| Paper ID | 163 |
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| Author(s) | Chun-Yi Ho |
| Title | After the Aid: The Role of USACE in Taiwan's Flood Control in the Taipei Basin During the |
| | Cold War |

Abstract

As the capital of modern Taiwan, the Taipei Basin has faced persistent flooding since the Japanese colonial era. To mitigate flood risks, the Kuomintang government launched the ""Taipei Flood Control Project"" in the early 1960s. This project holds significant value for environmental history research due to its unique characteristics. First, it not only involved constructing embankments but also significantly altered the hydrology of the Tamsui and Keelung Rivers, transforming the basin's physical environment, social structures, and spatial dynamics. Second, the project received technical support from the United States Army Corps of Engineers (USACE), which acted as a consultant during the 1960s and 1970s, aiding in the planning and decision-making process. Third, the project spanned over 40 years, from its initial proposal in the 1960s to the completion of the Keelung River diversion in the early 2000s. It unfolded alongside critical historical developments in Taiwan, such as the end of U.S. economic aid, administrative reforms, rapid economic growth, and population surges in the Taipei Basin.

This study focuses on the planning of the Taipei Flood Control Project from 1961 to 1973, analyzing the collaboration between the Kuomintang government's hydraulic technocracy and USACE consultants. Using primary historical sources, it situated the project within broader structural shifts, including the cessation of U.S. aid, Taiwan's second ten-year water resources development plan, and institutional transformations in water management. This paper explores how Cold War-era international dynamics shaped Taiwan's flood control infrastructure and urban hydrology.

| Paper ID | 132 |
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| Author(s) | Mei-huan Chen |
| Title | Infrastructuring the hydrosocial environment of the Kinmen Islands |

Abstract

Kinmen Islands have historically faced water stress and limited opportunities for cultivation. Before becoming a frontline in 1949, the islands were described as "barren and saline" and having "suffered from drought and lacked ponds for irrigation" (Li, 2009, p.195). However, these conditions were altered during the wartime period. From 1949 to 1992, Kinmen served as a battlefront for the Republic of China (ROC, Taiwan) against Communist China and as a frontline for the 'free world' coalition. To support this role and transform Kinmen into a model county for development, a series of agricultural, afforestation, and infrastructure development programs were implemented. While not all the programs were successful, they led to increased water extraction, improved crop yields, and public water supply.

This study examines how these programs infrastructured the hydrosocial environment of the Kinmen Islands. Two perspectives frame this analysis: infrastrucring, and the hydrosocial environment. First, rather than focusing on a single water infrastructure, the study considers various programs and resources mobilized to infrastructure an environment conducive to increased water supply and agricultural productivity. These include environmental data collection, training technical personnel, mobilizing military and civilian resources and labor, and reorganizing the landscape. Second, the study applies the hydrosocial lens to explore the effects of

infrastructuring on the inseparable water-society relations, attending to not only environmental changes but also shifts in water utilization and the development they enabled. Through these perspectives, this study aims to provide a nuanced understanding of the complex relationships between infrastructure, environment, and society on islands.

| Keywords Kinmen, Water, Infrastructure, Hydrsocial, Islands |
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| Paper ID | 267 |
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| Author(s) | Yanwen Liao |
| Title | Water more or less: the changes of campus infrascture of Tsinghua campus(1710-2023) |
| A h atmost | |

Abstract

From the Royal Garden to a modern university, the environment construction of Tsinghua Garden has nurtured and influenced generations of Tsinghua people. Those infrustructures form the relationship between humans and water, as one aspect of the relationship between humans and nature, has been widely discussed in environmental history. As an important carrier of campus environment and living conditions, water in Tsinghua Garden is closely intertwined with faculty and students, while also bearing the imprint of the times and transformations. This article, through the review of archives, newspapers, research materials related to Tsinghua's infrastructure history since its establishment, as well as the use of oral history and interview data, aims to showcase the changes related to the theme of human-water relationship along the usage of this land construction history, starting from the establishment of Xichun Garden and throughout Tsinghua's history. This includes the river change, silt, the water control under the pressure of flood and lack water, those constructions erect in order to make use of the water, as well as the impact of human development on this land. Base on those, the important to study the changes of this river can be summarized.

| Keywords river, infrastructure, campus, Tsinghua, water system |
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| Paper ID | 170 |
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| Author(s) | Hsin-Hua Chiang |
| Title | Clearing up the raw-water turbidity: Multi-agent interplays of climate, environment, and |
| | politics in Taiwan's drinking water governance |

Abstract

This study examines the intricate relationships between natural and anthropogenic factors influencing raw water turbidity in Taiwan, a region prone to water-related disasters. Changes in freshwater quality and drinking water supply are driven by climate-induced shifts in rainfall patterns and increased upstream runoff. These environmental challenges exacerbate river system turbidity, impacting the water infrastructure's functionality. The research investigates the interplay of human and non-human agencies in managing raw-water turbidity, focusing on extreme rainfall events since the 1990s. Human actors, including residents, technocrats, and politicians, intersect with non-human entities such as precipitation, soil particles, plants, animals, and streams in the watershed. Critical infrastructure, including sedimentation basins, filtration plants, reservoirs, and distribution pipelines, also mediates these interactions. Methodologically, the study employs discourse analysis of secondary data sources, such as media reports, government debates, and technical documents, to trace the framing of water turbidity issues in public and political arenas. Through these lenses, it highlights how natural disasters shape political narratives and infrastructural decisions. The case study highlights Taiwan, where short-

duration heavy rain brings challenges not only to flood control facilities but also to water treatment systems. This study contributes to environmental history by mapping the entanglements between human and non-human stakeholders, emphasizing how their interactions shape water governance. By situating raw-water turbidity crises within broader discourses on climate change and political responses, the research provides insights into the complex dynamics of environmental management in disaster-prone regions.

| Keyword | S |
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Raw-water turbidity, drinking water, environmental governance, human and non-human agencies, water-related disasters