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Dam construction in Francoist Spain in the 1950s and 1960s: Negotiating the future and the past

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Abstract

In the 1950s and 1960s, dams were crucial to governmental campaigns for development, progress, and modernity in many world regions. This article focuses on the local aspects of a particular development scheme, namely, the construction of the Mequinenza Dam in Spain (1955–1964). This case study shows that dams were contested on a local level from the beginning, even within authoritarian contexts like Francoist Spain. It offers a closer look at processes of transformation and contestation in connection with the construction of dams, focusing on the actors, their points of view and arguments. It shows that the cleavages between interest groups that were later dichotomously labeled as strong supporters or opponents of the ideas connected to the dam construction were complex and shifted over time. These findings are relevant today because they show how the notion of development through dam building was controversial per se and challenged from the beginning.

KEYWORDS

dam building, development, Ebro, Francoist Spain, electrification, hydropower, water regulation

1 | INTRODUCTION

Hydroelectric dams are currently under construction in Brazil, India, China, Tajikistan, and Ethiopia, to mention just a few examples (Galland, 2018; World Bank, 2018). However, they remain highly controversial, especially in view of the social, cultural, and environmental damage they cause. Whereas the present day is characterized by various facets of hypermodernity, acceleration, and digitalization, hydropower is a remarkably "old" phenomenon, having been employed since the beginning of the 20th century. Against this background, this paper presents a historiographical perspective by focusing on one case in a particular setting: Francoist Spain. More precisely, I will focus on the construction of the Mequinenza Dam (1955–1964) and its sister project in Riba-roja (1958–1967), which were built to regulate the lower Ebro River about 100 km before it drains into the Mediterranean, halfway between Barcelona and Valencia. In doing so, I will take a closer look at the actors involved and the arguments that were presented and track how these arguments were produced, adapted, and changed over time (I further develop this article's argument in Brendel, 2019). Although focusing on the specific actors in their particular political, social, and cultural context, this paper highlights which of the current debates involving hydroelectric dams—including controversies over the meaning of *sustainability*—were foreshadowed in an earlier phase of dam building and which were not.

In historiography, dam building is a well-established object of research. For instance, Vincent Lagendijk deals with the aims of the Tennessee Valley Authority, a river regulation project that was established in the United States in the 1930s. In his work, he focuses on dam building as a global phenomenon of the 20th century and comes to an understanding of the discursive transition of the concept by analyzing the role of the World Bank and other institutions, especially on a supranational level (cf. Lagendijk, 2015). Other scholars including Julia Tischler, who deals with the construction of the Kariba Dam on the Zambezi River during the 1950s, analyze dams as development projects within colonial settings. By including development aid institutions as well as colonial and local actors, Tischler points out that different interpretations and adaptation strategies of development concepts existed side by side. Although those concepts

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followed colonial racist patterns, they were negotiated in different arenas (Tischler, 2013). In her book *Rivers, Memory and Nation-Building. A History of the Volga and Mississippi Rivers*, Dorothy Zeisler-Vralsted claims that memory is closely connected to a nation's major waterways. Her thesis is that in the 19th and 20th centuries, folklore and mythology imbued rivers with national narratives (Zeisler-Vralsted, 2014). Nation-building endeavors of the 20th century were connected to this process and used it to legitimize the impact of large-scale projects like high dam construction. Similar approaches showed that dams played an important role in national myths, as symbols or icons that transported meaning beyond their mere technical function (Arrigo, 2014; Kaika, 2006).

The importance of dam building in Spain in the last century explains why various scholars have focused on this issue in the recent past. Representative of a broader research spectrum, I would like to mention only two essential studies for the history of infrastructural projects in Francoist Spain. First, Lino Camprubí points out the fundamental role of engineers and agricultural scientists in the construction process of the subsequently successful Francoist state (Camprubí, 2014, p. 129). Furthermore, Erik Swyngedouw shows how dam building became a motor of the economic success of the Francoist state from the late 1950s onwards. Swyngedouw stresses how the result of this modernization project was forced upon the population, thereby ignoring ensuing disadvantages and suffering, and points out that this strategy still remains an important factor in post-Francoist policy making to this day (Swyngedouw, 2007, 2015). Both points are important for this case study.

2 | SETTING THE SCENE: DAM BUILDING IN FRANCOIST SPAIN

Engineers played a role in the consolidation of the Francoist regime by acting on behalf of the state and physically implementing government policies during dam building processes. Furthermore, dam building schemes were projects with which the planners and engineers tried to shape society by changing people's lives. They achieved this through expropriations, by forcing people to move to model towns and change their jobs. The only alternative was to leave the region permanently.

Spanish dam building was accelerated at the end of the 1950s when money and materials like concrete and steel came into the country from the United States. The intention behind this resource support was to develop Spain economically and connect the country to the "Western bloc." From the 1920s to the 1970s, a tacit consensus existed between most political parties and movements in Spain, as well as in many other countries, that accepted dam building as a promising tool in shaping future societies. The result was an international setting in which dam building ideas and concepts and the necessary technical information required were exchanged and circulated. In order to legitimize the expected change that would occur with the implementation of their construction, dams were instrumentalized as symbols for modernity, connected to the ideals of conservative politics, tradition, founding myths, and other abstract concepts. Old Spanish traditions were upheld and connected to dam constructions to justify the comprehensive changes they produced. Many Francoist politicians, planners, and engineers aimed to electrify and industrialize the country and to irrigate the dry southern Spanish soil by using the rivers' water. A major part in this story is played by the state-owned Instituto Nacional de Industria (INI) and its subsidiary companies, which were used as a tool of the Francoist government to directly intervene in the country's economy (Martín-Aceña & Comín, 1991). Under this approach, far-reaching plans—developed under Primo de Rivera's dictatorship (1923–1930) and during the time of the Second Republic (1931–1936/1939)—came together: A vast number of dams were constructed that brought energy, just as the planners promised. However, they also led to forced labor, resettlements, and expropriations.

Outright opposition to the government and its plans for transformation through dam building was extremely dangerous, especially in the early stages of the regime. The repression of the Francoist state resulted in forced labor in work camps, long prison sentences, and even assassinations. After 1945, the "victors' justice" that had followed Franco's triumph in the civil war was watered down, but it remained threatening for those who did not openly support the dictator's policies. As the economic rise of the country coincided with the participation of fundamentalist, but highly economically trained, members of Opus Dei in the government in 1957, large parts of society were living in an environment of fear (Cazorla Sánchez, 2010; Ruiz, 2005).

3 | ZOOMING IN: MEQUINENZA

The Mequinenza Dam was celebrated in newsreels, newspapers, governmental institution brochures, and other media as one of the biggest dams of its time (Cifra, 1965). Together with the Aldeadávila Dam on the Douro River (Rio Duero), it was portrayed as a representation of the Francoist dam building project as a whole. The dam was built between 1955 and 1964 by the Empresa Nacional Hidroeléctrica del Ribagorzana (ENHER), a state-owned enterprise that was part of the INI consortium, and which was founded for the purposes of water regulation and dam building. The dam was a showcase project, and, as U.S. Bureau of Reclamation sources report, it was even proudly presented to a U.S. delegation of engineers in 1964 (Dominy, 1965). Because the project was at the center of national media attention and the stakes were high, the planners of the dam made every effort to conceal a serious miscalculation by the engineers: Due to mining activity prior to the dam's construction and small seams of coal in the sandstone under the foundation of the dam, the construction was less solid than expected. A U.S.-American engineer reported that it took 2 years until the leading engineer decided, in 1966, to fill the lake behind the wall to its highest level (Klein, 1963). No documents detailing these technical problems are accessible in the visited governmental archives in Spain. In addition to the technoeconomical and media importance of the dam and following Zeisler-Vralsted's approach, the Ebro (its Latin name *Iberus* was the

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eponym of the peninsula) was named the most "Spanish" of all rivers and the dam of Mequinenza could easily be connected to tales and myths, primarily to the national teleology of the *Reconquista*. At the same time, the potential for conflict increased due to the fact that the dam was built near to the industrialized center of Catalonia and because the Ebro valley was densely populated (cf. Estruga Estruga, Pérez Suñé, Rams Folch, Tormo Benavent, & Coso Catalán, 2010; Marcuello Calvín, 2007).

4 | RECONSTRUCTING A CONFLICT: THREE DIMENSIONS OF DISPUTE

The power of the regime is not only exemplified by the manner in which the authorities handled enemies of the state but also manifested in the archival situation. Spanish society during the Franco era was silenced in a dual sense: in daily life and in written records. This created an archival situation similar to colonial rule. Following postcolonial theory, powerless actors were victims of a "silencing" by the powerful (Spivak, 1988). Jacques Derrida and Eric Prenowitz describe this phenomenon by proclaiming that there is no political power without control over the archives (Derrida & Prenowitz, 1995; cf. Büschel, 2010). In this context, other authors emphasized that "violence" arises from the power of the archives (Farge, 1989). The powerless in Spain were never silenced completely, however. In order to understand the power-related discourse of dam construction in Francoist Spain, it is crucial to become aware of the communication between local people and the government administrators. To understand this discourse, we must narrow this communication down to the problems that were discussed and the way in which they were negotiated. I researched such communication in the General Archive of the Administration (Archivo General de la Administración), the Ministry of Public Works (Ministerio de Obras Públicas), the archive of the state-owned industrial trust (INI, Archivo de la Sociedad Estatal de Participaciones Industriales), and in newspaper reports. Due to the official character of sources accessible in these archives, the range of such an analysis is naturally limited. For a deeper insight into the local circumstances, intentions, and emotions, an oral history approach would be necessary. Hopefully, future researchers will deal with this other side of the dam building story in Spain, which is indeed worth telling.

Nevertheless, state-mandated transformation plans were contested, and there are documents providing information about these elusive exchanges, however hard they might be to find.

The Francoist dam building agenda was based on three dimensions: a time-related, a socioeconomic, and a technocratic approach. As will be shown, the population of Mequinenza reacted to all three dimensions in attempts to improve their situation or to at least keep the disadvantages as small as possible. They were confronted with forced resettlement to a planned model town close by, they faced no or inadequate compensation for the loss of their homes, and they risked the threat of becoming criminalized by Francoist state officials, with all the possible consequences this entailed under the Spanish dictatorship.

4.1 | A time-related dispute

In order to educate the Spanish people according to the "values" of the Spanish state after the civil war (1936–1939), conservative intellectuals designed an energetic program of social change. They opposed the "chaos of left ideology" (Fusi, 1992) with "tradition" and "new order." The synthesis of both concepts formed the vague and fluid ideology of the Francoist system. The ideology remained heterogeneous, as Franco gathered a broad spectrum of actors from the political right and conservative camps behind his banner. To avoid internal quarrels about their political direction and to include all of society, the Francoists did not name their political union a "party" but "Movimiento" (movement). On the other hand, it was very clear that the new state was not intended to be progressive cosmopolitan, urban secular, or liberal republican (Bernecker, 1997, p. 14; Moradiellos, 2000, p. 136; Fusi, 1992, p. 44), and it was not easy for the propagandists of the regime to combine the traditional values of the state with a claim of technological progress. In the case of the Mequinenza Dam, the ruins of a medieval castle on a hill above the village enabled the engineers and media experts to reconcile both, at least in a symbolic way. The new project was constructed in direct reference to the old one, the castle on the hill corresponding with the Ebro-regulating dam in the valley. It is therefore not surprising that in 1959, newspapers reported that ENHER restored the ruined castle during the dam's construction and later used it as a venue for conferences (cf. Cifra, 1959).

Castles were and are emblematic of the Spanish central province of Castile, which was named after the region's fortresses. In the founding myth of the Spanish state, the country was united by the marriage of a Castilian queen, Isabella I (1451–1504), and an Aragonese king, Ferdinand II (1452–1516). The myth claimed that it was this union that allowed the royal rulers to finish the "Reconquista" against the "unbelievers," the Moors. Significantly, the symbols of these "Catholic kings," the quiver and the yoke, became the symbols of the Spanish fascist party, the *Falange*. From the point of view of the supporters of the Francoist state, the enemies of the new "crusade," the new "unbelievers," were secularists, republicans, anarchists, communists, and separatists. Mequinenza was known as the place where the battle of the Ebro took place, a battle that, supported by these groups, irrevocably changed the tide of the civil war against the republic.

The simultaneous presentation of the dam's construction and the restoration of the castle allowed the regime to invoke a "glorious" past and at the same time recall victory in the civil war. Furthermore, both memories could be linked to a new vision of the future symbolized by the dam. The press told readers that the restoration of the castle recalled the "holy mission" of the first builders (Sargatal, 1959). The castle in Mequinenza, only one out of a hundred in Spain, would be surrounded by an aureole of glorious history, and the castles would carry the "spiritual heritage of Spain," allowing the spectator a moment of "national reflection" (La Vanguardia, 1960). The castle

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and the dam were symbols of both protection and threat, and signs of central Spanish and therefore Francoist rule. First and foremost, the population of mainly Catalan-speaking Mequinenza was confronted with both the dam as a physical threat to their way of life and with the propagandistic claims accompanying them. Following the implementation of the "colonization" plan connected to the dam, the population changed to become increasingly Castilian (Ministerio de Agricultura, 1952).

In response to this situation, the mayor of Mequinenza, Manuel Sanjuán Piera (in office 1949–1954 and 1958–1960; Marcuello Calvín, 2007, p. 390), who was not an opponent of the state, argued on behalf of the region's small landowners and even the miners. He wrote a letter to ENHER in 1962 telling the officials of the enterprise that the dam would not only pose a risk to local industrial and agricultural production, but also to the history of the town itself, which had stood between the castle and the river for the last two thousand years (Estruga Estruga et al., 2010, p. 310). As he pointed out, neither the war, nor the post-war years or progress had been able to change the town in a significant way; it had survived all of this and yet was now under the threat of being destroyed. A union of small landowners argued in a similar way, claiming that the expropriation of land and buildings was not the problem, but that their ancestral right to use the channeled water in fixed time frames would be affected (Ferre Ezquerra, 1964; Caballe Oliver, 1964). This argument was a political problem because immediately after the end of the war on June 24, 1939, in the so-called year of victory ("Año de la Victoria"), the new government guaranteed to re-establish the royal decree of 1923, which regulated the use of water in the Segre, the tributary which flows into the Ebro at Mequinenza (Confederación Hidrográfica del Ebro, 1939). Using tradition as the basis for the argument against the impact of the dam was a powerful strategy because it mirrored governmental policies such as those concerning ancestral water rights.

Another important group was constituted by the miners of the political left. Before 1939, they rejected concepts of tradition, as these were seen as the source from which Spanish society's conservative elites derived their aristocratic titles, their extensive land estates, and their social privileges and opportunities in political participation. With a view to the widely propagated successes of the Soviet's first five-year plan (of which the famous Dnieper Dam was an integral part), they supported the idea of a Soviet-style modernization. During the civil war, the vast majority of the miners fought against the conservative rebels, who opposed social revolution, and tried to change the social ownership structure and power distribution. In this sense, the Francoist government promoted the "traditional farmer" as the element of society that maintained traditions, along with the upper class, against their common enemy, the "anarchist miner." By taking up these topics in popular movies of the 1940s and 1950s, contemporary and future class conflicts were to remain unresolved (cf. Sáenz de Heredia, 1948, "Las aguas bajan negras"). It therefore amounted to a total reversal of positions when the miners in Mequinenza supported the mayor of the town and joined in the strategy of small landowners, who argued against the dam by stating that the local tradition had to be protected.

Thus, the miners and other local actors in Mequinenza adapted to the state ideology that oscillated between a traditional past and a modern future. They changed the socialist model of the "new man" propagated before the war, envisioned as one who was self-determined and at the same time identified with his class, and took on the role of the cautiously arguing member of the new state, who would not oppose the state any longer. They thereby opened up a space in which they could debate the exact way in which future goals would be achieved, at the expense of arguing for a specific direction in general.

4.2 | A socio-economic dispute

As brown coal in the Ebro valley was mined underground and the presence of this mining thereby threatened the stability of the dam, mine owners faced expropriation. Ironically, the owners had already been expropriated by the Republicans during the war and were therefore firm supporters of Franco's politics (Marcuello Calvín, 2007, p. 257; Estruga Estruga et al., 2010, pp. 283–286). That is, until the threat of expropriation returned.

Two mine owners in particular entered into a dispute with state officials to stop the expropriations. The exchange of letters between them and various officials, as documented in the administrative archive, allows us to trace the following line of argument: Agustín Gimeno Silvestre maintained, *inter alia*, that not only the construction of the dam but also the extraction of brown coal was in the national interest. Francisco Freixes, another mine operator, added that it was not clear whether the production of hydroelectricity was necessary at all. The counterargument by the state officials was a typical one in terms of the production of electricity by water: hydroelectricity would be available for much longer than coal and the planned expropriations therefore served the greater public good (Comisario Jefe de Aguas del Ebro, 1962). But internal letters and memoranda of the state officials warned against pursuing this line of argument any further. The fact that the mine did not generate any profit at that point did not mean that they could not produce financial surpluses and a "national value" in the future (Director General de Obras Hidraulicas ENHER, 1963). Even for experts in state institutions, which promoted the dam building schemes, it was not easy to argue that water had a bigger potential of accessible energy than coal. A greater pool of potential energy was only one of many arguments in favor of the construction of dams, and state officials decided that it was not the safest one with which to argue against influential members of society. In the end, the mine owners were confronted with the power of the state they had helped to establish. In mid-1963, the last mines were closed (Ministero de Obras Públicas, 1963).

The hidden core of the argument was not so much about the comparative efficiency of coal and water energy. It was about social power and the future. Even if the economic policy of the government in the 1950s aimed mainly at producing coal and cement, as Camprubí rightly argued (Camprubí, 2014, p. 15), water energy in particular played an increasingly important role from this decade on. Coal now faced

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competition: water, petrol and even nuclear energy gained power and influence. For the fascist-inspired idea of an autarchic economy (mainly relevant until 1957), it did not matter whether energy came from national coal or water resources. What mattered was a certain concept of the state that the planners believed in. Like many contemporary actors, they looked at water energy and saw the power of the future, which guaranteed a constant and infinite energy supply for the new state, for the development of Francoist power. Coal power and smoking chimneys were viewed as symbols of 19th century industrialization that, in the eyes of the elites, Spain had shamefully failed to capitalize upon, thereby losing the race to gain new power in Europe and the world.

The practice of dam building had repercussions beyond the purely economic. The expropriation of the local elite meant that the power monopoly of this group, which had based its wealth and social power on coal, was finally broken, enabling the state to gain control over its citizens in Mequinenza. This became apparent by the fact that the former masters of the valley, who formally displayed their power by living in castle-like estates close to the mines (Marcuello Calvín, 2007, p. 255), now migrated to bigger cities. Moreover, they did not receive building lots in a privileged location close to the center of the newly planned towns of the resettlement schemes, and preferred not to partake in the lottery system used to distribute building sites (cf. Moncada, 2005, p. 325). The expropriation of the coal barons' power in the Ebro valley was part of the new conception of the state's political rule.

The break with the old power relations between mine owners, other representatives of the local elite, and workers, became visible in another, more socially based aspect of the discussion. Remarkably enough, the owners of the mines argued that they had a social responsibility towards the workers. Before the war, in 1934, they called in the army to stop a major miners' strike in Asturias, Catalonia and Aragon, with none other than Franco himself leading the troops and ending the uprising extremely violently, with many of the workers being killed (Bernecker, 2010, p. 132; Bernecker, 2005, p. 16). Even though the owners of the mines did not pay their workers more—and sometimes even less—than the absolute minimum necessary to keep up their labor and to survive, in the context of the dam's construction they claimed to have a duty to take care of them. Archival records show that in 1962, Freixes wrote a letter in which he pointed out, in a triple *repetitio*, that the problem was not only the expropriation of the mine owners, but justice for the people in Mequinenza; justice in the case of expropriations and compensation in general, and justice in the acceptance of local values (Freixes, 1962). Apparently, Freixes was accustomed to deciding what justice was and was not. In fact, there was a social problem. In 1956, the ministry of the Movimiento counted 964 families and 3591 inhabitants in Mequinenza. According to this survey, 141 families, or 424 inhabitants, did not have accommodation but were employed and 311 families, or 996 inhabitants, had no work but accommodation. Finally, if all mines were to be closed in the near future, 81 to 85 percent of the population would be faced with unemployment, homelessness or both. The administrators demanded that the people of the village be given work at the construction site of the new village or in building irrigation channels (Sirvent, 1959; Subsecretaría del Ministerio del Movimiento, 1966). However, in both cases, specialists of the state-owned construction enterprise had already been employed.

The old patronage system was not only part of the elites' argument, but of local pressure groups as well. The latter transferred the local system of clientelism to the highest level and offered political loyalty in exchange for support by Franco. The mayor, Sanjuan Piera, followed this approach. At the beginning of a letter to the *Confederación Hidrográfica del Ebro* in Zaragoza, a government organization which was responsible for the regulation of the Ebro, Sanjuan Piera pointed out that he did not oppose the hydroelectric policy of the government of the "Caudillo" (the "Leader"), and that Franco would receive eternal gratitude from all Spaniards (Sanjuan Piera, 1959, p. 1; cf. Moncada Moncada, 1956). Sanjuan Piera ended his letter with the official greeting of the Movement "¡Arriba España!"; however, the letter contained a request: "We want and expect that we will not be abandoned after [the construction of the dam] and that there will be help for us, whatever solution he [i.e. Franco] will find" (Manuel Sanjuán Piera (in office 1949–1954 and 1958–1960). This ending to the letter represented not only an insurance against possible repression but was a direct call to the supreme authority of the state. The mayor underlined local loyalty to the "Caudillo" and asked for personal protection. Aware of the dissolution of the old socio-political order in Mequinenza, Sanjuan Piera attempted to adapt to the new circumstances.

4.3 | A technological dispute

The discourse around the design of the development also took in technical aspects. Freixes, for instance, wrote a letter to the *Ministerio de Obras Públicas* claiming that his mines would not threaten the statics of the dam (Freixes, 1962, p. 2.). Sanjuan Piera argued in a similar vein: referring to previous ENHER proposals, he pleaded in the name of the Mequinenzan people for a pre-project—an "Anteproyecto"—a small dam protecting the village from the water held by the bigger dams nearby (Estruga Estruga et al., 2010, p. 333; Trade Unions, 1959; Gerente, 1960, p. 4). This idea was not unfounded as it entailed the plan that Caspe, the nearby city, would be protected by such a construction. The attempt of Freixes, and of Sanjuan Piera in particular, shows that local representatives tried to adapt to the technocratic language of the engineers and to their way of thinking. In the logic of the engineers, the whole river system could be regulated, and plans could be implemented accurately. Finding a technical solution not only for technical but also social problems was their overall approach. This line of argument failed, however, just as it did for the time-related and socio-economic issues. Mequinenza was selected to be presented as a Francoist model town of the future, as was suggested by glossy ENHER brochures (Aguirre Gonzalo, 1967). To submerge the old town and its problematic history was part of the plan.

Nonetheless, the protests never stopped. The arguments contained a mixture of technical, social, economic, and symbolic aspects. An association of the heads of the families of Fayón, a town

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near Mequinenza that was forced to resettle in a similar way, wrote a letter to the ministry in 1975 (the dictator died later that year). It explained that there was still a strong belief in Francisco Franco, but no longer in the government, and that the people of the town wished to cancel their contract with ENHER, demanding the return of the boats with which they had hauled coal upstream before the dam was built. In addition, the signatories pointed out that the funds for road construction had never reached the town and that there was no money to construct a road or to buy a car with which to drive on it. Furthermore, the association mentioned that compensation for the small farms never reached the landowners, that all the money had been paid to a nearby textile enterprise instead, and because the new Fayón was without flowers, joy, life, peace and spirit, the families felt hopeless and held expectations of a dark future (Asociación de Cabezas de Familia Fayón, 1975).

5 | MEQUINENZA AND BEYOND: DAMS AS CONTESTED DEVELOPMENT SCHEMES

In the 1950s, much like today, dams functioned as lenses through which one could recognize the oftentimes hidden political, social, and cultural conflicts in society, primarily with regard to the distribution of power. Then as now, dams were symbols of political aims and agendas, attracting attention because of the extensive resources invested in them and the broad impact of their construction. The largest-scale dam project at the time particularly fulfilled this symbolic function. The fact that dams worked as a screen onto which government policies were projected also made them ideal targets for opposition to these policies, which consequently led to their contestation.

In Francoist Spain and other repressive systems, such critiques were deliberately concealed. Instead of open resistance, locals adapted to the discursive framework of official policy and tried to benefit from the new situation, or at least reduce the negative impact of the dam on their lives, within the limits of expression possible within the Francoist state. They did, however, clearly convey that the future visions of modernity, progress and development associated with the dam did not materialize for them. On the contrary, living conditions were rendered worse and expectations for the future were bleak.

Although the future visions projected onto the screen of the Mequinenza Dam were associated with notions of progress and modernity, more recent hydroelectric dams are often conceived as projects in the name of sustainability. The roots of this guiding concept go back to 18th-century forest management (cf. Grober, 2012, p. 80), but it acquired prominence through the work of the *World Commission on Environment and Development* or *Brundtland Commission*, which, in 1987, released its report entitled *Our Common Future* (Brundtland et al., 1987). In this report, "sustainable development" was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 41; Borowy, 2014). The Brundtland report, which was very widely received and endorsed, focused on three thematic fields: the economic, the environmental, and the social dimension of development.

Against this background, hydroelectric dams were reinterpreted as tools for the achievement of sustainable development. Brazilian, Chinese, and Indian governments, corporations involved in the construction, the World Bank, and other international actors presented dams as examples of sources of alternative energy, allowing economic development to take place without damaging the environment (Jauhari, 2002; Scheumann & Hensengerth, 2014; Tilt, 2015). However, various large dam projects show that although the environmental sustainability of dams is questionable, the social sustainability of such projects is not considered at all. Although intensive critiques and activism against the adverse social effects of dams led to a more hesitant approach by the World Bank in the 1990s, since 2010, the bank, which is the biggest funder of hydroelectric dams in developing countries, has again been focusing on such projects (Bosshard, 2014).

In view of these recent phenomena, the historical case analyzed here shows that this focus on economic questions and neglect of social sustainability already characterized earlier phases of dam building. Moreover, the analysis presented in this paper highlights that concepts that articulate a certain vision of the future—such as progress, modernity, or development—have already been used in the past to label the opponents of large projects as backward.

6 | CONCLUSION

In the middle of the 1960s, the Francoist media presented Mequinenza as an unmitigated success: The village had two new bridges (the old one had been blown up by the "reds" during their retreat in the civil war). It now had a connection to the Madrid–Barcelona highway and a petrol station close to the artificial lake (Cifra, 1960). At a time when only a few could afford a car in Spain, this message was already an allusion to the future (cf. Bernecker, 2010, p. 247; Catalan & Fernández de Sevilla, 2013, pp. 255–284). The newspapers reported on the women of Mequinenza who did not have to go to the river to do laundry anymore and on the men who were no longer washing off coal dust in the Ebro river. Instead, every household had electricity and running water. In addition to this, of the 600 schoolchildren of a community of 6,000 people, 100 completed their secondary education (Serrano, 1965).

These reports presented a stark contrast between the village in which the "reds" had shown their destructive power and the now orderly planned city, between the dirty workers' town that had now become a town with modern living conditions and between a town populated by coal skippers and miners that was now populated by high school graduates. Although the Francoists presented an abstract socioeconomic model of the future in the beginning of the 1960s, they touted the success of reorganizing space and society 5 years later. What the propaganda failed to mention was that many people had left the town to live in bigger cities and that the new town remained much smaller than originally expected. This image of Mequinenza promised the rest of Spanish society better living conditions in the future and

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communicated the power and the will of the state to change local conditions that did not fit in with the vision of state-hired planners. Therefore, this presentation was an offer to participate in the new state and at the same time a threat towards those who would not cooperate.

However, the strong propagandistic message and the ideological framework of dam construction in Spain was not based on a clear dam building program with an equally clear plan to change local society. Moreover, the official story of success at having achieved a balance between a traditional past and a bright future, spread by planners, politicians, and media makers, was open to change. The local elite and the miners of the village joined discussions about the future and discussed the Francoist agenda, which was a combination of time-related, socioeconomic, and technocratic disputes. Therefore, they tried to participate in the development scheme, to inscribe their own interest into the plans, and to benefit from the dam or to at least reduce its negative impact as much as possible.

In contrast to their past political agenda—in which the coal miners of Mequinenza saw themselves as actors in a modern socialist future, fighting against an establishment based on tradition—they now joined the former enemy in order to lodge their protests. During this process, the newly emergent pressure group adapted to the line of argument of those in power and presented itself as the owner of traditional water rights, as the inhabitants of a medieval town and as subjects loyal to the government. Meanwhile, Francoist coal mine owners argued that it was unclear whether hydroelectric power would be the right energy for the future and that they had a duty of care to their employees. In addition to this, both groups reacted to the technocratic logic of the project and tried to find a technical solution to change the plans to their benefit. Even though the arguments of the people in Mequinenza were similar to those of people in comparable situations—like in Caspe, where it was possible to influence the decision of planners and politicians—the situation in Mequinenza was not altered. It was determined that the population of the town would be resettled. The new town was to be presented in the media as a model town for other water regulation projects. Engineers, propagandists, and politicians therefore followed ideological motives and not just technical theories and plans. The regulation of the Ebro included land reform, reform of the ownership structure, and finally reform of the social basis of society. The plan became a social engineering project to "educate" the population in the Francoist way and to present the exemplary results to a broader public.

Although *sustainable development* was only turned into an argument for dam building 20 years after the Mequinenza project was finished, the case study shows that visions of future development were already central in legitimizing such projects in Francoist Spain. Although the concept of *sustainable development* comprises economic, social, and environmental aspects, hydroelectric dam construction often fails to take the question of social sustainability into account, as could already be observed in the case of Mequinenza.

Despite the contestation, the plan to build a dam was not negotiable in the end nor was the resettlement of the population. Discussions about the development scheme and the distribution of benefits and the disadvantages of the dams took place within the discursive boundaries of the Francoist state, and the residents of the Ebro valley were given a certain measure of attention and the promise of compensation. The policies of dam building as the implementation of top-down, large-scale projects were influenced by various actors and challenged by local interests, even in an authoritarian state like the Franco regime. Given the complexities of the discussions, it would be problematic to neatly distinguish between supporters of the dam and the regime on the one hand and its victims on the other. Instead, as the Mequinenza case illustrates, the dynamics of competing parties are complex and shift over time, as do the arguments, alliances, and expectations.

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