

Water as a 'Moral' Relation: Riparian Solidarity and Volumetric Sovereignty along Laos's Highland Rivers

Jerome Whittington

Abstract

This paper looks at emergent forms of life at the shifting, unstable boundaries between water and land along highland rivers in Laos. Tributary rivers of the Mekong basin have figured into many regimes of social and political life over the last several centuries, but in widely divergent ways. Nationalist hydro projects in the 1960s became a signature of post-war modernization, offering a characteristic image or paradigm of the quite literal naturalization of the state within an energetic assemblage. Yet if the nation state is built on forms of imaginative solidarity, including the energetic solidarity of large hydropower, then I wonder what forms of solidarity or commitment might be forged in construing water in terms of its plurality and distinctiveness. Using Franck Billé's notion of volumetric sovereignty, I describe the nationalist imaginative relation with water as based on a commitment to a volume that occupies a gravitational topology defined by the watershed. By contrast, one might describe waters in the plural by paying attention to their wide-ranging, distinctive capacities, phases and characteristics, water's qualities rather than its quantities, to help capture the dynamism of living along Laos's lively rivers. Large dams, even relatively modest ones, enact many orders of magnitude greater extraction from riparian flows than even the largest of the earlier hydrological regimes, with substantial consequences for the qualities of water and the relations between people, water and land in the riparian zone. Following the discussion of volumetric sovereignty, I trace diverse riparian relations from the upper watershed forming the border with Vietnam as the rivers descend through a hydropower project to the Mekong river forming the border with Thailand. If water is not primarily a volumetric abstraction, not one thing but many, if water is received as one might receive a person who is their own distinct being, then I am reminded of Marcel Mauss's important lesson that the person is a moral category, not a biological or psychological entity. I try to think about 'moral' commitments to water in an affirmative mode as a category of practical reason or agentive action, in which the ability to act in meaningful ways places obligations on the subject and helps make people who they are. 'Riparian solidarity' (cf. Oguz) in an affirmative mode might be an alternative to emphasizing violent environments, a theme that has recently been in vogue in anthropology.

Introduction

Trajectories of hydropower

Tendency to think of water generically as a mass noun, volumetric abstraction. Phases of water; volume and quality; water vs waters; margins between wet and dry (edge effects), erosion, suspended solids, sediment.

Problematic of commitment or solidarity as a 'moral' relation; not felt emotion per se but eminently affective; contrast with violent environments debates. Thinking about people who have long-term highly embodied and skilled relations with nonhumans. Solidarity as refusal of betrayal. Riparian solidarity. The term violence has a flat quality; there are other ways of identifying harm as well as people's capacities to respond to harm.

Waters as historically neglected research topic in SE Asia due to fixation on peasantry and farming; fisheries specialists; “living aquatic resources;” kids who fish; state misrecognition of the social value of rivers.

Production of difference (orders of magnitude); volumetric sovereignty.

A few scholars I’m in dialogue with – Paprocki, Oguz, Mostafanezhad

Two arguments I’m not making: that Lao people consider rivers to be persons; that morality is a function of a code of right and wrong (*moralitas*, ‘manner, character, proper behavior;’ cf. *damma*).

I. Background

Watershed

The watershed in question runs from the Annamite Ridge (forming Laos’s eastern border with Vietnam) to the Mekong River (forming the western border with Thailand). Lao conceptions of riparian space do not map cleanly onto the concept of watershed. The watershed is the basic unit of governance and engineering intervention. Trans-basin hydropower schemes.

Social setting and multiethnic context; limitations

Hydropower projects suture across multiple social and territorial domains, here involving at least three major languages from three language families. Lao as language of the nation-state. At least four distinct administrative zones. My research was focused on the hydropower company’s internal process.

THHP; impoundment and transbasin diversion

THHP involved an existing project plus active development of a major expansion in the planning stage (now completed and operational). Topography and capture of the greatest volume of water are the central diacritic. Existing project channeled water ~6km beneath a mountain ridge to an adjacent watershed, hence suturing two watersheds into a novel, single landscape. Defining features are hydro-geomorphological (erosion-flooding).

II. Volumetric sovereignty

Nation-state and Nature

Project level risk management maps core obligations of the state in terms of natural resource concessions; royalties; political risk guarantees; environmental management (governance of affected people); power purchasing agreement. Neoliberal arrangements have privatized env management in the positive sense (governmentality) while the state maintains the negative (discipline, repression). There are many examples of states’ guarantee of availability/cost for energy, e.g. maillot jaune protests in France.

Hydrological cycle and geomorphic scales

River basin/subcontinental; watershed/tributary; and increasingly Anthropocene scale form critical governing knowledges. A great many settlements are located at the confluence of smaller and larger streams or rivers. Ban Pak Kading as a “port city.”

Volume and Hydropower

What makes a river significant from an energy standpoint is simply the volume of water multiplied by the elevation difference (head pressure).

Turning away from rivers -> roads

A dominant social trend associated with modernity or modernization is turning away from living along rivers toward living along roads.

III. Highland Waters

Mist-fog atmospheres

Military administration, logging and resettlement

Concentrated flows

Concentrated flows seek to harvest gravitational energy, usually for Vietnamese-made 100w power generators. Some water-based threshing devices can be found.

Micro-impoundments; diversions; traps; isolated flows

Small weirs abound, for fishing or irrigation diversion, village uses such as washing and watering gardens, and promotion of aquatic resources. Paddy is a whole ecosystem. Microtraps for small animals. Isolating clear water for drinking as a material practice.

Transportation

Metal vs wooden boats. Transportation is expensive. Pleasure and skill, control of access. Tracks versus roads.

Erosion and sediment loads

Landslips, logging, roads. The stunning water quality of the upper watershed is thrown into relief as one moves closer to the hydro reservoir.

A new hydro regime

The difficulty of assessing topography and rainfall, the two key factors for hydropower. The risk posed by karst.

IV. Impounded Waters

Not a river, not really a lake either

The phase shift from river to impoundment

Murky backwaters, no access

The dam modifies upstream flow with a preponderant effect on smaller streams that now turn into murky backwaters. Access via former riverbanks is extremely difficult; gardens are lost; fishing curtailed; water supply impaired. The reservoir is largely unusable/unused.

Erosion

Because erosion impacts the viability of the dam, curtailing certain farming practices is a key priority for the hydropower company. "Permanent swidden" and "paddy style" as instances of the multiplier effect of the sustainability enclave. Confluence of state and privatized development. Obligatory development as an outcome of the broken relation to water.

Minimum Downstream Release

Volumetric sovereignty shows its asymmetrical importance in the struggle over MDR. Aquatic weeds, pervasive sandbars, lowered water table, the problem for ichthyologists.

V. Conjoined Rivers

Newly channeling a large amount of water into a small river channel has long term geomorphological effects. The most severe impacts are here. Fundamentally constrained ecological conditions for some 20,000 people, but while this is a matter of ecological limits this is not a strictly deterministic relation.

Water-land edges and margins

Edges and margins (spatial and temporal) provide all kinds of complexity. Temporal margins include seasonally flooded forests or spawning events in smaller streams. Spatial margins include smaller streams, wetlands or paddy fields, which have their own distinctive ecology. Many of these are sites of small scale practices that play under-recognized roles, such as children fishing for small aquatic resources or senior power company staff who bond over nature excursions.

Seasonal versus daily flow oscillations

Geomorphological change can be understood at multiple timescales, from longue duree directional changes when a river channel must change to accommodate a new hydrological regime, to seasonal and diurnal volumetric oscillations. Linked to energy consumption habits in Thailand, daily fluctuations associated with dry season peaking power generation play a particularly important role. Riverbank erosion leads to sharp banks very different from established riparian edges and the river has become much wider and shallower. It is unclear what timescale will lead to an established riparian regime, but probably >100 years. I discuss the two more prominent effects.

Riverbed Sediment Load

The riparian ecology depends on small rapids, riffles and deep pools for different kinds of habitat. Erosion deposits soil, sand and gravel in the river in three forms: suspended solids, dissolved minerals and riverbed sediment load. Tons of gravel and sand moving down the river smother these morphological features, while the volume and speed of the water make conventional fishing techniques useless. Suspended solids sharply reduce photosynthesis. Conventionally, fishing zones were subject to important collective resource agreements that have also been eroded by population flows related to the hydropower project.

Ambiguous Land-Water Boundaries

“Risky paddy” as a neologism that identifies the ambiguities of land-water relations during the monsoon.

VI. Conclusion: We’ve reached the Mekong

The imagined community of the nation-state also includes specific imaginative relations to nature in the form of resource concessions, royalties, debt obligations and power purchasing commitments, all of which require legal guarantees.

In many cases, the new ecological regime takes the form of not being able to do something that was previously important and valued (even if that value is not adequately recognized). People have to recompose their lives.

Paper outline Jan 26 2023

Something like commitment to water or solidarity with water implies the distinctiveness of both persons and waters. Contrast again with violent environments.

Paprocki discusses viability as a critical capacity for some form of thriving existence. This is not limited to survival (Tsing) or to endurance (Povinelli), although it is clearly in the same realm as these important discussions. I emphasize the reconstruction of an affirmative way of being and a new relation to living environments, akin to what Canguilhem calls 'knowledge of life'.