Yellow River and Geopolitics in Early Jin Dynasty

The semi-nomadic Jurchen originated from present northeast China and established the Jin dynasty. In 1127 it captured the Northern Song capital Kaifeng and terminated the Northern Song’s rule in north China. A group of the Song royal family escaped to south China and established the Southern Song dynasty in the lower Yangtze valley. This political turn in north China was accompanied by a dramatic change in the situation of the Yellow River. In 1128, a Song general commanded his soldiers to breach the river’s bank somewhere near Kaifeng, in order to provoke a flood to halt the southward match of the Jurchen cavalry. This manmade bank rupture inflicted a southward flood, and caused the river’s northern flow in Hebei to shift entirely into Henan. Its water formed two courses, one eastward and one southward, to penetrate the land of Henan (Map 3).

From 1128 to 1140 the information about the river is scant. This scarcity is most likely due to the seesaw battles between the Southern Song and the Jin in Henan where the river’s two courses were located. It is quite understandable that both states ignored the river problems, if there was any, and could not spare any resources to fix the problems. Henan, the core area in the Northern Song time, now became not only the battlefield of Song and Jin armies, but also the Yellow River’s flooding ground. This situation did not change until 1140 when a peace treaty ended the warfare between the two states and confirmed their territorial division. Henan, including the drainage area of the Yellow
River’s lower reaches, now belonged to the Jin. From then on, the Yellow River’s flooding problems began to be noticed, recorded and dealt with by the Jin state.

To the Jin, although occupying the similar parts of the land of north China as its predecessor Northern Song did, it faced an utterly different geopolitical setting: settling its capital in the location of present Beijing, the state regarded Hebei as its political core, and viewed the vast plain in northeast China and the Mongolian Steppe as its hinterland where the state extracted various resources and faced few political challenges. Henan became its southern borderland, which the Southern Song troops posed constant threats on and, if war broke out again, would first turn into battlefields. This geopolitical landscape did not change through the end of the twelfth century, so did not the Jin state’s vision of the core-periphery structure of its territory.

Given geopolitical circumstances like these, when the southward-flowing Yellow River gradually silted up its channel and caused occasional flooding problems in the next twenty odd years, these problems were all restricted inside Henan and were viewed as regional problems. They did not affect the state’s core interests and hence marked very few traces in historiography. But as we will see in the below, when more serious river floods occurred later to endanger the existing geopolitical landscape, the Jin state and its officials strove to employ their rhetoric device to rationalize and justify the necessity of maintaining the status quo, and they chose specific hydraulic efforts accordingly to prevent the Yellow River from destroying the beneficial geopolitical landscape.

2.2 Hydraulic Rationales and Practices from 1168 to 1214

Over forty years most of the Yellow River’s water flowed southward and seriously silted up the channel it used. By 1168 it had became obvious that the river would soon provoke huge floods or even breach its bank and shift its course again. When this happened in the summer of 1168, the flooding water ravaged two major prefectures in Henan. Responses
from the government appeared late, according to extant sources. Official inspections in the field were not sent out until six months later. Court debates were dominated by opinions suggesting not to fix the bank rupture but to allow the river to spread in the way it happened to be. The reasons they provided were four: 1, the socio-economic costs of the flood seem to have been limited, because the region affected by the flood was an area of paddy rice production. This means that the land and its people were used to the standing of a fair amount of water; the flood simply added a bit more water to the land surface. 2, even if the bank rupture could be fixed, given another heavy rain, the river would invariably overflow and breach its dykes again. Technically, it was not possible to ultimately terminate the bank rupture problems. 3. There was no guarantee that another bank rupture would not cause a heavier flood and make the river surge northward. It is lucidly expressed in their argument that the regions in the north, including Hebei and Shandong peninsula, were politically and economically more significant than Henan to the Jin state. In comparison with the risk that the river would possibly shift to the north, the harm caused by the southerly flood seemed relatively lighter. 4. To fix the bank rupture would require tremendous resources and corvee labourers. Such big project would possibly cause social instability.

The above cost-benefit analysis expressed the consensus about which region represented the core interests of the Jin state. The Jin court, including the emperor, approved this analysis and handled the flooding problem accordingly. Even two years after the flooding event, the emperor complimented one of the officials who advocated not fixing the bank rupture, saying: ‘what you talked about the benefits and harms of the Yellow River’s dykes in the past resonated with my idea quite well.’

The government’s sluggishness in dealing with the flood and its decision on how to deal with it after the 1168 flood contrasted sharply to how it acted at another flooding event in 1186. Between 1168 and 1186, the great percentage of the Yellow River water flowed southward, while the old eastern course that was created by the manmade bank rupture in 1128 had gradually dried out. The silted and ever raising riverbed of the eastern course

24 Jinshi, chap. 27. 1170.
pushed water to overflow, and inflicted floods to affect places in northern regions like Shandong and Hebei. The flood in 1186 was particularly serious. Its water surged northward into southern and eastern parts of Hebei, affecting an area of roughly the same size as in the 1168 flood. Immediately after the occurrence of this flood, the court instructed to build new dykes and fix old ones in Hebei to defend against water, and recruited more corvée labours into the Yellow River Protection Regiment, hoping to restore the flood-control institution employed by the Northern Song government – ‘manning every pace along the river banks.’ Tremendous amount of raw materials were gathered to build dykes. With such rapid responses, five months later the bank rupture was fixed, and the Yellow River water was regulated and returned to the southerly course.

Apart from these efforts directly dealing with the flood, the government regulated the flood control administration by emphasizing the responsibility of local and regional officials. Officials of various levels in the districts along the river were assigned the task of supervising the ‘river protection affairs’. The government moved the prefecture seats of Wei and Cao to safer places to avoid the flood. It performed religious rituals, like granting noble titles to a river deity, to pray for the peace of the river. Up to this time, the government had set up 25 flood control sites along the lower reaches of the Yellow River, among which 19 were placed along the river’s northern bank, while only 6 were along the southern bank. All these technical measures and institutions demonstrate the state’s preference to the north of the river and its fear of the river’s damaging the northern land. As the consequence of these efforts, the mainstream of the river was kept in the south, in the realm of Henan. All these sound familiar to us. They remind us of the similar attitude and treatments with which the Northern Song state protected the river’s southern bank in our first narrative. The only difference is, at this time, the state chose to protect the river’s northern side.

This protecting-the-north and sacrificing-the-south theme also dominated the state’s hydraulic practices in 1193-94. In the summer of 1193, the river once again burst out from its bank and flooded the land of southern and eastern Hebei in the north. The

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25 Yao Hanyuan, p. 194.
circumstance was quite similar to that in 1186, perhaps more severe and urgent. The technical suggestion proposed by the hydraulic managers in the Water Management Ministry was to dredge old water channels on both northern and southern sides of the Yellow River to release the pressure in the mainstream. By this time, the old eastern course generated in 1128 was almost fully silted up by river sediments. Some technical officials also proposed to dredge this silted riverbed to accommodate the river’s northward flood. Why they proposed so is understandable, because the flood did surge northward; their plans respected this natural tendency, thus technically might be doable.

This proposal, however, was denounced by the majority of court officials whose opinions, although being based on their little and indirect knowledge about the actual situation of the flood, counted more in the government’s decision making. They worried that the old northern course, even after being dredged, might be too narrow to accommodate the flooding water, and any attempt to direct the water into this old course would perhaps inflict more floods toward the north. If such floods occurred, ‘the fertile land and various sea salt plants in prefectures and counties of Shandong would invariably be submerged.’ In addition, the work of directing water required heavy labour force; it would ‘consume and exhaust the people of Shandong, so it is not beneficial but adds further harms (to the present situation).’ The political rhetoric as such focused on two points: 1, the cost-benefit calculation about the state’s regional preference – as the emperor put it: ‘(we) worried that the river would flood toward the north’; 2, the cost-benefit calculation on the expenditure and the technical achievability of the work. These rationales dominated the court’s decision-making process, and eventually declined the proposal from the specialists of the Water Management Ministry. The actual actions the government took were, 1, repairing and strengthening the dykes along the river’s northern bank to prevent any northerly flood, and 2, deliberately creating two breaches in the river’s southern bank to release water toward the south.\(^{26}\) The causal linkage between the reasoning of ‘various officials’ and the actual flood control practices is evident.

\(^{26}\) Yao Hanyuan, pp. 200-201.
2.3 Changing Politics and Changing Ideas about the Yellow River

The Jin state strove to sustain the peculiar physical landscape at the costs of the suffering of Henan and people living there. But when the political situation changed, and this physical landscape no longer served the state’s geopolitical needs, there soon emerged the reassessment of the significance (benefits and harms) of the Yellow River and the demand for creating a new physical landscape.

From the beginning of the thirteenth century, the Mongols thrived on the Mongolian Steppe and pressed southward into the territory of the Jin. Unlike the militarily weak Chinese regime in the south, the Mongols were aggressive and ambitious; within just a few years they captured present Beijing, the Jin’s capital, and conquered a considerable portion of Hebei. In 1214 the court of the Jin flight out Hebei, crossed the Yellow River, and resettled in Kaifeng in Henan. This city was merely eighty miles south to the Yellow River and was the old capital of the Jin’s predecessor, the Northern Song. At this change, the political dynamics between the regions on both sides of the river reversed to the situation quite similar to that in the tenth and eleventh centuries (if we still remember our first narrative about the Northern Song time): Hebei lost its status as the state’s political core and became the frontier against and the battlefield with the state’s fierce enemy. Henan, the secondary region that the state sacrificed to be the Yellow River’s flooding ground, once again rose to become the state’s core area. In the next twenty years, Henan was almost the sole region under the Jin state’s control, where the Jin’s emperor, bureaucratic teams, and military were based and, with a hope, could revive, thrive, and finally defeat the Mongols.

This change in north China’s geopolitical circumstances soon invited a brand new political discourse about the Yellow River. The previous rationales, policies, and hydraulic practices that favoured the river’s flooding Henan had to be reversed to protecting Henan against floods. Shortly before the court’s fly to Kaifeng, a prominent
literary official, Zhao Bingwen, proposed three measures to counteract the political crisis. Apart from moving the capital to Kaifeng and organizing regional resistant forces against the Mongols by enfeoffing local warlords, Zhao suggested shifting the Yellow River’s course to the north. Wishing that a northerly river would take the old northern course that the river created in the eleventh century, Zhao anticipated a new landscape in which Hebei served as a borderland, while Shandong peninsula and Henan were no longer separated by the river but integrated as one. Managing the river in this way would prevent more of the Jin’s territory from falling into the Mongol conquest.27

Zhao’s idea was further elaborated by a Jurchen official, Shiyanzhan tianze, in 1215. Shiyanzhan clarified that before the political change brought by the Mongols, the state opposed to any proposal of shifting the Yellow River to the north, because doing so would ‘destructor the seashalt plants in Cangzhou (Hebei’s eastern coast) and thereby harm the state’s profits,’ or ‘submerge and ruin fertile arable fields in Hebei’. Neither of these ‘excuses’ remained valid after 1214, because the territory of Hebei had almost fallen out of the Jin’s control. Any new policy about the Yellow River needed no longer consider the interests of Hebei. Therefore, Shiyanzhan proposed to breach the river’s bank and course the river to flow north into Hebei, following the river’s route in the eleventh century (as showed in our first narrative, the route created in 1048). The way in which he rationalized his proposal resonated much with Li Chui’s flood control proposal in 1015 and 1019. First, by so doing the Yellow River would no longer affect Henan; the core region of the state would be better protected; and this better protected region could produce adequate agricultural products to supply the military. Second, the flooding damage to Hebei would be comparatively smaller than that to Henan. Third, given the remnants of old Song flood-control infrastructures in Hebei, coursing the river to flow north would not require much labour and financial costs. Fourth, also a point Li Chui, Yao Zhongsun and Guo Zi promoted in the Northern Song time, shifting the river to the north was not only to rid of the harmful, but also to bring in further benefits – in this context, the strategic benefits. Commented Shiyanzhan in his memorial: ‘Your servant I once heard from the elders living beside the river. They said that if the river’s water

diverges and wanders around, it will become not shallow enough for horses to cross through, and not deep enough for boats to drift in. This (situation) will offer significant means for defense.‘

Wensakexi, another Jurchen governor at the time, supported Shiyanzhan’s proposal by articulating the territorial benefits a northerly flowing river could introduce. He maintained that if the river shifted northward into Hebei, ‘various places in Shandong and Daming (prefecture in southern Hebei) would be located on the southern side of the Yellow River; thereby (we) would own a half of Hebei’s districts.’ Obviously, at this time the river’s role as the source of disastrous floods was downplayed or even completely ignored. Instead, the river, even its floods, was conceptualized as something positive to the state, as a strategic defense or weapon that would produce a beneficial military landscape to halt the Mongol army. This idea was perfectly expressed in Wensakexi’s memorial, where he concluded: ‘(Assuming the river flows inside Hebei) we can rely on the river as a device of defense if we retreat (to the south), and take the river as our base in any action to restore (the lost territory) if we march forward.’

Proposals from Shiyanzhan and Wensakexi and alike were not accepted by the court. Politicians in power declined them due to their fear that any attempt to breach and shift the river’s course would perhaps inflict uncontrollable consequences. They also feared that shifting the river northward might result in consequences like two sides of a coin. On the positive side, it would create a strategically beneficial landscape. On the negative side, when water froze in winter, this landscape might provide the enemy an easy path. By the mid 1210s the Jin state faced serious threats from the Mongols and was struggling for survival. The land it controlled and the resources it could command were limited. It is quite understandable that the state ran out of resources (either labour, raw materials, money, or time) and could not afford any big project like what Zhao Bingwen, Shiyanzhan and Wensakexi proposed. During the last two decades of its rule, we do not even read any official writing about the Yellow River. Very few extant historical records mention river floods or activities dealing with the river. While the Jin state tumbled down
toward its final fall in despair, the Yellow River most likely remained in the land of Henan and caused troubles as it often did between 1128 and 1214.

Conclusion and Further Thoughts

In 1048 the lower reaches of the Yellow River shifted into central Hebei, a situation resonating with the hydraulic ideas and plans that Song emperor and officials advocated from the early 970s to the mid 1040s. This resonance is not a coincidence. This change in the river’s course was caused by deliberate hydraulic polices and practices that developed from these ideas. It resulted from the state’s long-term persistence on weighing the interests of Henan far above the rest of the country. Without such persistent and forceful political manipulations, it is likely that the river would have followed its early pattern to keep flooding and shifting to the south, while leaving Hebei in a disaster-free state as in the previous ten centuries. If so, the history of both Hebei and Henan would be rewritten, and the Northern Song state might have either changed its capital or suffered an earlier downfall.

In the Jin period, the river and its disasters remained in Henan. They did so largely because the state downplayed the significance of Henan and used various hydraulic means to restrain the river from moving eastward and northward. When the geopolitical circumstances changed in the 1210s, the state’s hydraulic pursuits reversed. New hydraulic plans emerged, strongly echoing with those ideas and proposals in the Northern Song. But unlike the Northern Song state in its early years, by this time the Jin state was in decline, faced political and economic difficulties, and was unable to carry out such pursuits into actual practices.
It is hard for us to judge whether or not these hydraulic polices and practices were right, or if they worked actually to advance the state’s geopolitical interests. Because there is no evidence clearly suggesting direct causal relations between the states’ river management and their political successes, either in keeping benign international relationships or in sustaining each state’s rule over a century. Reading retrospectively into the motivations and intentions of the states, I feel that the core-periphery structures the Song and Jin officials envisioned were quite reasonable at that time. Various factors covered in their cost-benefit analyses did reflect the political, socio-economic and military concerns the contemporary states ought to deal with. The technological inability to pacify the floods in the tenth-twelfth centuries was real. And even the contemporaries’ sense of frustration and despair, as how Jin officials expressed, ‘(the river problems) are not something that human forces are able to comprehend and command,’ was honest and true. Considering these contemporary historical circumstances and the limit of alternative choices for flood controls, we may regard these hydraulic polices and practices quite ‘rational’ for their own sake.

But, considering them rational does not justify the strong political biases that these policies and practices were rooted in and they themselves produced. The political biases gave up the pursuit of controlling floods as an agenda of protecting and achieving the common good for all people under the Heaven, which benevolent governments and rulers ought to do according to the Confucian ideology. Instead, these biases aimed only to achieve the partial good, in favour of some while harming the others. This partial good was highly selective. In both Northern Song and Jin cases, the state power decisively and deliberately chose which region to be saved and which region to be sacrificed. Such political biases brought about material, devastating consequences, including transforming land settings and relocating the river’s flooding disasters. As their results, million of people in Hebei were killed, injured and displaced by the river floods in the 1030s and 1040s. In Henan in 1168, 1186 and 1193-94, similarly, countless people and rural communities were destroyed by floods. Local voices and the actual situation of disasters were rarely recorded in historical records; local resistance fighting against state polices was absent in our literature. Nevertheless, the environmental and human costs of such
policies and practices must be evident at that time. In the 1080s, the prominent historian and minister Sima Guang argued about the river’s shifting course, lamenting that both Hebei and Henan were equal vassals to the state, and people living on both sides of the river were equal subjects of his Son of Heaven, but why they were treated unequally. Even the emperor of the Jin, after approving a hydraulic policy protecting the north and unfavoring the south in 1194, questioned his policy: ‘all the people are my subjects. How can we differentiate them?’ Clearly, even to these decision makers who participated in making and implementing these biased policies, they could not avoid facing the huge toll of deaths and tremendous environmental costs, and pretend feeling absolutely content with their decisions. The failure of their rational decisions is both material and moral, judged either by our modernist, humanitarian standards or by the standards in the middle-period China.

My readers may ask: did the Song and Jin decision makers anticipate the dreadful consequences their decisions would bring about? Why didn’t they, during their decision making process, anticipate the possible consequences and count them in their cost-benefit analyses, as how we do for risk assessments today? Were their rational decisions really rational? Is it sensible to study the history of medieval China through the lens of modern decision theories? All these questions point to the irony of human rationality that, although being rational by certain criteria, is invariably bound rationality (conditioned by bound morality), which fails to envision the blind spots hidden in the broader social, cultural, technological, and environmental contexts. Logically, the Song and Jin officials should have anticipated some consequences of their hydraulic practices, for example, moving the river’s course, together with its floods, to Hebei in the Song time would certainly cause disasters to Hebei and its people. But their bound rationality that strongly favoured the idea of shifting the river to protect the state’s geopolitical interests encouraged them to amplify the positive results their ideas wished to achieve, and obstructed them from thinking about the problematic, negative side of their hydraulic proposals and policies. Obviously, none of the historical figures mentioned in this paper articulated the possible costs that their hydraulic proposals would acquire.
The irony of rationality becomes particularly ironic when it encounters the course of the environmental history that is often unexpected and unpredictable. It is even more ironic when many rational decisions and related activities, which are supposed to solve one problem, in fact trigger other problems. My studies elsewhere show that many Northern Song hydraulic activities, seeking to control floods, actually inflicted even more serious floods, or many of them caused long-term environmental consequences, like deforestation and deterioration of soil quality, which were far beyond the design and knowledge of the Song people. It is due to these ironies and the unexpected, contingent natures of the environmental history that studying the millennia-long contests, sometimes negotiation, between Chinese states and the Yellow River appears so interesting and important. In this paper, we focus on how human rationales tried to manipulate the Yellow River to serve their political needs. Other parts of my book project will look from the other side of the story, showing how the Yellow River refuses to be so rationalized and manipulated.

As a preliminary work of a much ambitious project, what presented above requires further archival work; its analysis needs be sharpened; the narrative of the two medieval episodes needs be examined within a broader historical scope. With all these challenges it faces, this work opens many possibilities to further our understanding about the human-nature relationship in Chinese history. It encourages the quest for the changing conceptualization of ‘water’, ‘river’, ‘flood’, ‘disaster’ and etc. in Chinese history of political thoughts. It searches for delicate connections between causes and consequences beneath obscure environmental phenomena. It also calls for comparative studies in the future by welcoming cases across time (ancient and modern eras) and across space (studies of other river systems in- and outside China).

At this time being, I wish to use these two stories to open among the conference participants more discussions about power and resources – to connect my research with the theme of the conference. The relationship between the state and the river in the Song

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and Jin periods provides significant insights to our understanding of how complicatedly political power manipulates both the human world and the natural sphere. Difficult, disastrous circumstances, like the frequent river flooding in the Song-Jin period, seem more likely to invite in power manipulations, and allow such manipulations to grow forcefully (this logic is certainly well developed by Karl Wittfogel to formulate his thesis about the relationship between hydraulic works and totalitarian powers in places like China. In many ways my own research challenges his thesis; I would like to talk more about this at the conference.) These circumstances not only stimulate the demand for redistributing scarce and precious resources, but also ask for redistributing the disasters and their harms. Power decides how these redistributions are done. The hydraulic polices and works in the Song and Jin periods clearly show how limited resources were channelled from one place to another, while in the opposite direction disasters were channelled across space and across social strata. Thus, in a situation of widespread difficulty and hardship in which everyone is supposed to suffer a little, we in fact see some gaining from what the others lose. It seems that the political history of the Yellow River can be well interpreted through the lens of Amartya Sen’s analysis on famine and famine relief. My historical analysis about this state-river relationship, therefore, points to a question like this: *who* uses power to decide *what* to be done, and *how*?