Paper ID	026
Author(s)	Ruth Gamble
Title	A Flood with Many Sources: the Deep-Time, Generational, and Colonial and Histories of
	Sikkim's 2023 GLOF
Abstract	

On the fourth of October 2023, the South Lhonak Glacial Lake burst through the moraine holding it, and its waters cascaded down through the Teesta River Valley. Within hours, they had destroyed the Teesta III Dam and fifteen bridges in Sikkim and West Bengal. By morning, they had deposited unexploded ammunition from a flooded high-altitude army base in a West Bengal village hundreds of kilometres away. At least a hundred people

Most media commentaries on the flood focused on the disaster's immediate causes: excessive rain, the unmonitored glacial lake, and the lack of communication along the flood route. As this article argues, however, there are other temporal frameworks through which we can understand this event. Rather than taking one longue durée approach to the event, it proposes viewing it through several temporalities and examining how they intersect. First, it places this event within the region's deep-time geological and hydrological cycles, which created one of Earth's greatest stores of Gravitational Potential Energy, supercharging any flood's power. Second, it acknowledges the valley's Indigenous inhabitants' millennia-long relationships with the mountain and waters. Then, it looks at the declining temporal framings of the region's geopolitics. Sikkim's inclusion within the British imperial sphere introduced a more immediate temporality focused on extraction and imperial expansion. In the last century, the post-colonial independent government (1947-1975) and the post-merger Indian state extended Sikkim's extractive industries but sought to solidify its borders rather than expand its realm. In the past twenty years, despite intense protests from Indigenous groups who saw them as a threat to their lifeways, the state has increased its extraction and shortened its temporal view. The flood occurred within all these temporalities, representing a point from which to examine their intersections.

<b>Keywords</b> Water, Land, Disasters	
--	--

enth Century Colonial India	[Panel PS-
•	enth Century Colonial India

## Abstract

died, and many more are still missing.

Increasingly, scholarship on environmental histories of South Asia (EHSA) have embraced a 'hydraulic turn'. This turn, however, is not a simple re-orientation towards the study of rivers. Rather, the changed lens speaks to something much more dramatic, if not almost profound. The call, in essence, is to dissolve the certitudes of geography within time through flows.

Rivers in South Asia were subject to a sharp perceptual shift in the nineteenth century, being recast as homogenous colorless volumes in motion. Variations in such flow regimes, hence, were treated as being one of degree rather than kind with differences marked by a few variables: depth, slope and channel width. By the final decades of the nineteenth century, however, increasing river volatility brought to the fore the need to grasp rivers as geological and biological entities. Rivers now were viewed as principally being part of the rhythm of the

atmospheric ocean — the Indian monsoon — and seasonal fluvial highways carrying soil, silt, vegetation, sediment, muscle, fin, ova and fish. Rivers were no longer mere adjuncts to land but a force shaping geographical possibilities and unleashing ecological potential.

My presentation by drawing upon the French philosopher Henri Bergson's notion of élan vital will argue that upon treating rivers as an explosive biological and geological force, one is compelled to reconsider the project of environmental history itself: as the study of environmental dynamism with geography being a problem of time.

Keywords	WATER , ENVIRONMENTAL HISTORY OF SOUTH ASIA, TIME, RIVERS
----------	---

Paper ID	034
Author(s)	Gillian G Tan
Title	Culture and myth in the multiple temporalities of Asian river histories
Abstract	

## **Abstract**

Temporality is associated with expressions of time, both as understood within articulated frameworks and as directly experienced. In a framework that sequences events chronologically, temporality assumes a linear character with clear distinctions of past, present, and future. When one turns to direct experiences of affective dimensions, expressions of temporality become less clear-cut. Aspects of linear time undoubtedly continue but are often subsumed by a present that simultaneously experiences its past and future in the here and now. Statements on temporality have been explored by many thinkers; this presentation draws on contributions from the discipline of anthropology, notably Gell's distinction between A-series time, namely time understood according to past/present/future, and B-series time, namely time experienced as before/after.

In light of these, this presentation considers how myths are often told as ways to recount the origin and history of a cultural group. Through re-telling, myths blur certain distinctions in frameworks of temporality and overturn linear time. Drawing on myths of different cultures, including Tibetans of the high plateau, this paper suggests that culture plays a shaping role in how temporality is understood and experienced, and that this – in turn – shapes the cultures of history that may be found.

Keywords	Temporality, myth, Tibetan plateau