#### The University of Chicago

## **Depths of Locality**

# Narrative Complexity and Discourse Stratification in Oaxaca's Water Crisis

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#### **Abstract**

I use the case of Oaxaca's water crisis to explore how development organizations engage with local water problems, what kind of projects they propose, and the degree to which they engage with local actors and context-specific knowledge. I analyze sources across three levels of development discourse production—local, national, and international—to examine the narratives surrounding Oaxaca's water crisis and draw out discrepancies between discourse scales. I find that local sources present the most complex narratives, while international sources flatten Oaxaca's water crisis into a technical problem. National sources fall in between, and individual source outliers shed light on nuances and intersections within and between discourse scales. I argue that international sources exhibit significantly less narrative complexity than local sources, falling short of capturing the realities on the ground and reproducing flattened depictions of Oaxaca's water problem. This thesis contributes to empirical and theoretical understandings of narrative complexity and development discourse and offers novel insights into how narrative complexity and flattening fit into the paradigm of development shortfalls in Oaxaca's water crisis.

**Keywords:** Narrative Complexity, International Development, Discourse, Water, Mexico, Local Agency, Oaxaca, Water Crisis, World Bank

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#### Introduction

Oaxaca City's famous Xochimilco Aqueduct, once a beacon of life overflowing with fresh water and surrounded by lush greenery, today stands bone dry—a stark symbol of Oaxaca's ongoing water crisis. Oaxaca's water crisis has persisted through decades of international development interventions, including large-scale infrastructure projects funded by institutions like the World Bank, which overlook local realities in favor of progress metrics.

My thesis asks: How do development discourses at various scales—local, national, and international—frame Oaxaca's water problem? What narrative strategies do they use, and to what extent do these varied strategies overlap?

These questions grapple with a fundamental issue in international development: the power of narrative. Development organizations often shape their interventions through discursive frameworks that prioritize expertise, funding mechanisms, and uniform standards (Ferguson 1990). To justify any intervention, development actors must construct a narrative, or discursive framing, which paints the proposed solution and process as beneficial, well-fitted, and cost-effective. But development organizations in recipient locations are fundamentally external actors, and fully understanding local realities is a time-consuming and costly process. Juggling bureaucratic efficiency and local needs, development institutions often recycle previous intervention mechanisms, flattening and molding the local reality to fit the proposed solution instead of molding the solution to fit the local situation. These constructed narratives and external frameworks, solutions, and governance models reinforce the disconnect between local realities and development practices.

Oaxaca faces a severe water problem, and both local and international actors are calling for change through development. By studying how narrative complexity appears in discourse on

international development, I aim to uncover the gaps in narrative that are disseminated and woven into program implementation and wider discussions on development projects. I unpack the role of narrative framing in Oaxaca's water crisis and explore its role in tangible policy interventions like the 2014 World Bank loan to Oaxaca, which local sources cite as a complete failure to improve the state's water security (Bessi & Navarro 2021). Drawing upon local narratives and sources throughout my work, I point specifically to shortcomings in development narratives including the lack of contextual problem diagnosis, overreliance on external technical solutions, and exclusion of local knowledge and lack of community involvement in water management. Oaxaca's water crisis is as structural and political as it is environmental, yet interventions historically address infrastructure challenges and aim to increase water flow instead of acknowledging the political systems that perpetuate water inequality and worsening water insecurity. While externally centered narratives lack immediate local context, this context is communicated through local sources of discourse—development actors need only seek it out. The problem that prevents development projects from connecting the dots is the domination of external imposed narratives that propose technical solutions, often environmental projects or infrastructure development, which does not reflect the realities and needs of Oaxaca's water crisis. I argue that international development discourses of local problems lack local nuance and operate with myopic understandings of local realities that obscure the context on the ground.

Oaxaca's water crisis demonstrates the harm of flattening complex narratives in favor of simplified approaches to development. Water is critical to Oaxaca's modern economy, especially its large agricultural sector and rapidly growing tourism industry, both of which exert significant strain on water resources (Greenwald 2024). Addressing these intersecting challenges, local narratives in Oaxaca produce vibrant, multifaceted, and complex understandings of the political

and structural dimensions of the water crisis. But because development projects rarely engage with locals—and, when they do, it is commonly the local elite who do not experience the water crisis to the same extent as the general public—this local context and knowledge is all but ignored in modern development projects, and despite international funding, water insecurity in Oaxaca has worsened (Bruce 2024).

Oaxaca is not just a fruitful case to study because of its unique structure, intersectional impacts, and aid history, but also because the city's 300,000 inhabitants face constant water shortages and are often left without water for days or even weeks at a time. Most scholarship on Mexico's water crises focuses on Mexico City, in part because its population dwarfs that of other states including Oaxaca (Chen & Bilton 2022). While this research is valuable, it often overlooks the depth and urgency of crises unfolding in smaller, under-researched regions like Oaxaca. The situation in Oaxaca is not peripheral; it is central to understanding the intersections of development, locality, narrative, and nuance. Oaxaca's water crisis is killing people, and positive change is long overdue.

By examining how the city's water crisis has been narratively constructed by local, national, and international actors, my research contributes to broader critiques of the epistemological dominance of imposed development narratives and paradigms. Additionally, my work builds toward alternative development approaches including community-led programs and collaborations that better address the local complexity of water crises in Oaxaca and across the globe.

In this study I identify three key levels of discourse production on Oaxaca's water crisis: local, national, and international. I collect and systematically analyze sources from each scale of discourse production, applying a set of diagnostic questions to each source and scoring it across three thematic categories: problem construction, solution proposals, and presentation of local

agency. By applying a multilevel qualitative content analysis methodology, I uncover the key gaps in narrative complexity and trends across sources in each level of discourse production. My work sheds light on macro-level patterns in narrative complexity, as well as individual source variability by unpacking outlying sources in each tier.

I begin with key background information in What's the Problem? A Brief History and Context of Oaxaca's Water Security, drawing out the structural and political dimensions inside the "wicked" water problem and introduce a grounding case in <a href="The 'Zombie' Dam: Local">The 'Zombie' Dam: Local</a> Narratives Opposing the Paso Ancho Dam Project. I then move into a substantive literature review in Toward a Narrative Framing of International Development. I center the formation of development narratives and pervasion into development practice in <a href="Global Narratives">Global Narratives</a> of Development: Theoretical Foundations, then draw upon work in development bureaucracy to unpack the integration of development narratives into tiers of development discourse in <a href="Institutional and Bureaucratic Narratives: Local Knowledge & The In-Between of Development">Institutional and Bureaucratic Narratives: Local Knowledge & The In-Between of Development</a>. Narrowing my focus to ground-level development perspectives, in <a href="Beyond Binaries: Local Narratives & Vernacular Modernity">Beyond Binaries: Local Narratives & Vernacular Modernity</a> I dig into the nuance of local narratives to ground my understanding of "local realities" in Oaxaca, then conclude the literature review in <a href="Theoretical">Theoretical</a> Synthesis: Narrative Stratification & Failure.

After synthesizing the literature at the foundation of my argument, I move to a discussion of my methodology in **Methodological Tools to Approach Narrative Complexity**. I apply content analysis methods with a multi-level methodology investigating international, national, and local sources, thematically coding each source in three categories: problem construction, solution proposal, and local engagement. I delineate my scoring system using a qualitative rubric and use specific source extractions as examples of each score, while noting methodological limitations in

Limitations, Biases, and Positionality at Work in Content Analysis. In Analysis and Empirical Results: Stratified Narrative Complexity? I compile and analyze my results, then offer global insights in Trends and Patterns in Narrative Complexity. I demonstrate higher narrative complexity among local sources than national and international source, then dig into the nuance across scales in Deeper Takes: Outliers and Individual Source Analysis. I apply these trends and empirical findings to the broader theoretical conversation on international development in Theoretical Contributions: Who Acts in Discourse Production?, situating my work within development theory and valuably extending the conversation with my own argument and adding key context in Incomplete, Not Entirely Ignorant: A Clarification on International Narratives. I discuss the implications of my findings on development theory and policy in Implications of Scalar Narrative Misalignment on Development Practice. Finally, in Where Do We Go From Here? The Future of International Development in Oaxaca I recenter my research question and motivations and summarize each section of the thesis, ultimately calling for a better understanding of narrative complexity across development discourse.

#### What's the Problem? A Brief History and Context of Oaxaca's Water Security

In the state of Oaxaca, 15 of every 100 people lack access to piped water delivery systems (Mejía Reyes 2025). This statistic, while startling, does not capture the full magnitude of the water crisis—those with access to piped water delivery frequently wait more than 30 or 40 days for deliveries to arrive, leaving thousands of Oaxacans regularly facing not just water shortages, but water outages (Mejía Reyes 2025). The realities of the water crisis today result from a long history of water insecurity in Oaxaca, but today's water crisis is a collision of historical, political, and social dimensions. While an exhaustive review of the water crisis is out of scope for this study, in

this section I aim to provide key context and indicate the complexity of Oaxaca's water crisis. From the empty Xochimilco aquifer to the month-long gaps between water deliveries, the current state of the water crisis is critical. This problem is not purely a result of Oaxaca's geography—it is deeply tied to economic, political, and social factors. To appreciate the full weight of Oaxaca's water challenges, we must first understand the city's centuries-old relationship with water.

#### The Wicked Problem of Water in Oaxaca

In the pre-Columbian period, Oaxaca's water supply was managed by indigenous communities and local systems, but colonization, development, and centralized governance gradually shifted these practices toward modern systems. Because Oaxaca is a semi-arid climate at high elevation, water scarcity has long been a problem in the region. But the water supply used to be relatively plentiful, enough to sustain life in Oaxaca for centuries with two major rivers flowing through the valley: the Atoyac and the Jalatlaco (Kinzer 2013). The Jalatlaco, contaminated by industrial production in the mid-19<sup>th</sup> century, was paved over and now flows only underground (Kinzer 2013). The Xochimilco aqueduct, built in the 18<sup>th</sup> century during the Spanish colonial period, provided drinking water to the city center until the mid-20<sup>th</sup> century. But urbanization and modernization projects were too much for the existing water infrastructure, and the aqueduct fell into disrepair. Now, Oaxaca's water primarily comes via trucks from Etla, a town about 17 miles from the city (Kinzer 2013). The sheer distance of delivery, paired with Etla's inability to sustainably supply water to the city's high population, creates a vicious cycle of reliant insecurity.

While Oaxaca's water problem is rooted in its geography and urban development, simple modernization processes do not explain Oaxaca's exponential progress toward a severe water

crisis—to understand, we must look underneath the city itself, to Oaxaca's groundwater. Groundwater is a major component of the water cycle and a vital source of fresh water, but increasing groundwater demand has caused massive rates of groundwater depletion in Oaxaca's Central Valleys (Olivares et al., 2019). The two key drivers of groundwater depletion in the region are agriculture and population growth. More than 80 percent of Oaxaca's groundwater is used for agriculture, and between 1984 and 2010, the region's population nearly doubled (Olivares et al., 2019). Urbanization accompanies population growth as a secondary driver of water stress, heightening water consumption to support not only increasing human demands but also increasing development and construction uses (Olivares et al., 2019). If agriculture was primarily rainfed or superficially irrigated, Oaxaca's relationship with water would look very different. But as it stands today, Oaxaca's massive agricultural industry and growing population mark the key difference between the pre-Columbian plentiful water supply and the modern water problem.

Groundwater depletion is at the root of the water crisis, but Oaxaca's wicked water problem is built on a complex pile of economic, political, and structural factors. A key driver of the problem is Oaxaca's rapidly growing tourism sector. Tourism artificially inflates the already sky-high population growth in Oaxaca, further exacerbating the pressure of more cups to fill. Since 2020, the city of Oaxaca has seen a 77 percent rise in tourism (Greenwald 2024). This surge in tourism increases water demand across hotels, restaurants, and other tourism-focused facilities. Already struggling to manage its growing local population, Oaxaca's water supply must now accommodate over 190,000 hotel and motel rooms and short-term tourist accommodations (Greenwald 2024). Because tourists can typically pay higher prices for water access, this increasing demand massively decreases water availability for local communities (Greenwald 2024). Hotels fill pools with water while locals struggle to access a day's supply of drinking water.

But herein lies the wicked economic problem: the very same stressors of the water problem, agriculture and tourism, are also among the highest employing industries in Oaxaca. Agriculture alone employs nearly 30 percent of workers in the state ("Oaxaca: Economy" 2024). Tourism jobs make up another 9 percent of workers ("Oaxaca: Economy" 2024). This means that targeting these high-water-consumption industries would exert massive negative effects—unemployment, loss of exports, and general economic downfall—on the very people that should be helped by solutions for the water problem. This economic impasse exemplifies the nuance and wickedness within Oaxaca's water problem, and economics are only a single layer of the complex crisis.

Political factors, specifically political incentives and motivations for water sector improvement, are a key piece of Oaxaca's water puzzle. One key feature distorting long-term water management is the constitutional ban on gubernatorial reelection, which decenters leaders' incentives for building enduring solutions. In Mexico, governors are barred from seeking reelection past their one, six-year term (Zissis 2022). Thus, the governor of Oaxaca lacks a political incentive to undertake the unwieldy and challenging search for a sustainable solution to the water crisis, instead often opting for "beautifications" and surface-level changes that ensure political visibility and a generally positive political legacy. Of course, many political systems within Mexico and globally limit election terms, and gubernatorial practices are not the solitary cause of the water problem. But structural and political shortcomings are amplified in the context of a water crisis, and the persistence of the water crisis implicates every aspect of the surrounding system. Additional political obstacles including overly centralized water delivery systems and a lack of accountability within water management contribute to the repeated failure of the local governance system in Oaxaca to mitigate the local water problem (Mejía Reyes 2025).

Economic, political, and social factors collide to construct Oaxaca's wicked water problem. And though local sources note each driver of the crisis, the causes are not directly addressed. Tourism in Oaxaca is still rising, carrying its own set of disruptions and challenges in addition to pressure on water systems. Gentrification and tourism catering pushes local communities further out of prioritization when it comes to water systems. Agricultural exports are the backbone of Oaxaca's economy, leading to tantamount groundwater depletion. The numerous drivers of the water crisis far exceed this short review, and more literature documenting the relationship between politics and water as well as the adverse impacts of tourism in Oaxaca is critical to supporting a broad understanding of the water crisis. But each aspect of the wicked problem of Oaxaca's water crisis is understood by local sources—the narratives and framings of these problem dimensions are as important to this research as the problem itself.

#### The 'Zombie' Dam: Local Narratives Opposing the Paso Ancho Dam Project

To better understand different development narratives on the ground in Oaxaca, I draw upon the case of the Paso Ancho dam project. Initially proposed more than a decade ago, the Paso Ancho dam was created to provide greater water access to residents of Oaxaca City. But in 2014, the project was shut down because of its high costs, harmful environmental impact, and failure to secure the correct land use permits for dam construction ("Paso Ancho Dam" 2025). In 2024, the government of Oaxaca announced the return of the project as part of a historic National Water Plan including 17 water infrastructure projects throughout Mexico ("Federal Government" 2025). But this "revitalized" project is widely opposed by Oaxacan locals, with some terming it a "zombie project" because it was brought back to life after more than a decade ("Paso Ancho Dam" 2025). Oaxacan congressman Nezahualcóyotl Salvatierra López touts the dam as "the solution to

definitively address water in the metropolitan area in the long term" (Frabes 2024). But there is a clear narrative fragmentation between local government officials and the broader local population. Local blogs and newspapers criticize the dam project both for its high construction costs and the failure to consult and inform the local communities (Frabes 2024). When the project was confirmed, there was no public information on its location, its interference in existing municipal water structures, or its impacts on downstream communities (Frabes 2024).

Though local voices loudly oppose the dam, construction will begin this year with more than 1 billion pesos (49,278,586 USD) invested to build a 100-kilometer aqueduct to transport 1,100 liters of water every second ("Paso Ancho Dam" 2025). This project is part of Mexico's national water plan but will be carried out by the government of Oaxaca, emphasizing the scaled realities of development in Oaxaca. Discussed and planned at the national level, then implemented by the state government, the dam project exemplifies the in-group discrepancies of development narratives. Oaxacan government officials are certainly part of the "local" community in Oaxaca but their narratives markedly differ from the broader Oaxacan society. This disagreement illuminates the power dynamics at play—while the dam is not supported by the very people it is intended to benefit, it is nevertheless implemented by governmental actors. The Paso Ancho dam project, which I return to throughout my study, is a prime example of the power dynamics and narrative flattening in development projects. The various levels of discourse production are present in the Paso Ancho dam conversation, highlighting not only a scalar difference in narrative but also a disagreement within the "local" which draws out the nuance of local knowledge and local narratives. The future of the dam project is uncertain, but even in its early stages it provides key insight into development and narratives in Oaxaca.

#### **Toward a Narrative Framing of International Development**

#### Global Narratives of Development: Theoretical Foundations

The concept of narratives in international development intervention is not new, and my work is contextualized by a wealth of development research establishing development as not just a physical process but as a discourse which constructs problems and solutions to privilege certain views and actors while obscuring others (Escobar 2012, xviii; Mitchell 2002). This discourse props up the notion of development itself and paints countries as controllable, responsive, and impartial, constructing what Ferguson (1990) deems the "anti-politics machine." Ferguson defines the antipolitics machine as a "machine for reinforcing and expanding the exercise of bureaucratic state power" (Ferguson 1990, 251). He critiques development intervention in Lesotho, problematizing the reduction of poverty to a technical problem without considering its deep political aspects (Ferguson 1990, 252). Ferguson's landmark study also discusses how the formation of the "intelligible field" for intervention demands the exact intervention that external experts and state bureaucracies can offer, meaning that the identification of a problem to be solved is directly tied to the diagnosis, prescription, and implementation of the solution to that problem. Throughout this process, problems are stripped of their local context, politicized nature, and complex reality, traded instead for a flattened and mechanicalized version attuned for external intervention. The same processes are at work in Oaxaca's water problem, marking the relevance of Ferguson's work in my own study.

Tania Murray-Li extends Ferguson's argument with her work on the operation of "rendering technical" (2007, 123). Utilizing a close analysis of development documents, she reveals how imposed development programs identify and bound a problem to fit their standards, then digs into the gaps between the reality on the ground and the reality described by programmatic

documents (Murray-Li 2007, 124). She names migration, corruption, and illegal activities as examples of knowledge excluded from plans devised by external development actors as a result of this technical, bounded framework (Murray-Li 2007, 154). Murray-Li builds upon Ferguson's theory of depoliticized development, arguing that the diagnosis of a problem is fundamentally flawed when key economic and political processes are excluded from the foundations of development projects (2007, 18). Ferguson and Murray-Li's theories of development build the primary theoretical foundation upon which I construct an understanding of development in Oaxaca's water crisis. I extend this foundation to investigate the permeation of development narratives into different levels of development discourse, applying my theoretically-informed approach to content analysis of sources.

Global work on international development seeks to understand how realities diverge between development sites and development projects. Arturo Escobar (2012) takes issue with the repeated failures of development to effect positive change for people, noting the fundamental misalignment of reality and studying "how certain representations become dominant and shape indelibly the ways in which reality is imagined and acted upon" (Escobar 2012, 5). He breaks development down into three axes: the knowledge which brings it into being, the systems of power which inform its practice, and the subjectivities within its discourse (Escobar 2012, 10). Escobar's research forms a critical bridge between Ferguson and Murray-Li's work and the concept of development discourse, the focal point of my own work.

Rationalizations and assumptions of need are woven into development discourse, creating theoretical and practical justifications for development initiatives which actively harm host communities (Lansing 2006; Santos 2006). Alongside direct positioning of problems and solutions in development interventions, language too plays a key role in constructing narratives of Western

knowledge and superiority (Mueller 1991). Tania Murray-Li's close reading of development documents exemplifies the impact of language and rhetoric in forming not just reports on the development projects but also the narratives surrounding the projects themselves (123). Narratives are not simply externalized tools which communicate project objectives, interventions, and outcomes to an international audience—they are key drivers of program design and implementation, shaping imposed development strategies and even local approaches to problems on the ground (Murray-Li 2007, 33). The realities of international narrative-constructing languages in Oaxaca's case are as simple as framing water crises as technical challenges which can be solved with broad strokes top-down interventions rather than political and social challenges that require intersecting and locally led changes to the economic and political fabric of Oaxaca. By narratively curating the perception of the problem and potential solutions, external actors like the World Bank seamlessly adopt a reality wherein their proposed intervention is perfectly suited to the delineated problem. Narrative plays a key role in framing development discourse and practice, and narratives produced at an international scale exert pressure on other scalar narratives—the question motivating this project, then, is the impact of these narratives of local, national, and international projects and discourses.

While I take Ferguson and Murray-Li's work as the foundation from which to extend my own theoretical contributions later in this thesis, it is crucial to also foreground the gaps between these bastions of development discourse and my study of Oaxaca's water problem. One of these gaps is inherent to *water* problems—the nature of water itself. Andrea Ballestero's (2019) work on the technologal politics of water brings up the confounding nature of water: water is necessary to all life but is neither guaranteed nor fixed, occupying a space between a right and a commodity (5). Ballestero's work in Costa Rica and Brazil draws out "how water is kept mattering through

the everyday bureaucratic and technical decisions whereby its very materiality is at stake" (Ballestero 2019, 5). In the context of Oaxaca's water crisis, the stakes of these everyday decisions are sky-high. Water crises are unique to other development cases because water is by nature unwieldy—it moves through systems, both natural and manmade, in ways that are shared but can never truly be equal. Further, water maintains a distinct uncontrollable nature, which limits the application of Ferguson and Murray-Li's grounded approaches to development intervention. For example, much of the local criticism of the Paso Ancho dam project problematizes the unknown and uncontrollable downstream effects of the dam's construction (Frabes 2024). Because water is unpredictable and uncontrollable, communities and settlements downstream face a vast swath of threats including drought, loss of ecological resources, flooding, and water pollution (Flores 2025). Development projects cannot perfectly control the flows of water, limiting the application of Ferguson and Murray-Li's approaches. Thus, I draw upon broader development literature to examine the controllable and bureaucratic aspects of Oaxaca's water problem, then center my analysis on local sources which inform my conclusions and theoretical contributions.

#### Institutional and Bureaucratic Narratives: Local Knowledge & The In-Between of Development

Underlying global narratives of international development are the key bureaucratic and hierarchical actors who carry out development: international organizations and development institutions. International actors wield development narratives which reflect and reinforce global power hierarchies, painting the Global South as a secondary region dependent on the expertise and aid of the Global North (Spivak 1988). A second dimension of this hierarchy sets local actors as less powerful than external actors, building out a hierarchical bureaucracy of actors and agents in development programs (Blomquist et al., 2005). Postcolonial critiques of development have

problematized Western hegemony, subjugated knowledge, and the oppression of the "subaltern" for decades (Spivak 1988; Chakrabarty 2009). In addition, literature has documented the exclusion of minoritized voices and women in development and ecological intervention across the globe (Shiva 1989). Literature also delineates the problems of ignoring local knowledge—including the water practices that have sustained life in Oaxaca for centuries—and washing over development with misinformed and obfuscating narratives. Local critics of the Paso Ancho dam project, for example, question why the development project was not permanently derailed when the local ecological authorities deemed the dam unfit and rejected the land use request in 2012 (Flores 2025). Instead of abiding the local rejection of the dam, authorities pushed their own narrative onto the project and continue to ignore the local disagreement. This case exemplifies the nuance of locality in development projects. My positionality as an external researcher limited to mostly English-language sources and unable to conduct on-site research means that I cannot perfectly capture local voices and realities in this thesis project. Thus, I instead use the concept of local knowledge.

Local knowledge is defined by Escobar (2012) as "something that exists in the 'minds' of individual persons...that [is] profoundly historical and relational" (204). I understand local knowledge as the reality that local people come to know based on lived experience, shared culture, and relationships with other people and the land. This is not exclusive of indigenous knowledge, as indigenous people are part of the local community, but I do not term it as *indigenous* in my work. In Oaxaca, *indigenous* as a concept is nationally and locally specific and may differ from other definitions and contexts. It is not simply an insider-outsider distinction, but is based in language, acculturation, and the politics of integration. Thus, attending to local knowledge in Oaxaca also appreciates the nuances of self-identification and sociocultural politics—adopting the broader category of local knowledge allows my work to include nuance without overemphasizing

categorization and group distinctions. I use local knowledge as a concept to encapsulate the knowledge produced by Oaxacan people. Importantly, I do not view this knowledge as something to be *extracted* or *conquered*, a common problem Escobar explains, but instead as knowledge which must be *understood* in a constant constructive process which includes local actors as leaders in development projects and values input from local communities (Escobar 2012, 204). I do not aim to fetishize local knowledge, nor to elevate it to a mystical level; instead, I aim to adopt Escobar's perspective on the concept and center knowledge which is experiential, contextualized, historically and culturally informed, and nuanced—I refer to this as local knowledge and local narratives. Ultimately, local narratives offer multi-layered understandings of the structural, social, and political drivers often absent from external discourse on Oaxaca's water crisis. The goal of including local knowledge is not to boil down this complexity to one *purely local* narrative on the water crisis—it is to embrace complexity and nuance, resisting the simplification that is evident in external framings of the crisis.

While local knowledge has long been discussed in development literature, it is not yet fully integrated into development practices and projects—the very places it should matter most. This echoes the a disconnect between development theory and practice. An apt example of how development projects informed by international and external narratives play out in Oaxaca is the 2014 World Bank loan to Oaxaca, titled *Mexico Oaxaca Water and Sanitation Sector Modernization*. This was a 55-million-dollar loan with objectives including institutional modernization, infrastructure development, and financial sustainability. According to the World Bank (2021), the loan would strengthen the capacity of state and municipal water utilities to deliver reliable services, expand access to potable water in both urban and rural areas, improv wastewater treatment coverage, and address financial inefficiencies to drive sustainable improvement (5). But

in practice, the loan failed entirely. Its professed objectives were not met, and Oaxaca's water security did not improve by any metrics (World Bank 2021). In fact, only 15 million of the originally promised 55 million dollars were ever disbursed to Oaxaca (World Bank 2021, 5). Worse, the money that Oaxaca did receive went toward placing water supply pipes in the mountains surrounding Oaxaca city which eventually burst and caused flooding in mountainside villages—emphasizing the uncontrollable nature of water and the real harm of top-down project implementation. How is it possible that one of the most influential international development organizations, informed by decades of scholastic critique, failed so spectacularly to accomplish any of its objectives in Oaxaca? This question inspires analysis of the underpinnings of development narratives which support uncontextualized, doomed interventions.

In this study I draw connections between narrative construction and local understandings in Oaxaca and investigate how narrative flattening pervades past development institutions into each tier of development discourse production. I argue that the failed loan exemplifies the faults of an external narrative which lacks insight into local realities, as well as the disconnect between development theory and development practice that explains the failure to incorporate academized concepts of local knowledge and narrative complexity in development projects. Even after decades of academic work on local knowledge, international organizations still construct narratives of superiority to justify intervention, and water crises persist and even worsen through decades of international development. To effect positive change in Oaxaca, the underpinnings of development themselves must appreciate locality. Thus, my work centers local sources and analyzes narrative complexity across scales of development discourse, calling attention to the discrepancies between each tier of discourse production. I ultimately aim to uncover the harmful limiting role played by falsely constructed narratives in development programs and move to adopt alternative

development frameworks which challenge dominant external narratives and integrate local knowledge to find new approaches to infrastructure challenges including Oaxaca's water crisis.

The second dimension of hierarchy in development occurs at the individual level; within each development project, there is a multiplicity of actors ranging from local people to external leaders. As evident in Oaxaca's World Bank development project, these actors are not equal in influence nor agency. While hierarchy, like problem diagnosis and solution implementation, is not uniform across all development contexts, it plays a key role in development projects because of the inherent elevation of external actors over local agents. This is particularly impactful given the differing motivations for actors at varying levels. Blomquist, Kemper, Ballestero, and Bhat (2005) dig into the role of participant motivation in water infrastructure development and management, noting the discrepancy between local actors motivated by real quality-of-life issues, civil society actors motivated by influence on decision-making and development programs, and external institutions motivated by control over key decisions, often tied to economic and regulatory impacts of water management (20). The authors note a subtle additional motivating factor for governmental and institutional actors—the desire to turn individual projects into a holistic management strategy across a regional or national context (21). This understated factor is evident in Oaxaca's case, where regional water management actors are beholden to a national agenda within CONAGUA, exemplified by the uniform implementation of water distribution systems across varying infrastructural contexts in Mexico. When local development projects are understood as a stepping stone for broad-strokes national development projects, the care for contextually informed implementation understandably decreases.

In tandem with the hierarchical nature of development programs is the bureaucratic underpinnings of international development institutions. This addresses the root of the narrative

propensity of international organizations—as Widerberg and van Laerhoven (2014) assert, "Bureaucrats are not only the mere implementers of policy...they have an agenda and interests of their own, and they create and respond to incentives" (303). The role of hierarchy and bureaucracy in development initiatives extends beyond individual motivations and organizational structures—it manifests in the very processes through which development programs are designed, approved, and implemented. Bureaucratic actors across international, national, and local scales drive the construction and application of development narratives, often embedded within a hierarchy that reinforces external priorities and mutes local concerns. The wealth of literature on development bureaucracy and hierarchy calls for deeper understandings of local realities and the empowerment of local actors in junction with external institutions (Widerberg & van Laerhoven 2014).

Informative asymmetry, diverging interests, and power incentives all play important roles in decision making within bureaucracies and on behalf of individual bureaucrats (Widerberg & van Laerhoven 2014, 305). Bureaucracies act as capacity builders and knowledge brokers, exerting influence not only on programmatic design but also on the perceived urgency and need for intervention in the first place (Widerberg & van Laerhoven 2014, 305). Widerberg and van Laerhoven delineate the variation in influence across bureaucracies with three commonly understood variables: problem structure, polity (formal structures), and people (2014, 305). With variable incentives on the macro level for whole bureaucracies, the alignment of individual bureaucrats is already in jeopardy. Adding in bureaucratic inefficiency—for example, the impossibility of a low-level employee stationed in Oaxaca to access and persuade high-level internationally-placed bureaucrats even within the same institution to incorporate local realities—spells failure for the hope of bureaucratically-constructed bottom-up interventions. This

bureaucratic complexity, a failure in its own right, must be understood in work which suggests reform to development practice.

#### Beyond Binaries: Local Narratives & Vernacular Modernity

Previous scholarship has demonstrated the importance of locally centered narratives, but local narratives are distinctively complex and diverse. Local narratives offer multi-layered understandings of the structural, social, and political drivers often absent from international discourse on Oaxaca's water crisis, but it is important to note the nonuniformity of local narratives. Local discourses, including the sources analyzed in the Appendix, consistently identify intersecting drivers of the water crisis, including infrastructural breakdowns, misaligned policy incentives, inequality, and structural obstacles. The goal of including local knowledge is not to boil down this complexity to one *purely local* narrative on the water crisis—it is to embrace complexity and nuance, resisting the simplification that is evident in external framings of the crisis. The complexity of local framings reflects lived experience and deep engagement with the less externally obvious aspects of water insecurity in Oaxaca. To emphasize the importance of nuanced and complex local narratives, I first unpack what "technical" means in development narratives, then draw upon what the historian Sarah Hines terms "vernacular modernism"—a concept to explicate how local actors reframe development discourse on their own terms—to contextualize the nuance in the link between discourse and narratives in the local realm.

Part of understanding the gap between narratives at the international and local levels is understanding the rhetorical differences between them. A key aspect of this is looking for an emphasis on technical solutions, which intersect with James Scott's "high modernist" development projects and making of a "legible" society (Scott 1998). Technical solutions inherently assert the

conquest of resources, power, and knowledge from communities to state builders and bureaucrats (Klingensmith 2007, 13). Drawing back to the Paso Ancho dam project, Klingensmith (2007) writes that the construction of dams "inevitably means a transfer of power over rivers as resources: away from local control and customary law, and to bureaucracies and state regulation" (13). Thus, it seems there exists a glaringly obvious distinction between technical policies and nontechnical, more local, policies. But the nuance of locality extends to rhetoric, and this distinction pales under further examination.

Sticking with the dam example, Sarah Hines uses the Misicuni dam project in Cochabamba, Bolivia, to offer an "alternative history of modernism that reminds us that political and technical elites were not the only people captivated by dams" (Hines 2018, 228). The Misicuni dam project, borne of the global mid-1900s large-scale dam craze, was promoted by a community coalition of Cochabambinos who wielded modernist development to their own benefit (Hines 2018, 225). This locally-adapted participation in modernist development cracks open the technical-local distinction, unveiling the reality of locals using modernist ideas, projects, and rhetorics to bring about local reforms. This begs the question: if locals use technical frameworks, is the result *local* or *technical*? The answer, like the narratives supporting it, is complex. Hines draws out a distinction wherein vernacular modernism is a strategy for communities to "modernize themselves and their surroundings on their own terms" as opposed to being made to modernize by external forces (Hines 2018, 229). She also argues that vernacular modernism is fundamentally informed with historical and ecological knowledge—what I refer to as local knowledge—which contrasts with traditional high modernism's lack of local context. Thus, vernacular modernism and the weaponization of technical and modernist rhetorics by locals is, in this context, local. Local sources can use technical framings yet remain local. Likewise, external sources can reference locality yet remain external.

The perceived binary between "local" and "modern" is broken down by vernacular modernism, exemplifying a diversity of local approaches which includes the adaptation of development ideas to fit local realities. This diversity requires investigation into narratives across different levels of development discourse—laden with nuance and complexity, we must reach for a better understanding of how local knowledge presents in development projects. Local narratives are not purely reactive but are epistemically productive, setting the foundation for my findings that local sources demonstrate the most complex and grounded narratives of Oaxaca's water crisis.

#### Theoretical Synthesis: Narrative Stratification & Failure

The theoretical underpinnings of development discourse and critique build a crucial foundation to support my project's framing as an exploration of development narratives across multiple levels of discourse production. In addition to the grounding my work, I draw from this literature review to define key terms in my analysis including *local knowledge* and *technical solutions to development problems*. A final concept which is integral to my own work and grounded in existing theory is *narrative complexity*, which I operationalize to explore the diversity of narratives in development discourse. I draw upon the work of Sarah Hines (2018) on vernacular modernism to position my work on narrative complexity as an embrace of nuance rather than an adherence to binaries. I define narrative complexity as the degree to which a source of discourse acknowledges the structural, political, and contextual dimensions of a development problem, including identifying multiple drivers and centering local contexts and experiences. An individual source need not include an exhaustive review of every possible dimension of Oaxaca's water crisis to achieve narrative complexity—instead, it must acknowledge that the water crisis is not a purely unipolar problem which can be addressed with a limited-scope solution. Opposing narrative

complexity is what I refer to as "narrative flattening"—sources which frame Oaxaca's water crisis as a technical or "flat" problem and do not acknowledge the complexity and context inherent to Oaxaca's water crisis. My conceptions of narrative complexity and its inverse, narrative flattening, aim to bridge theoretical critiques with a more concrete way of evaluating discourse. This conceptual framework sets the stage for my empirical analysis, where I assess how narrative complexity plays out across local, national, and international sources and what these variations reveal about narratives and development discourse in Oaxaca.

The wealth of literature on development narratives and discourse provides a strong foundation to analyze the role of imposed narratives in Oaxaca's water crisis. Ultimately, this study aims to shed light on narrative complexity across local, national, and international actors in development discourse. Grounding this research with the case of the Paso Ancho dam project exemplifies the real-world implications of my work in narrative complexity and development practice playing out in Oaxaca today. Development policy in Oaxaca is marked by narrative flattening and fundamental misunderstandings, and we must understand its limitations to truly build better policy solutions for the water crisis.

#### **Methodological Tools to Approach Narrative Complexity**

This thesis utilizes a qualitative, multi-level content analysis methodology to examine and analyze narrative framings of Oaxaca's water problem. Following Carpenter's (2007) approach to comparing issue framings across transnational advocacy networks, this study analyzes how development narratives differ across international, national, and local sources. By analyzing policy documents, media coverage, and myriad local perspectives, my work investigates the commonalities and discrepancies between dominant development narratives and local perspectives

to assess the role narratives play in international development projects. By employing a content analysis methodology, I trace misalignments across the three tiers of discourse production in problem construction, solution and intervention proposals, and representations of local agency. This study investigates how external imposed narratives of development obscure political complexities, local knowledge, and layers of local nuance, ultimately contributing to a cycle of development problems. This approach moves beyond simply documenting project shortfalls and instead strives to diagnose the narrative mechanisms that (mis)represent complex local realities and contribute to repeated problems in development intervention.

To systematically compare narrative framings, this study targets three tiers of development understandings: international, national, and local perspectives. Key sources of the international discourse surrounding Oaxaca's water crisis are the World Bank and international media coverage, as well as international blogs and informal publications. To investigate the national discourse within Mexico surrounding Oaxaca's water crisis, I rely on national news media outlets including El Universal, as well as national blogs. To understand the local and community-level discourse, I dig into a variety of community-based blogs and publications, including media stories from El Imparcial de Oaxaca, Oaxaca's most prominent newspaper. This tri-level analysis allows me to compare the dominant narratives from each tier and highlight key discrepancies between each level which may contribute to a misinformed dominant international narrative. This study strives to cross the barriers between elite and non-elite discourse and include voices often excluded from official reports, such as local blogs and media sources, while maintaining a relatively similar source pool across scales. My three-tiered collection strategy enables a content analysis which highlights where external development frameworks diverge from or align with local understandings of Oaxaca's water crisis.

To analyze how each source constructs the water crisis and draw connections across sources, I apply a three-part thematic coding framework focused on problem construction, proposed solutions, and local agency. My analysis investigates how each tier or discourse frames these categories and what the implications of these framings are for development interventions. For each source, I answer specific diagnostic questions as outlined in Figure 1.

Figure 1

Problem Construction and Causality	Is the water crisis framed as a problem to be solved?	
	Is the problem framed as technical/infrastructural, environmental, or political?	
	Are structural causes (historic, industrial, social) acknowledged?	
	Does the narrative assume universality or specificity?	
Proposed Solutions and Development Logic	Are interventions or solutions to the water crisis proposed?	
	Is the solution technical and built on a bounded understanding of the problem?	
	Who will solve the problem (external experts, state actors, locals)?	
	What knowledge is prioritized, and what knowledge is obscured?	
Representation of Local Agency and Power Relations	Are local actors included in the proposed solution?	
	Are locals depicted as passive beneficiaries, victims, or agents?	
	Are locals involved in the intervention as laymen or leaders?	
	Are power dynamics (who benefits/who loses) made explicit?	

I answer the applicable thematic questions for each source and assign scores indicating the depth of political and technical complexity acknowledged, recognition of local knowledge and structural factors, and integration of local communities into proposed solutions. Each section is scored on a three-point scale ranging from 1 to 3. An explanation of each score is provided in Figure 2. This scoring system aims to capture how each source reflects narrative complexity versus simplification, ranging from externally imposed and technologized framings to politically nuanced, locally grounded perspectives. By scoring within the three thematic categories instead of giving each article a holistic score, I call attention to the piecewise nature of development discourse, maintaining the integrity of sources which may differ in their framing of problem, solution, and locality.

Figure 2

	Problem Construction		
Score	Description		
1 — Technical / Depoliticized	Frames the crisis as a neutral, technical, or natural problem with no mention of social, historical, or political causes.		
2 — Partial Context	Acknowledges some political, social, or structural factors but treats them as secondary to technical framing.		
3 — Structural / Political	Frames the crisis as deeply rooted in political, social, and structural inequalities, clear attention to historical context.		
	Proposed Solutions		
Score	Description		
1 — External / Techical	Proposes primarily external, technical, or expert-driven solutions, minimizing or excluding local knowledge.		
2 — Some Local Role	Includes local actors or knowledge symbolically but still prioritizes external intervention as the main solution.		
3 — Locally Driven / Integrated	Centers solutions on local agency, knowledge, and community-led approaches, with external actors in supporting roles.		
	Representation of Local Agency		
Score	Description		
1 — Passive / Absent	Locals are portrayed as passive or are absent entirely, with no meaningful role in problem-solving.		
2 — Limited / Consultative	Local actors play a limited or consultative role, with agency constrained or secondary.		
3 — Active / Central Local communities and knowledge are central to the narrative, portrayed as act agents of change and experts in their own context.			

This scoring is qualitative but systematic, meaning I ask the same questions of each source yet ultimately score them based not on each individual question but instead on a broad evaluation of the article's framing. Each individual question informs the score for the three broad sections, but only the section scores will be coded into my analysis. By simplifying the coding mechanism, I allow trends to emerge across the data set. This coding and scoring mechanism identifies macrolevel trends in framings of the water crisis across each level of discourse, illuminating the narrative misalignments between different actors in Oaxaca's water crisis.

By engaging a qualitative content analysis methodology paired with multi-tiered thematic coding, I compare problem framings, assess solution proposition and logics, and evaluate local agency across the three tiers of discourse production. I also examine the extent to which local narratives engage with, adopt, or challenge these imposed framings. After analyzing and thematically coding each individual source, I aggregate the scores by discourse tier and compute the averages for each thematic category, as well as across all three thematic categories. These averages allow me to compare macro-level trends across thematic categories and discourse tiers, while the individual scores and source evaluations make it possible to analyze each source in more depth and draw out the diversity of narratives. While my methodology assigns a numerical score to each source across the three thematic categories, I do not aim to simplify or flatten any source type into a purely numerical assessment. The averages make it possible for me to examine narrative discrepancies across source types, but the outlier sources—for example, international sources with high narrative complexity, or local sources with low narrative complexity—are equally, if not more, central to my findings. A numerical coding approach to these sources may initially seem congruent with the very approach that I critique as external, simplified, and overly technical. But my intervention differs from this framing because I additionally analyze the arguments within each individual source and use a global coding framework to accurately assess nuances like vernacular modernism and differing local framings. Ultimately, my methodology aims to exemplify a possible approach for external researchers and external sources to incorporate local narratives while still investigating important trends and takeaways from development discourse and practice.

#### Limitations, Biases, and Positionality in Content Analysis

This methodology offers a nuanced approach to understanding narrative constructions within development discourse, but it also comes with limitations, particularly in establishing direct links between discourse and development outcomes. Content analysis reveals trends, assumptions, and discrepancies between multiple actors, but cannot alone demonstrate policy impact or causality related to development interventions. This study does not claim to provide causal data. Instead, I use content analysis to reveal how different tiers of development actors, ranging from the World Bank to local Oaxacan bloggers, differently conceptualize Oaxaca's water crisis. By illuminating these discrepancies and tracking patterns and trends on each tier, my work valuably informs studies of narrative framings that could inform development actors across each tier. A clear understanding of narrative framing in international development is essential because it informs what is possible and actionable in future development interventions.

Another potential limitation of this study is a result of my own positionality as an external researcher, which carries limitations and potential biases in accessing and interpreting local narratives. Because I am limited to digitally accessible sources available in English, my sources do not fully reflect local discourse in Oaxaca. To the extent it is possible, I mitigate this limitation by drawing upon local news and informal blog sources from Oaxaca, as well as critically investigating how each source is produced and whose voice it represents. By acknowledging these limitations and biases, I strive to make a meaningful contribution that avoids replicating the same narrative erasure that my study critiques.

Despite these limitations, content analysis is a powerful tool to examine how framings and assumptions within development discourse shape responses to Oaxaca's water crisis. This multi-level systematic qualitative methodological approach moves to diagnose narrative misalignment

across tiers of discourse production and reveal how problem definitions, proposed solutions, and representations of agency shape development intervention. My findings inform broader critiques of development practice, and call for locally informed development practices through integrated and contextualized pathways. Ultimately, my methodology builds to an analysis that demonstrates why centering local knowledge and political realities is vital in addressing wicked problems like Oaxaca's water crisis.

#### **Analysis and Empirical Results: Stratified Narrative Complexity?**

This section applies the three-tiered narrative complexity rubric as discussed above to 45 sources collected from each level of discourse production to assess trends and patterns in the role of narrative framing of Oaxaca's water crisis. I analyzed 15 sources at each discourse level by applying the diagnostic questions outlined in Figure 1 to each source, then scoring each source based on the rubric in Figure 2. In this context, sources produced in Oaxaca are coded as local, sources produced in other states in Mexico are coded as national, and sources produced outside of Mexico are coded as international. I aggregated each level of discourse production, then calculated the average score for each thematic category for each level of discourse. Before completing my analysis, I hypothesized that local sources would average higher scores than both national and international sources, and that sources would typically score similarly across each thematic category. This expectation was based on my understanding of the literature which documents the tendency of external sources to flatten local realities and miss key social and political contexts. While my findings ultimately differed slightly from my predictions, my analysis demonstrates a clear trend of stratified narrative complexity across tiers, with local as the most complex and international as the least complex. In this section I will unpack the intricacies of my findings to

offer insight into the complex nature of development discourse and the structural limitations of external development narratives.

#### <u>Trends and Patterns in Narrative Complexity</u>

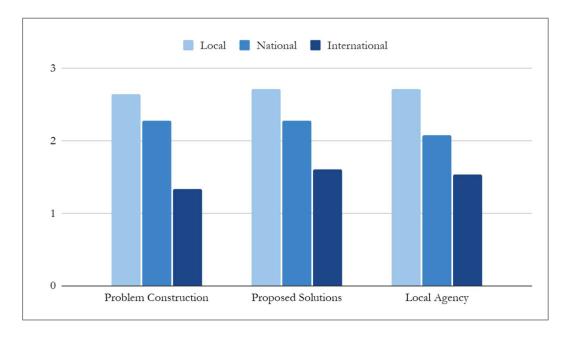
In general, more local sources garnered higher scores across the three thematic categories. This means that local sources scored higher than national sources, and national sources scored higher than international sources. The average scores by level for each thematic category are presented in Figures 3 and 4.

Figure 3

	Problem Construction	<b>Proposed Solutions</b>	<b>Local Agency</b>
Local	2.64	2.71	2.71
National	2.27	2.27	2.07
International	1.33	1.60	1.53

**Average Score by Level of Discourse and Thematic Category** 

Figure 4



Graph of Average Score by Level of Discourse and Thematic Category

International sources, represented by the darkest blue in Figure 4, consistently scored lowest among the three levels of discourse production. This means that among the sources analyzed, international sources most frequently framed Oaxaca's water crisis as a technical problem, proposed external solutions, and minimized local participation and agency. Local sources most frequently framed the water crisis as a multifaceted problem spanning social, political, and environmental factors, proposed locally-driven paths forward, and emphasized local agency. Of course, these macro-level trends do not indicate complete compliance among the sources analyzed. Each source was individually scored; some local sources received the lowest scores, and some international sources received the highest scores. Variation among sources is expected, and later in this section I unpack cases of outlier sources to explore the variety within each level of analysis. The scoring trends provide key insight into the role of imposed narrative framings in international

development and set the foundation for deeper analysis into the causes and consequences of these patterns.

Beyond scores, the qualitative patterns reveal a wide gap between narratives at local and international levels, particularly in how each level of discourse production frames and diagnoses the water crisis as a problem. Local sources framed the water crisis as a deeply complex and intersecting problem, citing drivers including the politics of dam construction, infrastructural water waste, uncontrolled tourism and urban development, and industrial exploitation ("Paso Ancho" 2025; Carrera Pineda 2024; Mejia Reyes 2025). Just under two thirds of local sources received a score of 3 in problem construction, and the remaining local sources scored a 2. While each local source boasts a unique framing of Oaxaca's water problem and draws its own conclusions and criticisms, there are still visible themes across problem framings within local sources. The most notable of these themes is the collision of multiple factors driving the water crisis, combined with governmental inefficiency or inability to meaningfully address the problems at the root of the water crisis.

Examining the framing of individual drivers of the worsening water crisis, including increasing tourism to Oaxaca, lends additional insight into how different actors conceptualize the water crisis. Multiple local blogs cited tourism as a key driver of water shortages, emphasizing the role played by hotels and tourist attractions in increasing water demand (Van Hoewyk 2024). While tourism is a key part of the problem construction in many local sources, international sources approach tourism differently. Most international sources I surveyed do not mention tourism as a factor in the water crisis, and those that do also note the economic benefits and fall short of calling for locally centered solutions (Greenwald 2024). Instead, international sources tend to frame the water crisis as a technical problem borne of Oaxaca's geographic position and high population

("Mexico Droughts" 2024). While geography and population are undeniable factors, they are not the exclusive drivers of Oaxaca's water problems. International sources frame the water crisis as a flat problem to be solved, but local sources document its multifaced and complex foundation.

In addition to problem framings, there is a significant gap between how local and international sources—with national sources falling somewhere in the middle—propose solutions to the water crisis. For example, one of the international sources I analyzed is an article written by Adam Williams in advance of the 2024 Mexican presidential elections which discusses the importance of water policy in politics (Williams 2023). Published in Americas Quarterly, I scored this article with a 2 in problem construction, a 1 in solution proposals, and a 1 in local agency. While noting that Mexico's water problem is a "consequence of poor resource management and a lack of adequate infrastructure, distribution, collection, and treatment systems," Willams frames the problem as a political challenge that does not account for the multitude of environmental, economic, and social drivers, much less the variation in water problems across different states in Mexico. Instead, Williams references flat statistics on water access in Mexico that disregard regional variation. Additionally, rather than emphasizing the importance of water policy and need for positive change, the article frames Mexico's water problem as fodder for the presidential candidates to capitalize on and garner support (Williams 2023). This article represents the broader selection of international sources I analyzed because it shows some attention to the context of the water problem but is distinctly less contextualized than local sources.

While the strongest comparisons arise between local and international sources, my analysis of national sources adds a key perspective into narrative framings. Among each level of source selection, national sources received the most nonlinear scores across thematic categories. Less than a third of the national sources surveyed scored uniformly across all three categories, compared to

more than half of local sources and more than two thirds of international sources. Thus, national sources often capture part of the puzzle of Oaxaca's water crisis, but lack full contextualization. For example, a speech published on a Mexican government website which I coded as national source received scores of 2, 3, and 3, across problem construction, solution proposal, and local agency, respectively. This speech diagnoses the water crisis as a climate crisis caused by a "constantly evolving, changing, and worsening set of conditions" which does not account for political dynamics, infrastructural challenges, or local context in Oaxaca—then argues for collaborative local solutions which prioritize the challenges faced by the most vulnerable people (Pedrozo-Acuña 2021). This speech falls short of the depth of problem diagnosis that many local sources engage with, but certainly considers the agency of local communities and the necessity of an integrated solution. Many national sources reflect this nonuniformity across thematic categories, but there is no individual category which scores significantly higher on average. This result offers insight into the positionality of national sources as more contextualized than international sources, but less contextualized than local sources, and indicates that sources are stratified across level of discourse production but maintain individual variety within each tier of sources.

#### Deeper Takes: Outliers and Individual Source Analysis

While exploring macro-level trends across source groups reveals key understandings about tiers of discourse production, deeper comprehension requires exploring variability of sources within groups. In general, my findings reveal a trend of local sources as most contextualized and international sources as least contextualized, but individual sources within each group scored against this broad trend. For example, an article published in Oaxaca's most prominent newspaper, *El Imparcial Oaxaca*, was coded as a local source yet earned scores of 2, 1, and 2, across the three

thematic categories. In the article, author Mejia Reyes critiques the severe state of the water crisis in Oaxaca, but parrots the exact language used by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) to mark World Water Day, writing that UNESCO "encourages action to address the global water crisis, supporting...water and sanitation for all" (Mejia Reyes 2025). While a day of water advocacy is certainly topical in Oaxaca, other local sources critique the top-down technical framing of UNESCO and World Bank water projects (Rothman 2024). Because Mejia Reyes did not delve into the local context and instead advocated for a broad technical solution to the water crisis, this article scored well below the average for local sources.

Similarly, one article among the international group received a score of 3 in each thematic category. This article, published in California's *Earth Island Journal*, uses local interviews to paint a picture of the water problem in Oaxaca (Rojo 2025). Author Magdaléna Rojo centers on Oaxacabased organization *Espacio de Encuentro de las Culturas Originarias* (A Space for Meeting of Original Cultures, or EECO) that supports rural communities in Oaxaca. Rojo explains that EECO, working to solve water scarcity, created initiatives including concrete rainwater collection tanks. As of this year, EECO has helped build more than 900 rainwater tanks which collect more than 18 million liters of water a year (Rojo 2025). The content of the article is important in its own right, but it also stands out in my analysis of international sources as exceptionally well-informed, nuanced, and contextualized, again indicating that individual sources are highly variable and can oppose the global trends of source comparison.

In addition to the outliers discussed above, my analysis highlighted distinctions in two additional categories: temporality and organization. While the vast majority of sources I analyzed were published in the last 5 years, 7 of 45—2 local, 2 national, and 3 international—were published between 2012 and 2016 (Appendix). A decade is a significant gap, and the older sources were

broadly less narratively informed than the newer sources, potentially reflecting a difference in temporality rather than purely across tiers of development discourse. In addition to temporal changes, there is a clear distinction across source organization, particularly among sources from scholarly publications and international organizations. One international article, published in the Yale Review of International Studies, scored 3s across each category because of its critical and indepth exploration of Mexico's varied water crises (Pacas 2024). Similarly, the two World Bank documents among the international sources I analyzed were focused primarily on development objectives and modernization, comprised more of numerical statistics than of local context (World Bank 2021). This represents the variation between journalistic, academic, and institutional sources. Because the majority of my sources across each scale of development discourse were journalistic, this variation does not meaningfully impact the validity of my results. However, it sheds light on other potential sources of difference between development discourses—future research which centers the role of temporality and source organization can further investigate these intersections.

Systematically analyzing sources from each tier of discourse production reveals that narrative construction is a key mechanism through which external, mostly international, development actors misrepresent, make technical, and simplify complex local realities like Oaxaca's water crisis. My findings indicate that local sources most often foreground politics, structural challenges, and local agency, while international narratives tend to obscure or exclude these realities. Additionally, the outliers and variations among sources provide meaningful insights into some of the many intersecting factors that impact development narratives and discourses. Not all discourses are equal—attending to the variations between sources even within the same discourse level is crucial to maintaining a nuanced and contextualized approach. Just as local

narratives can differ from each other yet all remain local, sources at the national and international scales can intersect on multiple planes—or none at all.

These findings provide a strong foundation for broader theoretical and policy implications as discussed in the following section. Ultimately, my analysis demonstrates that there are wide gaps in narrative complexity across local, national, and international sources. Understanding and bridging these narrative gaps is crucial to rethinking development practices in the context of complex crises like Oaxaca's water crisis.

#### **Theoretical Contributions: Who Acts in Discourse Production?**

In addition to the empirical contributions, my study of imposed narrative framings in a multilevel analysis of discourse production contributes to the broader theoretical understanding of international development discourse and policy. As outlined in the previous section, my findings reveal a trend where local sources score more highly in narrative complexity than national sources and international sources, with international sources earning the lowest average scores. In this section I will recenter the theoretical anchors of my work and draw upon Tania Murray-Li's work on the politics of development intervention and James Ferguson's critique of depoliticized development (Murray-Li 2007; Ferguson 1990). By situating my findings within broader discussions in international development and international relations, I illustrate the role narrative complexities and framings play in shaping policy and practice in development and offer an alternative lens to understand development.

The theoretical foundations supporting my contribution are broadly impactful across political and development thought, and my contribution extends these theories, taking them one step further by pairing them with novel empirical results. A key foundation of my work is Murray-

Li's Will to Improve, which argues that governing practices within development interventions limit the programmatic ability to engage with its "targets" by constructing a boundary between those with knowledge and power and those whose lives should be improved by that knowledge and power (2007, 281). I extend this contribution by arguing that not just government or development actors on the ground, but all actors in development discourse production, engage with and produce narratives, and the narratives constructed and framed by external actors fundamentally misunderstand the development "problems" and local realities. Building on Murray-Li's concept of "rendering technical," I observe that external actors approach development projects with topdown one-size-fits-all technical solutions—and critically, that those solutions do fit the problem that external actors typically diagnose (Murray-Li 2007, 7). The fundamental mischaracterization, which is often obscured by purely solution-oriented analyses of development projects, occurs much earlier in the development process: during the problem diagnosis. My investigation supports a reconsideration of the current theory in international development which assumes that international development projects falter mainly because they presuppose the superiority of Western knowledge and expertise (Spivak 1988; Chakrabarty 2009). While this presupposition certainly contributes to the narratives constructed at each tier of development discourse, it is those very narratives which build and disseminate incomplete understandings of local realities because of a physical distance from local realities, ultimately contributing to a cycle wherein external actors who consume externally produced sources construct and reproduce a narrative framework which misunderstands and lacks complexity on local realities.

The second bastion of theory that my work contributes to the depoliticization of development and the discourse produced by development institutions which creates a "structure of knowledge" around development projects (Ferguson 1990, xiv). My work is heavily informed and

influenced by Ferguson's, and my study extends this theoretical foundation to investigate the different tiers of discourse production, and the role that each level plays in constructing and disseminating a narrative, then engaging with similarly uncontextualized narratives and ultimately reproducing a cycle of hubristic framings of development crises which are not entirely representative of local realities. Ferguson also unpacks development failures, which are a peripheral point in my own work. He argues that development interventions are organized based on their own framings and narratives, and when they fail, it is "on their own terms" and does not accurately indicate *why* the project failed (Ferguson 1990, xiv). My work concurs with this finding, contending also that development "failures" and "successes" are only a small part of the picture of development, which is also a woven fabric of narrative oversights, focuses, understandings, and complexities, each of which are critically important to development processes and outcomes.

#### Incomplete, Not Entirely Ignorant: A Clarification on International Narratives

Unpacking the theoretical contributions necessitates a key clarification of the implications of my claims. It is not that international actors are informed by a *false* understanding of Oaxaca's water crisis—it is clear in my international sources that each narrative is constructed based on some part of the reality of the water crisis. Instead, international actors are informed by an *incomplete* and not locally informed understanding of Oaxaca's water crisis. I do not contend that international actors cannot understand Oaxaca, or development projects across the globe. I argue instead that the narrative complexity of international sources is significantly less than that of national sources, even more significantly less than that of local sources. This means that the complexity of understanding across the three tiers of discourse production is different such that international sources fall short of capturing the nuanced local realities. Frankly, even some local

sources fall short of local realities. My work contends that it is these realities which will drive progress in international development, and discourse producers across every level must embrace narrative complexity to truly develop pathways to better water security in Oaxaca.

### <u>Implications of Scalar Narrative Misalignment on Development Practice</u>

In addition to empirical and theoretical contributions which support a stronger understanding of international development, my work carries critical implications for understanding international development interventions across the Global South and moving towards sustainable and successful development programs. My work does not just extend theories of international development—it exemplifies the very failure of those theories to translate into real-world development politics and policy. Ferguson published his landmark study in 1990, and Murray-Li in 2007, but the World Bank loan to Oaxaca and Paso Ancho dam project are prime examples of development practice which is not adequately influenced by theoretical conversations on development policy. While I extend Ferguson and Murray-Li's arguments to form my own theoretical contributions, an analysis of the World Bank loan to Oaxaca would likely reveal the same problems that both authors identify, still at work in development projects more than 30 years after Ferguson's publication. While reviewing local sources, especially local blogs, to conduct my data analysis, it became clear that local realities of development policy in Oaxaca document how development institutions decenter local expertise and agency, topics that both Ferguson and Murray-Li critique (Rothman 2024). Thus, I contend that development policy and development theory must be more closely intertwined to truly realize the contributions of development theory in practice. However, it is important to note that local sources did critique the shortfalls and failures of development initiatives in Oaxaca. This indicates that while there are many gaps between theory,

narrative, and local reality, it is possible to build a bridge between each and reach a deeper understanding. Development policy and practice must focus on building these bridges and shift toward locally informed narratives to pursue more effective and contextually appropriate development programs.

The insights and findings of this study offer both theoretical and practical implications, suggesting new directions for research and policy in international development. As I outlined earlier, development initiatives should incorporate local narratives and knowledge into development practice to break down the barriers between tiers of development discourse. Potential mechanisms to achieve this include local leadership in development projects, direct economic transfer programs, and collaborative work between local NGOs and international funders. In addition to changing development practice, my work advocates for international relations theory to integrate narrative complexity as a tool of analysis. My framework of narrative content analysis may be helpful not only in international development theory but also in broader international relations discussions. Future research should explore comparative discourse studies and dig into deeper investigations of the political economy of narrative production. Revisiting traditional conceptions of development paradigms with narrative complexity in mind may transform our understanding of development programming across the globe and translate into future development practice.

Ultimately, by offering empirical insights and theoretical contributions, this study advances the broad understanding of narrative framings in international development and paves the way for more locally centered, agentic, and effective policy interventions. By engaging with the theoretical foundations of Ferguson (1990) and Murray-Li (2007), my work contributes to the broader conversation surrounding international development frameworks and narratives, emphasizing the

role of narrative complexity across levels of discourse production. I advocate for future research and policy which integrates complex, locally grounded narratives into development practices. The stratification of narrative complexity across sources is a symptom of a flawed development paradigm, but it is not permanent—future development programs can bridge the gaps to find a pathway to better policy and practice in Oaxaca's water crisis and across the globe.

#### Where Do We Go From Here? The Future of International Development in Oaxaca

This study investigates the central questions: How do development discourses at various scales—local, national, and international—frame Oaxaca's water problem? What narrative strategies do they use, and to what extent do these varied strategies overlap? In this section I synthesize the study's findings, methodological insights, and theoretical contributions, building to a final revisitation of the research question and reflection on development discourse. This study aims to investigate how externally imposed narratives exclude and obscure local realities and complexities, contributing to a cycle of poorly contextualized development interventions. To evaluate the success of the study, I will summarize each section and synthesize the key contributions to the field of international relations.

My empirical analysis demonstrates a trend of external sources lacking context and narrative complexity around Oaxaca's water crisis, highlighting the stratified narrative complexity centered on local sources and underscoring the limitations of imposed narratives of development. I apply a multilevel qualitative content analysis methodology to a set of 45 international, national, and local sources, employing a set of diagnostic questions to score each source on a three-point rubric across the three thematic categories of problem construction, proposed solutions, and representation of local agency. I find that local sources consistently score highest across all

thematic categories, indicating a high level of narrative complexity with structural dimensions, and international sources score lowest across all thematic categories, exhibiting oversimplified or incompletely contextualized framings of Oaxaca's water crisis. National sources occupy a middle ground, scoring between local and international and exhibiting partial engagement with local realities and narrative complexity. These findings support my hypothesis regarding narrative misalignment among imposed external development actors and practices. In addition to illuminating the narrative gaps across tiers of discourse production, my findings underscore the importance of integrating local perspectives to avoid misrepresentation in development discourse.

By investigating narrative complexity among discourse producers in Oaxaca's water crisis, this study contributes valuably to the theoretical understanding of development discourse and practice. I extend Murray-Li's (2007) argument on the politics of development management by contending that all actors related to development practice, not just governmental and institutional actors, engage with and produce narratives with variable complexity depending on their positionality. I argue that non-local actors engage with and reproduce externally imposed narratives which simplify complex local realities and theorize the intimate link between narrative complexity and development outcomes. I also build upon Ferguson's (1990) critique of dominant development narratives, extending his concept of depoliticized development past actors on the ground to also include media, institutions, and organizations who participate in development discourse. These theoretical insights contribute to broader international relations theories on power in development. My findings challenge conventional approaches to international development and suggest a shift toward locally grounded narratives to foster more effective and appropriate policy interventions.

The implications of this study extend beyond academic discourse and advocate for reconsidering development policies and investing in further research into narrative complexity. Local realities and knowledge must be integrated into development planning and practice, and international development actors must revise their narrative framings to be more complex and address the political and structural dimensions of crises. A more inclusive approach to narrative production which centers local actors could lead to more resilient and contextualized development approaches. These policy recommendations and future research avenues underscore the potential for a meaningful paradigm shift in international development to embrace integrated narrative complexities and move toward development which truly engages with local realities.

Oaxaca's water crisis is not just a fruitful case to explore development practice and narrative complexity, it is a crisis which affects hundreds of thousands of people that must be addressed with appropriate and informed development policy. This thesis is motivated by a desire to find a better path to water security in Oaxaca, and in addition to my analytical and theoretical contributions, I advocate for a more grounded vision of development in Oaxaca—one that centers local realities and prioritizes local communities over apolitical development statistics and goals.

Narrative framing plays an important role in Oaxaca's water crisis, and further investigation into narrative complexity is crucial to build effective and sustainable development programs across the globe. Imposed, external, simplified narratives not only misrepresent local realities but also contribute to a cycle of development problems. Development actors across every level of discourse production, as well as policymakers and scholars, should embrace narrative complexity and engage with local realities to form more holistic, context-appropriate approaches to international development. By bridging the gap between external narratives and local complexities, we can achieve transformative changes in international development and urge

development actors to design policies which truly reflect local realities. Oaxaca's water crisis is a stark reality of today, but the spirit of development imagines a better world of tomorrow—one that demands we reckon with complex local realities. Development truly begins when we stop flattening complexity and start learning from it.

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# Appendix

# A. Source Analysis

Local Sources					
Article Title	English Title	Problem Construction	Proposed Solutions	Local Agency	Notes
		News:	El Imparcia	l de Oaxaca	
Crisis hídrica: desafíos y soluciones al agua en Oaxaca	Water Crisis: Challenges and Solutions to Water in Oaxaca	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Proposes solutions including rainwater harvesting, wastewater treatment investment, and citizen training for reduced water usage
El proyecto de la Presa Paso Ancho revive en Oaxaca: Controversia y desafíos ante la crisis hídrica	The Paso Ancho Dam project revives in Oaxaca: Controversy and challenges in the face of the water crisis	3 — Structural / Political	1 — External / Technical	2 — Limited / Consultative	Focused on dam construction project in Oaxacahighlights activism and advocacy around water crisis but proposes technical solutions
Trece puntos: Oaxaca sin agua	Thirteen Points: Oaxaca Without Water	2 — Partial Context	3 — Locally Integrated	3 — Active / Central	Focuses on geographic and industrial causes of water crisis, but does not note political context; calls for locally led projects to conserve water
Se pierde en fugas 40 de agua potable	40% of "Potable" Water is Lost Through Leaks	2 — Partial Context	3 — Locally Integrated	3 — Active / Central	Quotes the coordinator of Oaxaca's water program, Julián Rubén Ríos Ángeles, who calls for local solutions to cut down on water waste but orients everything in support of the government
Alertan por altas temperaturas, contaminación y crisis del agua	Warning of high temperatures, pollution and water crisis	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Quotes an environmental activist, Nasaria Garcia, who critiques government failures to ease the water crisis and argues that citizen indifference is worsening the water crisis
Sin acceso al agua entubada, 15 de cada 100 habitantes de Oaxaca	15 out of every 100 inhabitants of Oaxaca without access to piped water	2 — Partial Context	1 — External / Technical	2 — Limited / Consultative	Critiques the delays in water delivery but does not target the root of delays, advocated for implementing the framework that UNESCO encourages on World Water Day

Crisis del agua, sin soluciones de fondo ni a largo plazo: FOA	Water crisis, without fundamental or long-term solutions: FOA	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Quotes activist Juan José Consejo, who argues that state authorities are not doing enough to address the water crisis and cites tourism and urban development as key drivers of the worsening crisis; promotes harvesting rainwater and wastewater treatment
Desconocen estudios donde se planea construir presa Paso Ancho	Studies on the Paso Ancho Dam are unknown	3 — Structural / Political	3 — Locally Integrated	2 — Limited / Consultative	Critiques the Paso Ancho dam project, arguing that implementation must be accompanied by careful evaluation but the dam project does not include evaluation. Also argues in favor of reforestation and more locally involved approaches to the water crisis.
			Websites & A	Blogs	
Drought: The water crisis in Oaxaca – Mezcalistas		3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Discusses the river from San Felipe that is now dry, argues that societal indifference and government failures are to blame; critiques mining industry and big businessl calls for reforestation and community-based solutions to Oaxaca's drought
Drought hits Mexico hard, including Oaxaca		2 — Partial Context	3 — Locally Integrated	3 — Active / Central	Discusess the water crisis from the perspective of mezcal producers; argues in favor of community water managment and decreasing water use without harming the mezcal industry
You – Yes, You! The Impact of Tourism on Mexico's Water Shortage   The Eye Mexico		3 — Structural / Political	3 — Locally Integrated	2 — Limited / Consultative	Focuses on tourism as a driver of the water crisis and critiques government projects including the Maya Train which promote tourism throughout Mexico; argues that the water crisis is slowly eroding Oaxaca's history
Boletín de prensa: Presa Paso Ancho ¿Una respuesta a la crisis hídrica?   Foro Oaxaqueño del Agua	Paso Ancho Dam: A Response to the Water Crisis?	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Critiques the government failure to provide requisite information regarding the construction of the Paso Ancho Dam; does not propose a solution but argues that local people should play an active role in decisions related to water management
Vidas en sequía. Oaxaca en el epicentro de la emergencia hídrica, investigación periodística - EDUCA	Lives in Drought: Oaxaca at the Epicenter of the Water Emergency, Journalistic Investigation	2 — Partial Context	3 — Locally Integrated	3 — Active / Central	Focuses on the lives of people who experience drought in Oaxaca; cites both geographic factors and infrastructure failures as a driver of the crisis, and focuses on local agency in building solutions

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Mexican Cities and States Could Run Out of Water. What's the Solution? - Modern Farmer		3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Holistically evaluates the water crisis in Oaxaca as a resident and addresses the worsening realities of the water crisis, including the antiated pipa delivery system and rapid approach toward a complete loss of water that is unrecoverable in Oaxaca
En agosto reiniciará la construcción de la Presa Paso Ancho, proyecto inviable según ONG	Construction of the Paso Ancho Dam will restart in August, a project deemed unviable by NGOs.	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Critiques the revival of the Paso Ancho dam project, arguing that this is a step backward in water management in Oaxaca rather than a step forward. Discusses the original closure of the project and local NGOs claim that it is not viable.
		N	ational So	ources	
Title	English Title	Problem Construction	Proposed Solutions	Local Agency	Notes
Reviven proyecto fallido en Oaxaca para atender la crisis hídrica - Avispa Midia	Failed Project Revived in Oaxaca to Address the Water Crisis	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Critiques the construction of the Paso Ancho Dam to provide water to Oaxaca, argues that inequality is at the root of the problem and water is still available to companies, just not to people living in Oaxaca
Cumplen 15 días sin agua potable más de 50 colonias del puerto de Salina Cruz, Oaxaca	More than 50 neighborhoods in the port of Salina Cruz, Oaxaca, have been without drinking water for 15 days	1 — Technical / Depoliticized	2 — Some Local Role	2 — Limited / Consultative	Focuses on the depletion of wells in Salina Cruz, Oaxaca, calling for citizen collaboration to improve water sustainability in Oaxaca; blames citizens as a main driver of the problem becaus eomisuse of water resources
Oussiasias	Organizations				

#### Organizaciones warn of a water advierten crisis and hídrica y ambiental environmental Claims that the solution to the water crisis en Oaxaca; se crisis in 3 — 3 — 3 — Active / lies in water conservation, education, and requiere mayor Oaxaca; greater Structural / Locally public works; calls for more investment in Central participación citizen Political Integrated water distribution to underserved areas ciudadana y participation and long-term soluciones a largo solutions are plazo needed Two-thirds of Dos tercios de la Discusses the reduction in daily water Oaxaca's población de supply per person in Oaxaca, as well as 2 population have threats of illness in the water that is Oaxaca tienen difficulty Some 1 — Passive / dificultad para Technical / delivered to Oaxacan homes; leaves out accessing Local Absent most local agency and paints locals as acceder a agua Depoliticized drinking water, Role potable, revela el simply recipients of water, not as agents of according to **INEGI** change INEGI

La Gentrificación Agudiza Escasez de Agua en Oaxaca	Gentrification aggravates water shortages in Oaxaca	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Discusses the role of gentrification and increased wealthy tourists in Oaxaca in exacerbating the water crisis, emphasizing the role of the hotel industry and other tourism industries in driving the water crisis
México vive una crisis hídrica afectando a 54% de municipios en Oaxaca   NVI Noticias	Mexico is experiencing a water crisis affecting 54% of municipalities in Oaxaca	3 — Structural / Political	2 — Some Local Role	2 — Limited / Consultative	Cites drought, overexploitation of water resources, and population growth as drivers reducing the availability of water per person in Mexico; cites a study by the Mexican Institute for Competitiveness which indicates a decrease in water consumption over the past 2 decades
Oaxaca de Juárez: La ciudad que agoniza por falta de agua y altas temperaturas	Oaxaca: The city dying from lack of water and high temperatures	2 — Partial Context	3 — Locally Integrated	3 — Active / Central	Focuses on the experiences of people in water crisis in Oaxaca, citing high temperatures and changing climate as worsening the water crisis and water waste as another main factor
Sequía en Oaxaca amenaza al turismo y la agricultura • Actualidad • Forbes México	Drought in Oaxaca threatens tourism and agriculture	2 — Partial Context	2 — Some Local Role	1 — Passive / Absent	Flips the discussion to how the water crisis is impacting the tourism sector, focusing on how income from tourism is a major supporter of Oaxaca's economy and how this may change with increasing dry seasons
Crisis hídrica afecta a Oaxaca; colapsa sistema de agua potable- Grupo Milenio	Water crisis warned in Oaxaca; supply system collapses due to lack of maintenance	2 — Partial Context	2 — Some Local Role	2 — Limited / Consultative	Discusses public dissatisfaction toward drinking water shortages and the sheer cost of buying water in Oaxaca, noting illegal tapping of water pipes as well as leaks driving water loss
Sequía en Oaxaca deja al descubierto templo del siglo XVI	Drought in Oaxaca exposes 16th-century temple	2 — Partial Context	1 — External / Technical	1 — Passive / Absent	Notes the unique impacts of the water crisis on historic sites, uses this historic temple to trace the water crisis throughout history by marking each time (6 total) that the water level has dropped this significantly
The climate crisis is a water crisis: Its attention requires social justice.   Instituto Mexicano de Tecnología del Agua		2 — Partial Context	3 — Locally Integrated	3 — Active / Central	Calls for a unified solution to the water crisis which brings together all citizens; advocates for using less to produce more, treating wastewater, and striving to meet the human right to water
Huatulco's Water Supply Revisited: Is There Relief in Sight?   The Eye Mexico		2 — Partial Context	2 — Some Local Role	2 — Limited / Consultative	A strong review of water in Huatulco (coastal Oaxaca) and infrastructure. Notes infrastructure failures and privatization of water but does not propose new ideas or solutions beyond critique.

gobierno de Jara en Oaxaca es inviable social y	intends to revive in Oaxaca, is	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	even if it is temporarily successful, it is not a real solution to the water crisis and will only lead to a worsened crisis with a
jurídicamente: Observatorio del Agua	socially and legally unviable: Water				massive wasted investment years down the line.
	Observatory				
		Into	rnational	Sources	
		Inte	rnational	Sources	
Title	English Title	Problem Construction	Proposed Solutions	Local Agency	Notes
Title	English Title	Construction	Solutions		Notes
	English Title	Construction			
Title  In drought-prone Oaxaca, indigenous women are reviving ancient techniques to preserve water	English Title	Construction	Solutions		Focuses on indigenous water management as solutions to the water crisis; cites geographic factors as the cause of the water crisis and does not go into the political context of the crisis

Technical /

Depoliticized

Politics - The New

York Times

Technical

Absent

understand the root causes of the water

crisis nor any local perspectives on the

crisis

Amid Tourism Surge, Oaxaca Residents Resist 'Disneylandization'	2 — Partial Context	2 — Some Local Role	1 — Passive/Absent	Discusses how tourism has completely changed the landscape of Oaxaca and made it more difficult for local people to continue their lives, including by worsening the water crisis, but points out the benefits of tourism in economic terms and does not call for local solutions
Water Reform in Oaxaca: Bard CEP Travels Abroad	1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	Unique post advertising a travel program to Oaxaca spotlighting "knowledge managment" regarding the World Bank's loan to Oaxaca; emphasis on external evaluation and complete erasure of local participation
Implementing Water Security Initiatives in Oaxaca, Mexico	1 — Technical / Depoliticized	2 — Some Local Role	2 — Limited / Consultative	Frames the water crisis as a technical problem but acknowledges the multigenerational knowledge of water management that should be leaned on to make progress toward better water access
Drought Or Deception: Mexico's Dubious National Water Emergency - The Yale Review Of International Studies	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	This article focuses on Mexico city, but digs into the unique context of Oaxaca's water crisis to contextualize the unreliable nature of government data on water crises and the complete lack of local integration, especially non-wealthy locals, into water management and policy
Oaxaca 2016: Rainwater Harvesting	1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	This article documents rainwater capture as a solution to Oaxaca's water crisis; initially appearing to cite local knowledge, it quickly turns and paints a picture wherein Oaxacan residents are to blame for the water crisis because they are not adopting this "easy" solution
Forecast Report: Mexico Droughts and the Ongoing Water Crisis	1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	Writes on how geographic factors and changing temperatures drive the water crisis; this article notes the inequality and that poor Oaxacans have the least access to water, but does not aim to pick apart why that is or what the political and social foundations of the crisis are
Oaxaca's Low- Tech Climate Solutions	3 — Structural / Political	3 — Locally Integrated	3 — Active / Central	Frames problem as ecological, but digs into the context of agricultural water use as both a stressor on the community and a large source of employment. Discusses community solutions to the water crisis but refrains from claiming they are widely applicable everywhere in Oaxaca, centering local voices throughout.

Mexico's Water Crisis Is Spilling Over Into Politics		1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	Focuses broadly on Mexico's water crises but delves into how in regions like Oaxaca, Sheinbaum uses the promise of water improvements to drum up votes. Frames the issue as an unavoidable water crisis across Mexico broadly.	
Ecotechnologies and Knowledge- Sharing to Strengthen Adaptation Capacity in Mexico		1 — Technical / Depoliticized	2 — Some Local Role	2 — Limited / Consultative	Discusses a project which received an award for "Local Adaptation" for community-driven water work in Oaxaca.  Notably, while discussing the organization, this blog fails to fully unpack the problem, solutions, or local engagement.	
Mexico announces historic investment of €5.6 billion in strategic water projects		1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	Focuses on funding renewal for Paso Ancho dam project. Emphasizes technicality of the dam project, numerical claims about its efficacy, and does not mention the massive local opposition to the dam project nor the reason for its original closure.	
Mexico's Conagua to tender US\$193mn Paso Ancho dam in October - BNamericas		1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	Related to the original Paso Ancho dam project in 2013. Overviews Mexico's water projects in 2013, echoing government claims about success and efficacyclaims which are not reflected in Oaxaca now, more than a decade later.	
World Bank Documents						
WB: Oaxaca to Enjoy Improved and Sustainable Drinking Water Supply		1 — Technical / Depoliticized	1 — External / Technical	1 — Passive / Absent	Frames problem as technical, using statistics to outline the severity of the water crisis and writing that the proposed World Bank project will "improve the water supply" and impact productivity	
Program-for- Results Information Document: Oaxaca Water and Sanitation Sector Modernization		2 — Partial Context	1 — External / Technical	1 — Passive / Absent	Proposal for intervention by the World Bank into Oaxaca's water sectionwhat later became the World Bank's major loan to Oaxaca in the 2010s; notes some context and legal challenges surrounding Oaxaca's water crisis, but does not dig into the true causes nor explore any local dynamics or agency to find progress	

### **B. Source Access Links**

Article Title	Access Link (URL)			
	Local Sources			
El proyecto de la Presa Paso Ancho revive en Oaxaca: Controversia y desafíos ante la crisis hídrica	https://imparcialoaxaca.mx/oaxaca/el-proyecto-de-la-presa-paso- ancho-revive-en-oaxaca-controversia-y-desafios-ante-la-crisis- hidrica/			
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