

**Past-futures in the Magdalena River basin, Colombia:
Political ecologies of hydropower development.**

Abstract: Abstract: My Ph.D. project analyzes the historical transformation of Colombia's most important river into an active hydropower frontier, the reworkings of the water-food-energy relations it has made possible, and the ongoing, multi-sited power struggles to define the river's future. It is informed by my previous research experience carried out between 2016-2017 on the conflicting forms of territoriality produced in cooperation, negotiation, and dispute between the Colombian government and Colombian agrarian movements. My CLAS Summer Research objective was to carry out an exploration of the historical underpinnings and legacies of the upper Magdalena river's first-built dam, the Betania Hydropower Dam (BHD). Originally, my research plan involved ethnographic methods and on-site archival research. It had to be adjusted to cope with the international air travel suspension and other disturbances brought about by the COVID-19 crises. Reimagining my methods and my questions to reflect my research objectives while operating entirely online was a challenging Summer-long endeavor. Thanks to the guidance of so many wonderfully scholars and researchers and to the generous support provided of the CLAS Summer Research Grant, from May to August 2020 I devoted my time to analyze the 1993 documentary "50 años de historia para una sola realidad", in which the Central Hidroeléctrica de Betania, developer of the BHD, provides a unique insight into the intermingled dynamics of the dam construction and the planning of future hydropower projects in the region. I tracked the sources of information assembled in the video and teased out their historicity and specific temporalities. In doing so, I gained a nuanced perspective on the expectations, disputes, and legacies of the construction of the BHD from the perspective of its main actors. I have recently presented my CLAS-sponsored Summer research findings in the monthly panel "Designing the World: Ethnographies of infrastructure, space and power", where I received generous commentaries and insightful suggestions about where to direct my future inquiries.

Report: A striking geo-political feature characterizes current global energy transition efforts: while large dams are being dismantled and discouraged in Europe and North-America, the conditions for the expansion of the hydropower sector are being laid down in South East Asia, Central Africa, and South America. The Magdalena river, South America's sixth greatest and Colombia's most important river, sits in one of the most active hydropower frontiers of the continent. It accounts for a 50-year long history of dam building, has long-standing plans for building 17 new dams, and is a complex socio-environmental assemblage that sustains more than 39 million people. My Ph.D. project analyzes the historical transformation of Colombia's most important river into an active hydropower frontier, the reworkings of the water-food-energy relations it has made possible, and the ongoing, multi-sited power struggles to define the river's future. It takes 1950 as a starting point to explore how the entanglements between development paradigms, hydropower infrastructure, and regional agricultural ventures shape and are shaped by peasant movement networks, customary uses of the river, and local landscapes. Now that world-wide concerns about energy transitions are paired with climate change and environmental justice concerns, a retrospective analysis of the processes at play in the making of hydropower frontiers like the Magdalena River will provide a vital perspective on the trade-offs implied in contemporary hydropower-driven development policies.

My original CLAS Summer Research Grant plan was to carry out an exploration of the historical underpinnings and legacies of the upper Magdalena river's first-built dam, the Betania Hydropower Dam (BHD). My main objective was to understand the expectations, disputes, and legacies of the construction of the BHD in the Upper Magdalena River from the perspective of the developers of the

project and the affected peasant communities of the region. The original research planned involved a mix of qualitative methods geared towards gathering empirical data on BHD's official plans, debates, and projections from regional archives, as well as local inhabitant's expectations and contestation of the dam project collected through semi-structured interviews. Understanding the historical underpinnings from which the BHD emerged, and the disputes over the river's future it gave rise to, seemed to me a natural first step towards explaining the historical drivers that turned the Magdalena River basin into the place where the conditions for a new hydropower infrastructure rush are being laid down and contested.

Nonetheless, as the 2020 was just too ready to confirm, every plan is an approximation to what would happen under ideal conditions, and my research plan had to be adjusted to cope with the international air travel suspension and the UC Berkeley's suspension of any non-essential in-person research brought about by the COVID-19 crises. Reimagining my methods and my questions to reflect my research objectives while operating entirely at a distance was a challenging research-long endeavor. Under the supervision of the Doctor Michael Mascarenhas, director of the Critical Environmental Justice Lab and my advisor, I narrowed down my research methods exclusively to their archival research component and redirected my ethnographic question to be answered based on that method only. During the development of my adjusted research plan, Becky Miller, the Natural Resources and Environmental Sciences librarian, and Liladhar R. Pendse, librarian for Latin American Collections, both from UC Berkeley, provided me with timely and dedicated trainings in online archive sources identification and search strategies. Also, professors Simon Uribe and Sandra Botero from Universidad del Rosario, Colombia, diligently guided me through some of the [Colombian National Archives](#) and repositories available online, and provided me with strategies for organizing archival research materials. Finally, thanks to my long-standing relationships with some of the region's inhabitants, I was introduced to Misael Kuan, Ph.D. History student in the Universidad de Los Andes, Colombia, who was born in Pitalito, a town located a few hours upstream from the BHD, and Andrés Cabrera, a local historian born in Yaguará, one of the towns flooded by the BHD, who runs the Facebook website Memoria Colectiva de Yaguará. Misael and Andrés directed me to the [Revista Academia Huilense de Historia](#), an outstanding source of regional historiography available online, and in extensive zoom sessions helped me to understand the [timeline of the BDH's conflictive construction](#) developed by the Universidad Nacional de Colombia. Andrés even provided me with pdfs from some of the archival material he has gathered during the last 10 years and that he has not made available online yet.

Thanks to the guidance of so many wonderfully scholars and researchers and to the generous support provided of the CLAS Summer Research Grant, from May to August 2020 I devoted my time to analyze the 1993 documentary "[50 años de historia para una sola realidad](#)". In it, the Central Hidroeléctrica de Betania (CHB), developer of the BHD, provides a unique insight into the intermingled dynamics of the BHD construction and the planning of future hydropower projects that laid the foundations, 50 years ago, of a prevalent understanding of the upper Magdalena river as region endowed with an untapped hydropower potential. I focused my attention not only in the different narrative resources employed to produce a specific representation of the dam's history and the future of hydropower development in the region, but specially, in the different sources of information the video assembled and aligned to produce a coherent version of such history. I teased out the historicity and specific temporalities embedded in the video's allusions to the river's water as a present from God, a long standing medieval trope; the history behind the video's most important pieces of footage, which I found out were archival materials extracted from a forgotten video produced about the BHD during its construction process; and the temporal dimensions present in the lists of future hydropower projects, in

itself a regional tradition with several iterations starting before the BHD inceptions and extending as recently as 2013, when the most recent future-list was produced by Chinese companies. My findings have been documented in a preliminary research report on the historicity and temporalities of the upper Magdalena river's hydropower frontier based as seen through the lenses of the BHD construction. I presented such findings the 24th of September 2020 in one of the sessions of the monthly panel "Designing the World: Ethnographies of infrastructure, space and power", coordinated by Professors Simón Uribe and Alejandro Camargo, where I received generous commentaries and insightful suggestions about where to direct my future inquiries.