



Between War and Water: Farmer, City, and State in China's Yellow River Flood of 1938–1947

Author(s): Kathryn Edgerton-Tarpley

Source: *Agricultural History*, Vol. 90, No. 1 (Winter 2016), pp. 94–116

Published by: Agricultural History Society

Stable URL: <https://www.jstor.org/stable/10.3098/ah.2016.090.1.94>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Agricultural History Society is collaborating with JSTOR to digitize, preserve and extend access to *Agricultural History*

JSTOR

Between War and Water: Farmer, City, and State in China's Yellow River Flood of 1938–1947

KATHRYN EDGERTON-TARPLEY

This article examines how the catastrophic Yellow River flood of 1938–1947 impacted rural communities and state-society relations in the inundated area. The flood, which occurred when China's Nationalist government deliberately breached a major Yellow River dike in a desperate attempt to use flooding to slow the advance of the Japanese Imperial Army, turned millions of Chinese farmers into refugees and killed over eight hundred thousand people. This essay explores the human and social sides of the flood through the eyes of local observers, missionaries, and the wartime Chinese media. It compares rural and urban experiences of the disaster and examines local perspectives on the efficacy of the flood relief projects organized by the Chinese government. This paper finds that while the wartime Nationalist state did not abandon the inundated area, its state-building efforts there exhausted and disillusioned flood refugees rather than integrating them more fully into the modern nation state.

KATHRYN EDGERTON-TARPLEY is an associate professor of history at San Diego State University. She earned her PhD from Indiana University in 2002. Her research focuses on changing conceptualizations of disaster in late imperial and modern China. Since publishing her first book, *Tears from Iron: Cultural Responses to Famine in Nineteenth-Century China* (2008), she has been researching the Yellow River flood of 1938–1947 and the related Henan Famine of 1942–1943 and has published several articles on those catastrophes. Her new book project traces change over time by comparing state and popular responses to three major famines that struck North China in the late-Qing, Nationalist, and Maoist periods.

© the Agricultural History Society, 2016
DOI: 10.3098/ah.2016.090.1.94

In 1938 the Japanese army came; Old Jiang [Chiang Kai-shek] breached the Yellow River and the river water covered the earth and came. Many of the houses of wealthy families collapsed; our family's thatched house quickly floated away on the stream.

Wang Ruiying and Jin Tianshun¹

IN ONE OF THE MOST STRIKING examples of the use of scorched-earth policies during the Second World War, in June 1938 China's Nationalist leadership ordered soldiers to breach a major Yellow River dike in Henan Province in a frantic attempt to "use water in place of soldiers" to slow the Japanese Imperial Army's advance towards Wuhan, China's temporary wartime capital. Within days the strategic breach widened into a five-thousand-foot-wide break, causing the Yellow River to depart from the northern course it had followed since 1855. In its new course the river flowed southeast instead of northeast, which meant that it flooded much of eastern Henan, joined the Huai River in Anhui Province and inundated much of northern Anhui, and finally flooded northern Jiangsu province as it flowed in three streams towards the sea. The breach led to catastrophic flooding that killed over eight hundred thousand people, created close to four million refugees, and kept nearly two million acres of good farmland out of dependable production for almost nine years. It also contributed in important ways to the severity of the Henan Famine of 1942–1943, which resulted in as many as three million deaths.²

Both Chinese and English-language publications have devoted considerable attention to military and political implications of the strategic breach, undeniably a major event in the Sino-Japanese War of 1937–1945, and recently the environmental impact of the disaster has received consideration as well. First-hand accounts recorded by local observers, Chinese journalists, and missionaries stationed in Henan and Anhui demonstrate how rural communities experienced the disaster, and the choices that made the flood a predominantly rural catastrophe, which, in turn, impacted state-society relations in the inundated area. In recent work on World War II in China, revisionist scholars have moved away from characterizing the wartime *Guomindang* (Nationalist Party) state under the leadership of Chiang Kai-shek as a "failed state," and view it instead as "a state attempting a project of state-building in which its intentions ultimately outran its capacity." Rana Mitter, for instance, argues that the Chinese Nationalists had "considerable success in creating the instruments that

would enable the creation of a mass, self-aware, mobilized citizenry in the early years of the war.” Later Nationalist failures, he continues, “should not obscure the reality of profound and directed social change by Chiang’s government during wartime.” In the case of the Yellow River disaster, the state-building efforts carried out in flooded areas of Henan and Anhui underscore the presence and activism of the wartime state. At the same time, such endeavors often proved counterproductive in terms of the wellbeing of the rural women and men most directly affected by the flood and its aftermath.³

The Yellow River, which Randall Dodgen describes as “a restless, unpredictable, and dangerous stream,” created major challenges for governments and riverine communities long before the 1938–1947 flood. Because the Yellow River flows through a plateau of powdery loess soil between Shaanxi and Shanxi, it picks up enormous amounts of silt. When the river’s current slows as it emerges from the mountains and flows east across the flat North China plain, it deposits close to half of its silt burden in its channel. The accumulation of silt causes the riverbed to rise a bit each year, thus increasing the danger of flooding. The sharp variation in the river’s flow makes controlling the river all the more difficult. Because 50 to 60 percent of the annual rainfall in the Yellow River area falls between June and August, the river changes from a relatively small stream to a vast torrent during the summer monsoon season.⁴

Aware of the danger posed by the annual flooding, Chinese rulers began diking the Yellow River as early as the seventh century BCE. By the Qing period (1644–1912), the river was confined by dikes that stretched for close to five hundred miles, from Henan to the sea. These massive dikes, which could be up to sixty feet tall, were built specifically to withstand the force of the river during the high-water season. The construction of dikes, however, contributed to the rise of the river’s bed, which rose above the surrounding plain along most of the river’s lower course. That in turn produced more serious flooding when dikes broke.⁵

The rise of the riverbed, combined with agricultural over-development, eventually resulted in periodic course changes as the Yellow River “sought lower gradients to empty into the sea.” After nearly a millennium of following a northern course that entered the sea north of the Shandong peninsula, in 1194 CE the Yellow River shifted south, captured the lower course of the Huai River, and began to flow into the sea south of the peninsula. The Huai and its tributaries then became, “for all practical purposes, tributaries of the Yellow River.” After Yuan dynasty (1279–1368) rulers completed the Grand Canal,

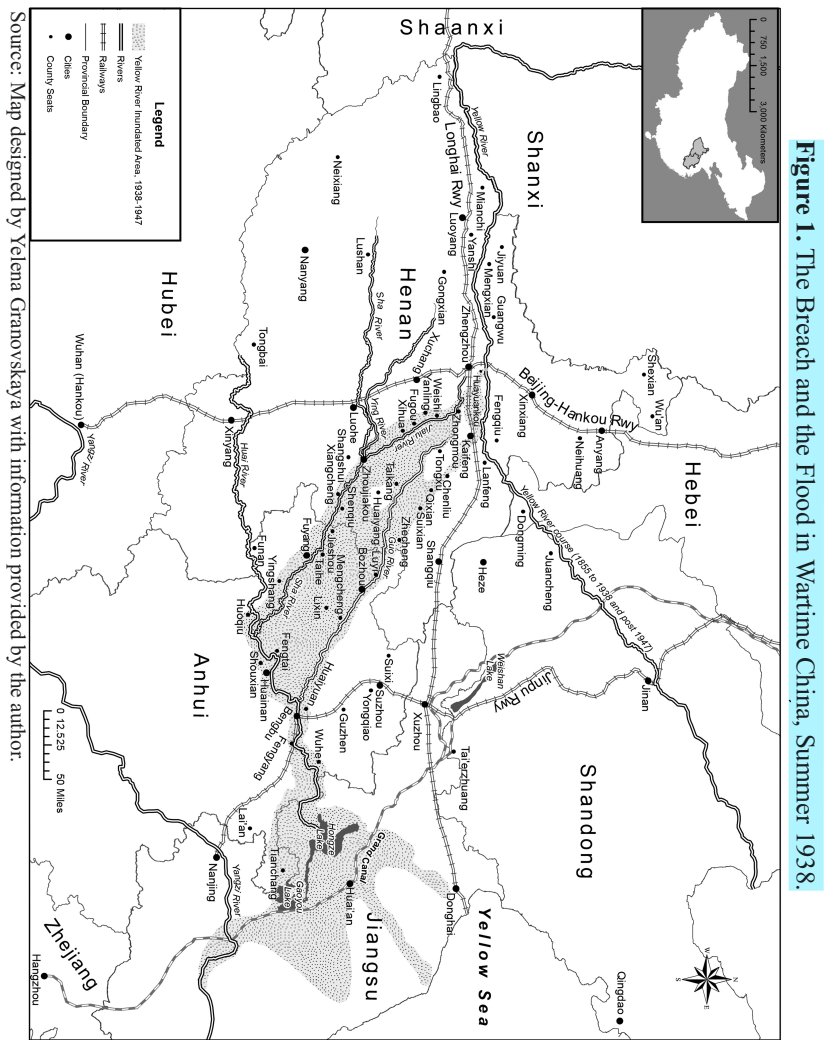
which crossed the Yellow River and incorporated part of it, Yuan, Ming, and Qing rulers tried to protect the canal by preventing the Yellow River from diverting northward. “No amount of human effort, though, could stop the Yellow River from its meanders and ultimate shift back north,” writes Robert Marks. Between 1851 and 1855 the river breached its banks in Henan and adopted the northern course through Shandong that would last until the 1938 breach.⁶

Within this long history of human/riverine struggle, the strategic breach of 1938 resulted in a particularly catastrophic course change. Herbert Kane, a Canadian missionary stationed in Fuyang, a small city in northern Anhui, described the scale of the flooding in vivid detail as he made the one-hundred-mile trip southeast along the Sha River from Henan’s Zhoujiakou city (Chowkiakow) back to Fuyang roughly three-and-a-half months after the breach (Figure 1). Because “the floods had made land travel almost impossible,” explained Kane, he and his party traveled by boat. They encountered their first large stretch of Yellow River water soon after leaving Zhoujiakou. “It is about 10 miles wide, and everything within that radius—houses, farms, crops, and everything—is under water of various depths.” The water grew higher and swifter as Kane’s party sailed southeast, crossed the border into Anhui, and approached Taihe’s county seat, located thirty miles northwest of Fuyang. “Just before we got to Taiho we came across the second big stretch of Yellow River water,” wrote Kane. “It too flows into this Sha River . . . no wonder it has overflowed its banks and run amok. Pouring the Yellow River into the Sha River is like dumping a gallon into a pint.” The river, which had been a mile away from Fuyang before the breach, now extended to the city. “When we got to Fowyang, instead of walking this last mile, we sailed up over the bridges, motor roads and wheat fields, right up to the north gate of the city,” wrote Kane. “I didn’t even recognize the place.”⁷

Because the chaos of war prevented the closing of the breach until after Japan’s defeat, the flooding that resulted from the 1938 strategic breach lasted much longer than most Yellow River floods. For example, it took the late Qing state only eight months to seal a breach and send the river back to its northern course when the river broke through its dike and flowed southeast in the fall of 1841. In contrast, communities affected by the 1938 breach had to endure flood conditions for close to nine years. It was not until after Japan’s defeat that the Nationalist state, with considerable assistance from the United Relief and Rehabilitation Administration, finally plugged the breach and returned the river to its northern course in March of 1947.⁸

While serious flooding persisted throughout the disaster years, the extent of the flooding changed according to the season. In many locales the floodwaters receded somewhat when water levels dropped in the Yellow River and its tributaries each winter, leaving behind fields and roads covered with two to three feet of silt and mud. In Fuyang, for instance, the floods were “as bad as ever” in November 1938, but by January 1939 the water had receded to such an extent that it was “confined to the banks of the Sha River.” It would return in force that July. Some farmers in inundated counties learned to cope with the recurring flooding by fleeing to other areas during the high-water season each year and then returning to plant barley or wheat when the waters receded in winter months. Yun Jinsheng, a villager who experienced the flood in northern Anhui’s Taihe County as a youth, recalled that farmers in Taihe were totally unprepared for the Yellow River water that arrived in 1938, but in 1939 they tried to plan for the summer floods by building high earthen platforms to put their food and possessions on. Most of these platforms proved too low to withstand the floods of 1939, so people’s belongings were once again swept away. After that, according to Yun, villagers moved to other areas or went to live with relatives on the opposite bank of the Ci River before the flood season hit. Once the waters subsided in the winter, they would return to plant their wheat, no easy feat in fields covered by silt and ice. Working early in the morning while the ice was thickest, and binding large wooden planks to their feet to avoid sinking into the mud, Taihe farmers “scattered wheat seeds on the fields, and used brooms to sweep them into the cracks” in the ice. They would then rush to harvest their wheat as soon as it ripened in late May and June, before the waters rose again. When the floods came early, as was the case in 1940, an early harvest proved impossible.⁹

People in the inundated area came to dread the annual return of Yellow River water. Tian Ren, the author of an article originally published in 1939 in Anhui’s *Dabie shan ribao* (*Dabie Mountain Daily*), imaginatively likened the floodwaters to a relentlessly filial married daughter who paid costly visits to her struggling parents every year. After the breach, wrote Tian, counties along the Huai River in northern Anhui all became like the natal family of the Yellow River floodwaters. “This incomparably filial daughter, regardless of whether her natal family loves her or not, always returns to the province once each year, and upon returning lives there for half the year,” he wrote. “She not only consumes her natal family’s fall harvest, but sometimes even makes off with the seeds sown in winter in the hope of an early harvest next spring.” Letters



Source: Map designed by Yelena Granovskaya with information provided by the author.

that Herbert Kane and his wife Winnifred wrote to family members demonstrate a similarly keen awareness of the timing and destructive power of the returning floodwaters. “The people are reaping their wheat now, so things will be a bit better for awhile,” wrote Winnifred on June 10, 1939. “I suppose by the end of the month the Yellow River will be flooding again, and then we’ll be in for it.” A week later Herbert noted that the wheat harvest of 1939 was good in areas not affected by the Yellow River flood, but “it was only 50–75% of the usual amount” in affected areas. “Even this would enable the people to make a living, provided they had a prospect of a fall crop of potatoes and beans,” he continued, “but in another three or four weeks the Yellow River will rise again, and this area will again flood like it did last year.” On the first of July, Winnifred wrote to say that the river had indeed overflowed its banks. “We had been expecting it, of course, but it came as a bit of a shock nevertheless. . . . The whole city is surrounded by water now, they say. This means that the fall crops have been destroyed again.”¹⁰

In Henan province, the locus of the breach and epicenter of the flood, the destruction of rural infrastructure caused by the severe and recurring flooding ultimately left the province vulnerable to famine. As J. R. McNeill points out, “intensely anthropogenic landscapes” like China’s require unremitting upkeep to maintain. “China’s terraces, paddies, polders, dikes, dams, and canals needed massive and constant labor and investment,” he writes. “Should the supply of either of these fail, rapid and costly deterioration (from the human point of view) would inevitably follow.” Henan experienced this sort of sharp decline during the flood. “The persistent flooding that followed the 1938 diversion of the Yellow River disrupted hydraulic infrastructure and led to transformations in Henan’s landscape that dealt a blow to agriculture,” explains Micah Muscolino. “Floodwaters inundated fields; sediment covered previously cultivated land. Refugee displacement caused by floods led to outflows of labor power that was badly needed on farms, which further decreased harvests.” These disruptions, in combination with a severe drought and heavy military tax and grain levies for the nearly one million soldiers stationed in the province, resulted in the Henan Famine of 1942–1943, which killed two to three million people. Flood refugees fared especially poorly since they had already lost their homes and farmland in 1938. People from the inundated area “wandered about homeless and had no place even to beg,” write the authors of a county gazetteer essay on the famine in Zhoujiakou. “The strong moved far from their home villages, but the old and weak starved to death along the

banks of the Jialu River, or upon the Yellow River dike.”¹¹

The Yellow River flood of 1938–1947 was first and foremost a rural disaster. Maps of the flooded area unintentionally mask the fact even in the most severely affected areas larger cities as well as many county seats—the small walled cities that housed each county’s government offices—were often spared the worst of the flooding, particularly during the first few years of the disaster. Cities and county seats were generally built on higher ground and were encircled by protective dikes and walls, and local officials expended considerable energy to keep the floodwaters at bay. A letter written by Helen Mount Anderson, a China Inland Mission (CIM) missionary stationed in Zhoujiakou city during the flood, provides a vivid example of the desperate measures that local authorities employed to save their cities. “Saturday afternoon when we went over to the Brocks for prayer meeting, we noticed that the rivers were very high,” wrote Anderson to her mother on July 29, 1938. The Yellow River waters were still rising when they returned home. “Soon after we went to bed we heard a great rumble and then a splash, and then later on the ominous clanging of gongs to get the men folks up to help at the dykes,” she recalled. The next day Anderson and other missionaries went to investigate.¹²

Anderson explained that a protective dike ran along Zhoujiakou’s city wall and then followed the river north, and another dike branched off from the river dike and ran from west to east “over dry land for city protection.” During the night the floodwaters had reached the city walls, and Anderson learned that “it was a big chunk of the city wall that we had heard crash into the river.” With the city in imminent danger, city officials broke the dike above the city’s protective dike. “This of course spared the city as the heavy stream poured over the countryside going east,” wrote Anderson, but wreaked havoc on surrounding rural communities. “People had already left some of these country places already flooded, but with this new break, many had to leave their houses with what little they could take and rush to the dykes,” she wrote. “Men women and children are along the dyke, some with shovels; others have been cutting down the trees to make the force easier at strategic points. The city was saved to be sure, but at the expense of all these villages and the poor people.”¹³

The Kanes had a similar experience in Fuyang, where flood conditions worsened during the high water season of 1939. In late July Herbert wrote to the CIM headquarters in Shanghai to report that he and Winnifred were plan-

ning to evacuate to the mission station in nearby Taihe because Fuyang was in danger of flooding. "Already the water is almost two feet higher than last year's high water mark," he wrote. "The city is packed with refugees from the nearby villages and from the four suburbs. If the floods break through into the city there will be an awful panic." On August 2 Kane wrote to the CIM headquarters again, this time to explain that the breaking of a dike eighteen *li* from Fuyang had relieved the pressure on the city itself, but had in the process flooded another four hundred square *li* of land outside of the city. The city largely escaped the floodwaters in subsequent years as well; the Kanes were able to remain there until Japan's Ichigō offensive forced them to evacuate in 1944.¹⁴

In interesting ways the local-level decision to protect small cities such as Zhoujiakou or Fuyang by channeling floodwaters into the surrounding rural areas mirrored the Nationalist leadership's decision to save Wuhan, their temporary capital, from falling to the Japanese by breaching the Yellow River dike in June 1938. The strategic breach did not save Wuhan, which fell to the Japanese in October 1938, but it did buy the Chinese time to move its government and dependents west to Chongqing. On the county level, given the fact that local authorities could not protect entire counties from Yellow River floodwater, breaking dikes in order to divert the water away from more defensible county seats was arguably a pragmatic response to a terrible situation. However, just as breaching the Yellow River dike postponed but did not prevent the fall of Wuhan, at times the measures taken to save county seats delayed but did not ultimately stop the flooding of those small cities. Like many county seats, Fugou was built on a small hill, so initially residents thwarted flooding by blocking the northern gate and using willow branches and earthwork to shore up the city walls. Unfortunately, as the enormous amount of silt deposited by the Yellow River flood raised the ground level outside the county seat, it became increasingly difficult to keep out the floodwaters. The flooding worsened after newly built dikes in surrounding counties broke in 1943 and 1944. Eventually water was two feet deep along the county seat's main northern street, and there roughly 70 percent of the houses collapsed. By the end of the nine-year disaster the county seat in Xihua had also been ravaged by the accumulation of silt. "The city is dead," reported missionaries who returned to Xihua after the war.¹⁵

During the Chinese civil war (1946–1949) that broke out after Japan's defeat, the Chinese Communists argued forcefully that the wartime Nationalist

leadership at both the central and the local level had consistently prioritized saving cities and Nationalist troops over the wellbeing of the population in the flooded areas, and in doing so had shown a profound disregard for rural livelihood and lives. Local-level accounts of the Yellow River disaster complicate that narrative to some extent. First, eyewitness accounts demonstrate that the boundary between small cities and the surrounding countryside was far from clear-cut. Cities were embedded in and dependent upon the rural areas around them. For example, urban residents often fled into rural areas to escape Japanese air raids. When the Japanese bombed Fuyang in late May 1938, Herbert Kane joined the crowds of people “pouring towards the four gates in droves” to evacuate the burning city. “The city was empty within 30 minutes,” he wrote from the rural out-station he found refuge in. Kane temporarily left Fuyang for Shanghai soon after the bombing, explaining: “It isn’t possible to live in Fowyang even in our house which isn’t burned, for there is no food available. Everybody has gone to the country where they will remain until the war passes this way.”¹⁶

Similarly, the degree of connectivity between cities and the surrounding countryside, combined with the scarcity of high ground on the flat North China plain, meant that cities were often the first place rural people fled to when the floodwaters destroyed their villages. “I had word from Fowyang to say that the floods in those parts had forced the people to leave the country districts and live in the city in the debris and ashes under the open sky,” wrote Herbert Kane from Shanghai. Likewise, when the floodwaters arrived in Fugou County in eastern Henan, thousands of rural residents fled to the walled county seat, where they slept in temples and sought government relief. At first the Henan disaster relief committee was able to provide some grain and money, but as the number of refugees increased, there were no longer sufficient relief goods and materials. Along with the cities, the protective dikes and walls surrounding them were important places of refuge. According to Wang Zhifeng’s firsthand account of the flood in Anhui’s Jieshou County, when villagers first heard about the approaching flood, many people took refuge with some of their livestock on top of the county seat’s walls. Others did not get there in time and tried to escape the water by climbing trees or huddling on rooftops. In the night those who had made it to high ground heard the sound of houses collapsing into the waves and wailed for their missing relatives. Even five years after the initial breach, villagers continued to seek refuge on dikes whenever the floodwaters rose. After new breaches appeared in the dikes near

Fuyang, Herbert Kane explained in a letter written in the fall of 1943, “the land on either side of the dyke was under water as far as the eye could see, and all the people had moved bag and baggage onto the dyke to live! The dyke is only about ten feet wide, and covered with everything common to a Chinese household: straw, grain, pigs, dogs, cows, donkeys, ducks, and children.”¹⁷

Even when decisive action did prevent floodwaters from entering a walled city, the plight of the flooded countryside had a direct impact on the lives of city residents. In a letter that details the near-fatal case of bacillary dysentery that the Kane’s toddler son suffered in Fuyang, Herbert described the challenges the flood posed for urban residents. “With living conditions as they are in this city now, it’s a wonder we’re not all in heaven,” he wrote to his family in September 1939. In normal times, he explained, farmers carried the human waste collected in Fuyang into the countryside to be used as fertilizer for their crops. “But with all the country districts under water, there is no place, nor use for this refuse,” he lamented. “Hence nothing has been carried out of the city for the last three months, and the temperature has been over 90 practically every day.” To make matters worse, the refugees packed on the city wall had no toilets, so they threw their refuse into the water surrounding the city. “When the water carriers go down to the water to fill their pails,” finished Kane, “they first have to splash around to remove the floating refuse before drawing their water. This is the water that we have to drink!”¹⁸

Although urban residents in the inundated area could not escape the problems caused by the Yellow River floods, rural men and women who lost their homes and farmland bore the brunt of the disaster. Flood-related diseases, for instance, posed a particularly grave threat to refugees forced to “eat, sleep, and defecate all in one place” while crowded together on walls or dikes. In the case of Yun Jinsheng, his cousin suffered through smallpox, his father and uncle caught typhoid, and both of his grandfathers and four of his younger brothers and sisters perished of various illnesses during the years of flood.¹⁹

The oral history account of a woman named Wang Ruiying from Weishi, one of the severely affected counties relatively close to the breach, provides a haunting snapshot of how the flooding and its aftermath combined to destroy the lives of many villagers in eastern Henan.

My name is Wang Ruiying. I came to Duanzhuang village as a child bride when I was 13 years old. . . . Our entire family of seven people lived in a tumbledown thatched house. In 1938 the Japanese army came; Old Jiang [Chiang Kai-shek] breached the Yellow River and the river water covered the earth and came. Many

of the houses of wealthy families collapsed; our family's thatched house quickly floated away on the stream.

When the flood washed away their home and village, Wang and six family members—her husband Liu Huan, their young daughter and son, Wang's mother-in-law, and her husband's younger brother and his wife—fled south-east along the Jialu River into Xihua County, where they found a place to stay in a temple. The men sought odd jobs, Wang and her sister-in-law went out to beg for food with the children, and her elderly mother-in-law stayed in the temple. Their already precarious situation deteriorated when a severe drought hit in 1942, and it became impossible to survive by begging. "Even the locals had no food; who could give to beggars?" she stated. Wang had another baby, but her milk dried up. Her new baby daughter cried piteously for the milk that would not flow and starved to death after a few days. "Soon my mother-in-law was too hungry to move," recalled Wang, and her daughter and son were crying and screaming for food. In this "life or death juncture," Wang and her husband made the decision to find another family to give their daughter Xiao En to as a child bride. "After sending Xiao En away," she continued, "the whole family held their heads and wept."²⁰

Soon after, Wang's mother-in-law starved to death. Five days after her death, a local leader took Wang's husband away to work on a Yellow River dike. He was already weakened by starvation and died during the long walk to the work site. After his death Wang wanted to commit suicide, but kind-hearted people encouraged her to live to care for her young son. Soon after that her husband's younger brother also died, and his wife was forced to remarry. Then one night Xiao En returned to the temple half-starved and begged her mother for a steamed bun. The family they had married her into had also been too poor to feed her. Wang promised her daughter that she would beg some food for her early the next morning, but Xiao En died in the night. At that point only Wang and her son De An remained alive. They eventually sought refuge with Wang's younger sister's family in Xiping County, where they survived by begging. Wang and her son were finally able to return to their home village in Weishi after the breach was repaired in 1947.²¹

Wang's lengthy displacement, her use of begging as a survival tactic, the sale of her daughter, the death of multiple family members, and her husband's conscription into dike-repair work, provide disturbing examples of how the extended disaster was experienced by rural people. Other families in Wang's

Duanzhuang village suffered similarly devastating losses during the flood and famine. Because Duanzhuang was located on the north bank of the Jialu River, floodwaters from the Yellow River “swallowed up” the village, forcing the vast majority of its farmers to flee. According to a local history, before the flood struck in 1938 Duanzhuang had a total of five hundred twenty households made up of over 2,800 people. Of those, five hundred six families, or over 2,700 individuals, fled to other areas during the flood. Many of them did not survive the disaster years. Between 1938 and 1948, continues the report, over 1,100 people from Duanzhuang froze or starved to death, 67 people drowned, 33 people were killed by soldiers, bandits, or local tyrants, and 230 children were sold.²²

The chain of events set in motion by the strategic breach affected the relationship between the Nationalist state and the largely rural population of the inundated area in significant ways. Having taken the drastic step of breaching the Yellow River dike, the Nationalist state exerted considerable energy trying to both mitigate and make use of the disaster it had caused. Scholars such as Christian Pfister and Naomi Klein have emphasized the transformative effect of catastrophes. Pfister, for example, argues that disasters should be seen as the “salt of the modernization process,” because they spur technological development and push societies to develop better emergency preparedness. Klein puts forth a darker vision of the relationship between disaster and “radical social and economic engineering.” She asserts that Milton Friedman and other powerful proponents of “unfettered capitalism” have learned to exploit major crises ranging from the Chilean coup of 1973 to Hurricane Katrina in 2005. “This is how the shock doctrine works,” she explains. “The original disaster—the coup, the terrorist attack, the market meltdown, the war, the tsunami, the hurricane—puts the entire population into a state of collective shock.” So-called “disaster capitalists” then move in swiftly to “impose rapid and irreversible change” before the traumatized society can recover.²³

In the Chinese case, early in the war the Nationalist state made a concerted effort to turn war-related disasters, including the Yellow River flood, into an opportunity to consolidate power and transform disaster refugees like Wang’s husband into dike workers or soldiers. The Japanese invasion of China and the eight years of war that followed “gave rise to a fundamental reassessment of the relationship between the Chinese state and society,” writes Mitter. “The Nationalists wanted to use the refugee crisis as a means of state-building,” he continues. Their aim was “to develop the idea of a shared citizenship through

the highly pressured experience of wartime evacuation and reconstruction.” Refugees who fled floods, famine, or Japanese forces were expected to take part in the Resistance War. Early in 1939 the Nationalist government began a policy of compulsory labor in refugee camps from which only the old, very young, disabled, and infirm were exempted. “‘Refugee production’ became a rallying cry for the cause of national salvation, linking the labor of war victims to the cause of Anti-Japanese Resistance,” explains Janet Chen.²⁴

In the case of the Yellow River flood, the government attempted to turn the disaster into opportunity in three ways: by fostering the idea of shared sacrifice through the media; by increasing agricultural production via resettling refugees in land reclamation sites; and by mobilizing flood refugees in the Yellow River inundated area to construct dikes that could protect against additional flooding and foster strategic interests. In its coverage of the Yellow River disaster the Nationalist state and the wartime Chinese media emphasized the extent to which flood refugees were laying down their lives for the country. Newspapers from across the political spectrum attempted to forge connections between disaster victims and other Chinese by referring to flood refugees as “refugee compatriots” or “disaster victim compatriots.” “We should say, it is for the nation that the disaster victims in eastern Henan endure suffering. Their sacrifice is a sacrifice borne for the nation,” pronounced the Communist-operated *Xinhua ribao* (*New China Daily*) newspaper in June 1938. The media also drew frequent connections between refugee relief and anti-Japanese resistance. “If we want to strive for the survival and well-being of the entire Chinese nation we cannot fail to arise at once to rescue these disaster victim compatriots,” insisted Guan Sheng, a correspondent for the *Henan Minguo ribao* (*Henan Republican Daily*). In spite of such rhetoric, disaster refugees who fled to other areas were frequently viewed as a drain on already scarce local resources and a “source of potential unrest.” According to the Fugou gazetteer, flood refugees “driven to strange areas where they had no relatives to rely on” were often “bullied and humiliated” and left to wander from place to place pushing their belongings in carts and spending their nights in temples.²⁵

Guan also suggested that young men from the inundated area should be encouraged to join the army to fight against the Japanese and asked the government to organize cultivating teams that would send groups of refugees to reclaim land and foster agricultural production in Shaanxi, Gansu, and Qinghai. That proposal reflects a second major effort on the part of the wartime

Nationalist state: the drive to boost agricultural production by resettling disaster refugees in under-populated areas where they could open up uncultivated land. Over the course of the war, at least five hundred thousand refugees nationwide participated in state-sponsored reclamation projects. “By mobilizing refugees to civilize previously ‘uncivilized’ landscapes,” observes Muscolino, “discourses that informed wartime land reclamation projects cast the chaos of war as an opportunity for national rejuvenation and renewal.” As Qu Changgen demonstrates, within a year of the strategic breach, central, provincial, and local government relief programs had resettled over fifty-four thousand flood refugees in land reclamation areas in Shaanxi Province, Guangxi Province, and southwestern Henan’s Deng County. This was an impressive achievement for the beleaguered Nationalist state. The sheer scope of the crisis dwarfed such efforts, however. Even the relatively successful program in Shaanxi’s Huanglongshan region, which as the site of one of wartime China’s largest land reclamation projects, took in over fifty thousand refugees, aided only a fraction of the roughly nine hundred thousand flood refugees who fled into Shaanxi by the end of 1939, or the three million famine refugees who fled Henan in 1942–1943.²⁶

Finally, the government attempted to deal with the Yellow River disaster by mobilizing local populations to construct new dikes that could both reduce the danger posed by the river’s unstable new course and contribute to the Resistance War by redirecting water into Japanese-occupied territory. “After June 1938, with Nationalist armies holding areas west of the river’s new course and Japanese armies occupying territory to the east, Henan’s flooded area turned into one of the war’s most important frontlines,” writes Muscolino. Building a new dike along the river’s western bank thus “shifted waters east to threaten Japanese positions on the other side.” As historian Li Wenhui and his colleagues explain, in July 1938, only a month after the breach, the Yellow River Conservancy Commission, in concert with Henan’s provincial government and military commanders of the Henan war zone, decided to use work relief to construct a new protective dike. The first phase of the project, which was completed by September of 1938, aimed to prevent flooding to the west of the river’s new course by building a thirty-two-kilometer dike that began at the Huayuankou breach and ran west to the Longhai Railroad in Zhengzhou. The second phase, which began in April 1939, constructed a 284-kilometer dike along the western bank of the river’s new course. The “west dike” followed the river’s new course southeast through Weishi, Fugou, Xihua,

Huaiyang, and Zhoujiakou, then down to the border with Anhui Province. Similarly, in Anhui, provincial authorities established the Huai River Basin Work-Relief Commission to organize dike work in the flooded areas. The commission drew laborers from ten different flood-stricken counties in northern Anhui.²⁷

Like the land reclamation projects, these large-scale dike-building campaigns highlight the ambition and activism of the Nationalist state in the inundated area. The wartime state succeeded in drawing large numbers of people from riverine communities into dike-building efforts. During the construction of the west dike in eastern Henan, for instance, Fugou County dispatched thirty thousand local workers who moved over 1.9 million cubic meters of earth in order to build the forty-eight-kilometer section of the dike that crossed through the county from northwest to southeast. At the same time, the severe financial constraints faced by the wartime state made it increasingly difficult to pay for the labor and materials required to construct and maintain the new dikes. The fall of Shanghai and the Japanese conquest of the entire Lower Yangzi region by the spring of 1938, notes Felix Boecking, “accounted for a 45 percent decrease in the amount of revenue over which the Nationalists had control,” leaving the Nationalist state with an increasingly limited capacity to deal with the multiple crises posed by the war. The situation deteriorated even more from 1941 on, explains Hans van de Ven. “The Nationalists were hit by a broad economic, fiscal, and financial crisis as a result of developments on the battlefield, the tightening of the Japanese economic embargo, Japan’s strategic bombing offensive, financial policies of the Japanese and Wang Jingwei’s rival National Government, and China’s isolation from the world markets.”²⁸

Such pressures meant that in flood-ravaged Henan and Anhui, the amount of money the Nationalist government provided the inundated areas for work relief, emergency relief, and refugee migration was woefully insufficient. For example, while government regulations claimed that the Huai River Conservancy Commission had allocated funds for people working on dike-repair projects, local workers often received little or no pay, and riverine communities also had to pay for the materials used in the construction projects. In 1940, claim Li Wenhai and his colleagues, the relief money the central government provided for disaster refugees in Anhui averaged “only two *fen* [cents] per person,” which was not enough for anyone to live on. To make matters worse, the new dikes were often too low and fragile to offer meaningful protection during the summer high-water season. In Fugou, the new dike that had re-

quired the labor of thirty thousand local workers to build breached in three separate places when the river rose, resulting in yet more flooding. Fuyang experienced a similar situation. According to the Fuyang County gazetteer, although local people worked hard to build protective dikes and the government sent two engineers to supervise the construction effort, the dikes along the lower reaches of the Ci River near Fuyang suffered constant breaches, and the resulting flooding brought many casualties and turned formerly fertile land into deserts of silt. Because the new dikes required labor-intensive work but could not necessarily be depended on for protection, many in the flooded area came to see them as an unwelcome burden.²⁹

One of Herbert Kane's letters, written soon after Fuyang's newly constructed outer dike broke in August 1940, provides an outside observer's biting assessment of official dike-building efforts in northern Anhui. "I find it difficult not to lose my patience with the criminal negligence of the Chinese officials," wrote Kane. "They knew as sure as anything that the floods would come down this year as last. They had eight long months in which to prepare—months during which the farmers are idle, and would be glad of something to do. But they wait until May after the floods have commenced to rise, and then they run around like mad trying to build a dyke." Constructing new dikes shortly before the flood season, argued Kane, was counterproductive because it both pulled farmers away from harvesting their winter wheat and resulted in weak and unreliable dikes. "At that time [May] the farmers are busy getting in their wheat and have no time to waste on building a dyke which is sure to collapse," he wrote. "They just get it finished before the floods come, and this, of course, means the earth is too soft to be of any use, and sure enough with the first gust of wind, the thing falls, and thousands of acres of land are inundated."³⁰

The wartime state's inability to protect counties in the inundated area from recurring flooding or provide them with adequate relief complicated its efforts to mobilize the rural population for the war effort. Tian Ren argued that the impoverishment brought by the flood negatively affected "the great cause of the Resistance War and the establishment of the nation." The Japanese enemies had encountered "fierce resistance" from the local people when they first arrived in counties along the Huai River in 1937, wrote Tian, but successive years of the Yellow River disaster had since driven many families into bankruptcy. Facing starvation, some people in flooded areas of northern Anhui decided that robbing others to survive was better than becoming a traitor. Others,

however, began to trade items such as salt or grain in nearby Japanese-controlled areas, and some even sold their guns to the enemy. “Without food to eat, what use are guns?” asked Tian. It was often said that there was a relief fund, he continued, but no one ever came to distribute relief. Tian felt that waiting for government aid that never arrived was having a devastating effect on the morale of the people in northern Anhui.

They doubt, they are dejected, they waver, they lose hope and are pessimistic. . . . Although personnel working in the countryside rush around crying for support and exerting the effort of nine bulls and two tigers, [Anhui villagers] always turn a deaf ear; they hold that no other problems compare to the gravity of a starved belly.³¹

Morale in flooded areas of Henan reached a nadir in 1943 due to a lethal combination of famine, catastrophic flooding, and large-scale dike construction projects. In May 1943, just as farmers in famine-stricken Henan finally began to harvest their desperately needed wheat crop, the new protective dikes constructed along the new course of the Yellow River in eastern Henan broke in at least sixteen different places. The breaks caused severe flooding that inundated 1.3 million *mu* of land. Fearing that if the breaches were not repaired more breaks would occur downstream and the flooding would expand until it was impossible to control, the provincial government decided to recruit five hundred thousand civilian workers from more than twenty different counties to repair and strengthen the dikes. Providing the labor for this ambitious but poorly funded endeavor exhausted Henan’s already struggling rural population. At times, the beleaguered state turned to conscripting dike workers and soldiers by force. According to Zhang Luodi, who was a teacher in wartime Henan, in 1943 the Nationalist General Tang Enbo ordered farmers from numerous counties to haul tree trunks for large-scale construction projects and “sent people to each county to seize conscripts for the army.” Youths in rural areas were unwilling to serve as soldiers, wrote Zhang, but conscripts caught trying to escape were shot. Instead, families would often hunt for someone willing to serve as a replacement in exchange for two or three *dan* of wheat. Flood refugees far from their home village presumably found it difficult to hire a replacement and were often “seized to serve as able-bodied laborers.”³²

In 1943 the *Henan Minguo ribao* published editorials that gave voice to rural discontent over the demands the state was making of communities in

flooded areas. A front-page editorial published in June of 1943, for instance, pointed out that in past dynasties managing the river had required a great deal of energy from the entire country, but since the course change five years earlier, counties along the river had borne “over ninety percent” of the responsibility for controlling the river. The labor, food, and materials riverine communities had to provide far exceeded the normal tax and military service burden, continued the editorial, to the extent that people in the area were saying, “The Yellow River is killing us.” Due to the recent breaches and flooding, each village and town now had to send at least four or five thousand laborers to conduct dike work. According to people along the river, “Even if the elderly and small children all go to serve as laborers, the number collected still won’t be enough.”³³

Wang’s testimony about her husband’s death provides a deeply personal example of how the sacrifices expected of people in the inundated area impacted refugee families. Wang recounts how in late February 1943, only five days after the death of her mother-in-law, her husband was “dragged off” by a local leader to work on the Yellow River dike. “He had already been driven to the brink of death by the torment of illness and hunger,” stated Wang, “how could he do hard labor?” After walking more than thirty li in one day en route to the work site, Liu Huan suddenly fell to the ground outside the Daolinggang temple. Upon receiving a letter about her husband’s collapse from someone traveling with him, Wang left immediately, wishing she could get to Daolinggang “in one step” to see her “dear one,” but it was too late. “Who would have thought that what I saw instead was a frozen corpse,” she recalled. In Liu Huan’s case, then, the dike work organized by the Nationalist state proved to be a fatal burden.³⁴

One theme that appears again and again in firsthand accounts of the disaster is the ubiquity of dikes on multiple levels—the strategic breach of the massive Yellow River dike in Henan that caused the disaster; the life-saving role of the smaller dikes that protected cities and provided places of refuge for fleeing villagers; and the heavy burden that dike construction placed on rural communities in the flooded counties. Another recurring theme is that of agonizing choices, ranging from the top-level decision to breach the dike to buy time for Wuhan, to the county-level decisions to save a walled city by channeling the floodwaters into the surrounding countryside, to the heartrending choices forced upon families struggling to survive the seemingly endless cycle of flooding.

Local-level sources demonstrate that for many rural families in the path of the flood, the floodwaters were as devastating as the invading Japanese army. These sources also make it clear that the Nationalist state did not abandon the inundated areas, but instead made a serious attempt to valorize, resettle, and mobilize flood refugees, especially early in the war. By 1943, however, it was evident to many in the inundated areas that the wartime state's calls for shared sacrifice, its attempts to make flood refugees productive by sending them to farm uncultivated land, and the drive to control the flood by constructing new protective dikes had failed to transform the Yellow River disaster into an opportunity to strengthen and unify the Chinese nation. In the end, the degree of state penetration, as demonstrated by the state's ability to conscript hundreds of thousands of laborers for its dike-building projects, appears to have exhausted and disillusioned flood refugees rather than integrating them more fully into the modern nation state. It would be the Nationalists' bitter rivals, the Chinese Communists, who would effectively mobilize the rural masses in the flooded areas.³⁵

NOTES

1. Wang Ruiying and Jin Tianshun, "Weishi: An yijia de beican zaoyu," in *1942: Henan da jihuang*, ed. Song Zhixin (Wuhan: Hubei renmin chubanshe, 2005), 201–203.

2. Portions of this essay were presented at the Association for Asian Studies annual meetings in 2013 and 2014 and at the "Disasters Wet and Dry" conference held at the People's University of China in 2013. The author thanks many colleagues who commented at those events, in particular Peter Perdue, Ling Zhang, Ruth Mostern, Andrea Janku, Xia Mingfang, Ma Junya, Donald Worster, Stephen MacKinnon, John Watt, Caroline Reeves, Rebecca Nedostup, and Lu Yan. She is grateful to Yelena Granovskaya for her work on the design of the flood zone map and to archivist Bob Shuster and other staff members at the Billy Graham Center Archives. Finally, the author thanks the anonymous readers of *Agricultural History* for their suggestions.

Diana Lary, "The Waters Covered the Earth: China's War-Induced Natural Disasters," in *War & State Terrorism: The United States, Japan, & the Asia-Pacific in the Long Twentieth Century*, ed. Mark Selden and Alvin Y. So (Lanham: Rowman & Littlefield, 2004), 143–47; Rana Mitter, *Forgotten Ally: China's World War II, 1937–1945* (Boston: Houghton Mifflin Harcourt, 2013), 157; Lary, "Drowned Earth: The Strategic Breaching of the Yellow River Dyke, 1938," *War in History* 8 (Nov. 2001): 199–201; Micah S. Muscolino, *The Ecology of War in China: Henan Province, the Yellow River, and Beyond, 1938–1950* (New York: Cambridge University Press, 2014), 1, 25–27, 31; O. J. Todd, "The Yellow River Reharnessed," *Geographical Review* 39 (Jan. 1949): 39–45; Song, *1942: Henan da ji huang*, 2–4.

3. For discussions of strategic and political implications, see, Qu Changgen, *Gongzui qian-qiu: Huayuan kou shijian yanjiu* (Lanzhou: Lanzhou daxue chubanshe, 2003), 121–36, 163–

80; Li Wenhai et al., *Zhongguo jindai shida zaihuang* (Shanghai: Shanghai renmin chubanshe, 1994), 239–46; Mitter, *Forgotten Ally*, 157–69; Lary, “Drowned Earth,” 201–202; Hans van de Ven, *War and Nationalism in China, 1925–1945* (New York: RoutledgeCurzon, 2003), 226. For revisionist scholarship on World War II in China, see, Mitter and Aaron William Moore, “China in World War II, 1937–1945: Experience, Memory, and Legacy,” *Modern Asian Studies* 45 (Mar. 2011): 230; Mitter, “Classifying Citizens in Nationalist China during World War II, 1937–1941,” *Modern Asian Studies* 45 (Mar. 2011): 245.

4. Randall Dodgen, *Controlling the Dragon: Confucian Engineers and the Yellow River in Late Imperial China* (Honolulu: University of Hawaii Press, 2001), 11–13; Robert B. Marks, *China: Its Environment and History* (Lanham: Rowman & Littlefield, 2011), 89.

5. Marks, *China*, 89; Dodgen, *Controlling the Dragon*, 3, 12; Lary, “Waters Covered the Earth,” 144.

6. David A. Pietz, *Engineering the State: The Huai River and Reconstruction in Nationalist China, 1927–1937* (New York: Routledge, 2002), 9–14, 17; Dodgen, *Controlling the Dragon*, 1–3, 13; Marks, *China*, 154, 239–40.

7. Herbert Kane and his wife served with the CIM from 1935–1950. “Biography of James Herbert and Winnifred Mary (Shepherd) Kane,” Billy Graham Center Archives (BGC), <http://www2.wheaton.edu/bgc/archives/GUIDES/182.htm#2> (accessed July 1, 2015).

The Sha, Ying, and Jialu Rivers merge into one river at Zhoujiakou (Chowkiakou), which is today called Zhoukou (see map). Kane and many other wartime sources called the combined stream that flows southeast from Zhoujiakou the Sha River, while current maps refer to it as the Ying River. Throughout the essay I employ the internationally accepted pinyin system for romanizing Chinese names, but Kane and other missionaries writing in the 1940s used both the older Wade-Giles romanization system and alternative spellings. I have added their spelling in parentheses next to the pinyin version of Chinese names when necessary for the sake of clarity.

Herbert Kane to family, Oct. 15, 1938, folder 4, box 2, collection 182, James Herbert and Winnifred Mary (Shepherd) Kane Collection, Billy Graham Center Archives, Wheaton, Ill. (hereafter Kane Collection).

8. Dodgen, *Controlling the Dragon*, 69–71, 86; Hou Quanliang, ed., *Minguo Huanghe shi* (Zhengzhou: Huanghe shuli chubanshe, 2009), chpt. 5.

9. Herbert Kane to family, Nov. 13, 1938; Herbert Kane to Wilfred and Jenny, Jan. 7, 1939, Kane Collection; Liu Jingrun, “Fanqu canshi shilu,” *Weishi wenshi ziliao* 5 (Nov. 1990): 58, 61; Yun Jinsheng, “Huangshui jianwen,” *Xiyang chunqiu* 4 (Dec. 1987): 61–63.

10. Tian Ren, “Huangzai canzhong xia de Wanbei nongcun,” in *Huaxi fengyun lu*, ed. Yang Xiaojie (Linquan: Anhui renmin chubanshe, 1992), 191. This piece was originally published in the *Dabie shan ribao* on Apr. 18, 1939. Winnifred Kane to family, June 10, 1939; Herbert to family, June 18, 1939; Winnifred to family, July 1, 1939, Kane Collection. In Henan and northern Anhui, farmers normally planted their winter wheat crop in the fall and harvested it in May and June. Summer crops, including sorghum, millet, maize, black beans, and sweet potatoes, were planted in June and harvested in the fall. Garnaut, “Quantitative Description,” 2017, 2019, 2021.

11. J. R. McNeill, “China’s Environmental History in World Perspective,” in *Sediments*

of Time: Environment and Society in Chinese History, ed. Mark Elvin and Liu Ts'ui-jung (Cambridge: Cambridge University Press, 1998), 37; Muscolino, *Ecology of War*, 90–91; Muscolino, “Violence Against People and the Land: The Environment and Refugee Migration from China’s Henan Province, 1938–1945,” *Environment and History* 17 (May 2011): 299–301; Song, 1942: *Henan da ji huang*, 3–5, 187, 201–203; Ma Zutang and Zhou Hongkui, “Can jue renhuan de teda zaihuang,” *Zhoukou wenshi ziliao* 9 (Nov. 1992): 154.

12. Helen Mount Anderson to mother, July 29, 1938, folder 7, box 1, collection 231, Papers of Ian Rankin and Helen Mount Anderson, BGC.

13. Ibid.

14. “A letter from Mr. Kane,” *China’s Millions* 65 (Oct. 1939): 157; J. H. Kane, excerpt from July 24, 1939 and Aug. 2, 1939 letters, in *Field Bulletin of the China Inland Mission* 1 (Sept. 1939): 8; CIM Collection, School of Oriental and African Studies Library Archives, University of London, London, United Kingdom (hereafter SOAS). One *li* is equivalent to one third of a mile. For an overview of the Japanese offensive, see, Hara Takeshi, “The Ichigō Offensive,” in *The Battle for China: Essays on the Military History of the Sino-Japanese War of 1937–1945*, ed. Mark Peattie et al. (Stanford: Stanford University Press, 2011), 392–402. Winnifred Kane left Anhui in April 1944 due to the Japanese advance, while Herbert evacuated that fall.

15. Lary, “Drowned Earth,” 201–202; *Los Angeles Times*, Apr. 22, 1944, 4; Van de Ven, *War and Nationalism*, 226; Fugou xianzhi zongbian jishi, eds., *Fugou xianzhi* (Zhengzhou: Henan renmin chubanshe, 1986), 90; “Regional Notes,” *Field Bulletin of the China Inland Mission* 8 (Apr. 1946): 7, SOAS.

16. Edgerton-Tarpley, “From ‘Nourish the People,’ to ‘Sacrifice for the Nation’: Changing Responses to Disaster in Late Imperial and Modern China,” *Journal of Asian Studies* 73 (May 2014): 464; *Jiefang ribao* (Yan’an), May 18, 1946; *Xinhua ribao* (Chongqing), Aug. 21, 1946, Jan. 8, 12, 21, 1947. The *Xinhua ribao* was the only Communist newspaper to be openly published in Guomindang-controlled territory during the war. Herbert to family, May 26, 1938, Kane Collection.

17. Herbert to family, Aug. 17, 1938; Winnifred to family, Aug. 3, 1938, Kane Collection; *Fugou xianzhi* (1986), 91–92; Wang Zhifeng, “Yi jiunian Huangshui zhi hai: 1938–1947,” *Jieshou shihua* 2 (Dec. 1988): 73; Herbert to Mama, Sept. 20, 1943, Kane Collection.

18. Herbert to family, Sept. 4, 1939, Kane Collection.

19. Yun, “Huangshui jianwen,” 59–60. Malaria and cholera were rampant among flood refugees, and many also suffered from dysentery, smallpox, measles, jaundice, typhoid, scabies, and skin ulcers. See, Taihe gazetteer office, “KangRi shiqi Taihe Huangshui zaihai de jidian ziliao,” *Xiyang chunqiu* 3 (Dec. 1986): 67–68.

20. Wang and Jin, “Weishi,” 201–202. The interview with Wang Ruiying, titled “An yijia de beican zaoyu,” was originally published in *Weishi wenshi ziliao* 5 (Nov. 1990): 77–79.

21. Wang and Jin, “Weishi,” 202–203.

22. Jin Tianshun, “Duanzhuang cun shuihuan shi,” *Weishi wenshi ziliao* 5 (Nov. 1990): 74.

23. Christof Mauch and Christian Pfister, eds., *Natural Disasters, Cultural Responses: Case Studies toward a Global Environmental History* (Lanham: Lexington Books, 2009), 7;

Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (New York: Picador, 2007), 5, 9, 7, 20.

24. Mitter, "Classifying Citizens," 244, 251, 254, 257; Janet Y. Chen, *Guilty of Indigence: The Urban Poor in China, 1900–1953* (Princeton: Princeton University Press, 2012), 129, 147–48.

25. Edgerton-Tarpley, "From 'Nourish the People,'" 461–62; *Zhongyang ribao* (Wuhan), as excerpted in the *Dagongbao* (Wuhan), June 22, 1938; *Dagongbao*, June 28, 1938; July 5, 1938; *Xinhua ribao* (Wuhan), June 25, 1938; *Henan Minguo ribao* (Nanyang), Aug. 26, 1938; R. Keith Schoppa, *In a Sea of Bitterness: Refugees during the Sino-Japanese War* (Cambridge: Harvard University Press, 2011), 36–37; *Fugou xianzhi* (1986), 91–92. Many Chinese newspapers relocated several times during the war.

26. *Henan Minguo Ribao*, Aug. 26, 1938; Edgerton-Tarpley, "From 'Nourish the People,'" 462; Muscolino, "Refugees, Land Reclamation, and Militarized Landscapes in Wartime China: Huanglongshan, Shaanxi, 1937–45," *Journal of Asian Studies* 69 (May 2010): 454–55; Qu, *Gongzui qianqiu*, 308. According to the statistics compiled by Qu, between April 1938 and June 1939, a total of 45,132 refugees were resettled in Shaanxi's Huanglongshan reclamation area. Muscolino, "Violence Against People," 300, 302.

27. Muscolino, *Ecology of War*, 35, chpt. 1; Li et al., *Zhongguo jindai shida zaihuang*, 259–60.

28. *Fugou xianzhi* (1986), 97–98; Felix Boecking, "Unmaking the Chinese Nationalist State: Administrative Reform among Fiscal Collapse, 1937–1945," *Modern Asian Studies* 45 (Mar. 2011), 283; Schoppa, *In a Sea of Bitterness*, 39, 57; Van de Ven, *War and Nationalism in China*, 252.

29. Taihe gazetteer office, "Banian Huangfan," *Xiyang chunqiu* 4 (Dec. 1987): 50–52; Li et al., *Zhongguo jindai shida zaihuang*, 260; *Fugou xianzhi* (1986), 97–98; "Huanghe jueidou wei zai," in *Minguo Fuyang xianzhi xubian* (1947; repr., Shanghai: Jiangsu gujie chubanshe, 1998), 620, 624.

30. Herbert to Wilfred and Jenny, Aug. 19, 1940, Kane Collection.

31. Tian, "Huangzai canzhong xia de Wanbei nongcun," 191–92, originally published in the *Dabie shan ribao*, Apr. 1939; Agnes Smedley, *Battle Hymn of China* (New York: Alfred A. Knopf, 1943), 345–57; Van de Ven, *War and Nationalism*, 199–203, 288.

32. *Henan Minguo ribao* (Lushan), July 7, 8, 22, 1943; Aug. 3, 1943; Dec. 8, 1943; Muscolino, *Ecology of War*, 121–25; Zhang Luodi, "Nanwang de 1943 nian," in Song, *1942: Henan da jihuang*, 208; Wang, "Yi Jiunian Huangshui zhi hai," 74. One *mu* is equivalent to one sixth of an acre of land. One *dan* is equal to one hectoliter of grain.

33. *Henan Minguo ribao*, June 21, 1943.

34. Wang and Jin, "Weishi," 201–202.

35. As observed by Odoric Y. K. Wou, Communist organizers proved adept at integrating flood-ravaged communities in eastern Henan into collective defense programs, especially after the Japanese offensive of 1944 drove Nationalist forces out of most of Henan. Wou, *Mobilizing the Masses: Building Revolution in Henan* (Stanford: Stanford University Press, 1994), 220, 236, 329–30.