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A simple overflow? Environmental Coloniality in Francoist Spain (1950-1979)

Um simples transbordo? Colonialidade Ambiental na Espanha Franquista (1950-1979)

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Abstract—This article analyzes the emergence of the critique of the "environmental coloniality" of Spain's Francoist dictatorship, and how it connected to the foundation of several environmental injustice struggles in Spain. This coloniality can be observed in contemporary critiques of "internal colonialism", which arose during the 1970s. Green intellectuals, such as Mario Gaviria, went as far as to describe three types of environmental colonialism based on classic colonialism: space colonialism, energy colonialism and extractivism. In this article we argue that the Spanish case illustrates that the global colonial system implies a certain capacity for reversibility. In comparison to liberal democracies, the environmental coloniality of a fascist regime involves more violence and repression in the coloniality of power, knowledge, and being. Such reversibility, along with the old patterns of environmental coloniality, prompts historians to criticize the rhetoric of European economic miracles and high-modernity through the lens of decolonial environmental history. We can describe the concept of environmental coloniality from three perspectives. First is the conceptualization of the environment as an object of capitalist appropriation of scientific processes overseen by the State. This perspective can be described in terms of the commodification of nature. Secondly, and related to this first element, is the coercive nature of a fascist state that annuls any decision-making processes or social participation in the field of environmental management. Finally is a fascist state's violent repression of any form of social contestation. From these three perspectives we can conclude that environmental coloniality gave rise to a cycle of struggles for the defense of land, water, and community life; these struggles can be considered decolonial, because they proposed an alternative model to the authoritarianism of the fascist state.

Keywords—Internal Colonialism; Environmental Justice; Decolonial Environmental History; Fascism and Authoritarian regimes.

Resumo—Este artigo analisa o surgimento da crítica à "colonialidade ambiental" da ditadura franquista espanhola, e como esta se ligava à fundação de várias lutas de injustiça ambiental em Espanha. Esta colonialidade pode ser observada nas críticas contemporâneas ao "colonialismo interno", que surgiram durante a década de 1970. Intelectuais verdes, tais como Mario Gaviria, chegaram ao ponto de descrever três tipos de colonialismo ambiental baseado no colonialismo clássico: colonialismo espacial, colonialismo energético e extractivismo. Neste artigo argumentamos que o caso espanhol ilustra que o sistema colonial global implica uma certa capacidade de reversibilidade. Em comparação com as democracias liberais, a colonialidade ambiental de um regime fascista envolve mais violência e repressão na colonialidade do poder, do conhecimento, e do ser. Tal reversibilidade, juntamente com os velhos padrões de colonialidade ambiental, leva os historiadores a criticar a retórica dos milagres económicos europeus e da alta modernidade através da lente da história ambiental descolonial. Podemos descrever o conceito de colonialidade ambiental a partir de três perspectivas. A primeira é a conceptualização do ambiente como um objecto de apropriação capitalista dos processos científicos supervisionados pelo Estado. Esta perspectiva pode ser descrita em termos da mercantilização da natureza. Em segundo lugar, e relacionado com este primeiro elemento, está a natureza coerciva de um Estado fascista que anula qualquer processo decisório ou participação social no campo da gestão ambiental. Finalmente, é a repressão violenta de um Estado fascista sobre qualquer forma de contestação social. A partir destas três perspectivas podemos concluir que a colonialidade ambiental deu origem a um ciclo de lutas pela defesa da terra, da água e da vida comunitária; estas lutas podem ser consideradas descoloniais, porque propuseram um modelo alternativo ao autoritarismo do Estado fascista.

Palavras-Chave—Colonialismo Interno; Justiça Ambiental; História Ambiental Decolonial; Fascismo e regimes autoritários.

1 Introduction

AFTER the Spanish Civil War (1936-1939), Francisco Franco's dictatorship devised a national policy to develop and industrialize the country. After 1945, Franco's Spain became internationally isolated, and the regime developed an autarkic policy that focused on spreading propaganda about feeding the people (Barciela *et al*, 2001, Barciela 2015, Gorostiza 2016). The National Colonization Institute and the National Industry Institute were established in 1939 and 1941 respectively, and devoted themselves to "produce, produce, produce!", a slogan from Franco's speech after his victory in the Civil War in June 1939. In spite of the plans' methods and propaganda, large-scale dam and canal systems were targeted to produce energy and promote industrial and urban growth (Garrabou *et al*, 1989: 383-454). The rhetoric of autarky and its focus on discovering the great potential of unexplored lands failed to acknowledge the people's real misery and hunger (del Arco 2007). The emphasis on industry and the policy of nationalizing hydraulic enterprises far exceeded the scale and water capacity of any regenerationist, liberal, or republican plan conceived before 1939. In short, Francisco Franco ended up betraying rural communities and creating the very proletarian and urban industrial culture he had fought to prevent (Garrabou *et al*, *ibid*; del Arco, 2010).

The 1940s brought a system of slavery and forced labor, while the 1950s were marked by the prevalence of rural-to-urban migrations and cheap manpower. These factors, along with the economic opening and international assistance that occurred after 1955, combined to create what was considered a *techno-natural revolution* and a *wet dream* for Spain (Swyngedouw 2007 and 2015: 99-128). In 1964, tax-free zones were created in certain "Development Pole" cities, following advice from the World Bank (Biescas Ferrer 1977). As a "developing country", Spain also benefited from international aid for its development between the

1950s and the 1970s (Sanz 2005; Martín Aceña and Martínez Ruíz 2009; Swyngedouw, 2015: 147). These capitalist policies accelerated the country's great leap towards industrial and urban development, and consequently, to domestic crises and massive migrations from rural areas to the Development Poles and abroad (Carr and Fusi, 1979; Marín i Corbera 2008; Martín Aceña and Martínez Ruíz, 2009; Valero-Matas *et al* 2010). The Francoist planners considered traditional rural cultures "uneconomic", and the regime implemented a regulation to wipe them out (Cuesta, 2001).

Regarding environmental transformation, it was under these developmental policies that a critique against colonialism emerged as a consequence of environmental conflicts and regional inequalities. Archival and newspaper sources show that a double environmental and colonial critique arose as a result of the conflicts against coal-fired power plants, large hydraulic infrastructures, and nuclear power plants, but also against mass tourism and large-scale transportation infrastructures. The first environmental thinkers, antifrancoist writers and journalists, and organic intellectuals identified an "interior or internal colonial" situation in Spain as a consequence of the extractivism of natural resources. This colonial critique emerged between 1971 and 1979, and originated from the environmental struggles in "abandoned" regions of the country, such as Aragon, Galicia, Extremadura, and the Canary Islands.

Mario Gaviria, and José Manuel Naredo documented these struggles and described the "internal colonialism" of the Francoist regime. Gaviria was an urbanist and sociologist whose work revolved around urban and rural rights. In 1974, he published the first ecologist manifesto in Benidorm and led the first anti-nuclear campaigns with Pedro Costa Morata and AEORMA, the first green association. He also edited a book of collective scientific research in 1977, titled *El Bajo Aragon expoliado. Recursos naturales y autonomía regional*. Naredo, an ecological economist, also worked with Gaviria on the problem of pillaging and spoliation in Extremadura. Together with Juan Serna, they published *Extremadura saqueada. Recursos naturales y autonomía regional* in 1978. Both books were considered the founding works of environmental criticism against Francoism. Ed-

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uardo López Aranguren and Mariano Aguilar Navarro completed the "internal colonization" theory. López Aranguren was a professor of sociology interested in regional and national consciousness and inequality. Mariano Aguilar Navarro was a socialist and scholar in the Canary Islands. Mario Gaviria, along with these antifrancoist intellectuals, defined the internal colonialism of deserted regions such as Galicia, Extremadura, Aragon, or the Canary Islands. The inhabitants, natural resources, capital, and energy produced were taken without compensation from these peripheral regions and delivered to the industrial metropolitan centers of Madrid, Barcelona, Tarragona, Bilbao, and Seville. Outside of environmental circles, the work and activism of these individuals, has not been recognized for questioning the centralism of the transition to democracy, but rather, as we will discuss below, for theorizing about a topic that Eurocentric thinking is not yet willing to accept.

We will analyze as follows the emergence of the critique of the "environmental coloniality" of the Francoist dictatorship and how this critique connected to the foundation of several environmental justice struggles in Spain. In order to do so, we will first describe narratives of exploitation and pillaging from concerned populations during environmental conflicts. The empiric cases revolve around the following issues: water and natural resources exploitation, energy colonialism and pollution, and technological colonialism. Next, we will explain the concept of "internal" or "interior" colonization described by the environmental and *organic* intellectuals of the 1970s. Finally, we will discuss our concept of "environmental coloniality", along with its methods of decolonization and its contributions to Spanish environmental history.

2 Pillaging and plundering of water resources

Examples of "workforce coloniality" were seen during the 1940s, as canals, reservoirs, and dams were often constructed using forced labor (Acosta Bono *et al.*, 2004). After the 1950s, the labor force came largely from rural populations. These emigrant laborers were untrained and were plagued by hunger and poverty. Workplace casualties were numerous, and were falsely recorded on death certificates

as resulting from strokes or other natural causes. These workers essentially constituted a slave labor force, due to their poverty and poor living conditions (Campo Vidal 2007). Forced expropriations and evictions led to a pyrrhic economic compensation system. In many mountain communities, some property owners took their own lives (Sabio Alcutén 2011). Suicide was often the consequence of the loss of livelihoods and properties. In other valleys, many villagers engaged in long and costly legal battles and court processes, often finding themselves without defense and facing difficult legal barriers (Mairal 1993; Menjón 2006; Pinilla, 2008; Cabana et Lanero 2009; Corral Broto 2011; 2012b). Old "electricity factories" that were run by communal, neighbor, or family ownership from 1900 to 1930, soon disappeared. According to Cuesta, "the capital of the center was not interested in associating with the local capital", and "the 1000 million Kw/hour produced by the large dams of Sobrarbe, meant that the existence of an 'electricity factory' producing 4 Kw/hour on a communal property was obsolete to the development of a sector dominated by Big Capital" (Cuesta, 1999: 266).

As oral and local history has reported, some engineers stole concrete and cement to build their houses (Marías Cadenas and Corral Broto 2006; Campo Vidal 2007). Partly as a result of these practices and subsequent shortages, major disasters related to dam building occurred. The disaster in Ribadelago (León) took place in 1959. The failure of Vega de Tera dam due to poor construction killed 144 people and displaced residents living between Ribadelago and Sanabria lake. As a result, the exiled trade unions and anti-Franco political organizations criticized the national policy of building large dams. Francoist authorities suppressed information about the lack of iron and reinforced concrete in the construction of the dam.¹ Newspapers that were censored by the regime defined the disaster only as the result of "a simple overflow" of the dam.² In the rigged

1. *España Popular*, Epoca Segunda, Year XVII, num. 879, 15 January 1959, p. 1, and *passim*; AIT CNT, *Órgano Oficial del Comité Nacional del M.L.E. en Francia*. Época II, num. 717, 25 January 1959, p. 2, and *passim*.

2. *ABC*, January 10, 1959, p. 15; *La Vanguardia*, January 11, 1959, p. 5 and 16 January 1959, p. 4.

trial of 1959, only a few technicians were convicted of recklessness.

Between 1964 and 1967, in Mequinenza (Aragón), women, children and men organized two demonstrations to protest the dangers of the big dam project, which was constructed on the flooded mines. The Mequineza Ebro river dam aspired to be the biggest in Europe, along with Vaiont's dam in Italy. Local villagers questioned the Francoist celebration of "25 years of peace" in 1964 by calling it "XXV years of peace and 7 years of war against ENHER" (Gaviria, 1977: 165). Immediately, The Communist Party, together with Christian worker and youth organizations, published articles about the Mequinenza dam struggle.³ For the first time, underground labor organizations incited internal environmental activism beyond the local level, promoting meetings and protests, targeting national public opinion, and linking with similar events nationwide, such as Ribadelago, Castrelo de Minho, etc. Christian workers organizations fought for legal protection against the risks of dam failures (Corral-Broto 2013). In the 1970s, clandestine trade unions began to advocate for the improvement of living conditions on behalf of those affected by the conflicts.⁴ For the first time ever, they contested the water policy and the Ebro river transfer - a project to transfer water from Aragon to urban and industrial Catalonia (Pinilla, 2008; Corral-Broto, 2015).

These underground parties published manifestos against the river transfers and nuclear power plants that were products of the environmental coloniality of Franco's policies toward natural resources.⁵ For example, *Ebro*, a clandestine propaganda publication, qualified the expropria-

tion of Mequinenza's dam as "premeditated and authorized abuse" and "plunder, an insolent and brutal pillaging". In their campaign against big dams, antifrancoist trade unions and left-wing parties argued that "public investments should be made by the criteria of social profitability and ensure the development of the most backward areas".⁶ Concerning the Ebro River transfer, peasant trade unions championed "regional solidarity" in opposition to "regional inequalities".⁷ In 1971, the Communist Party called for regional justice and spoke out on the abuses of powerful regions.⁸ In addition, FRAP explained environmental injustices as follows: "they [regional elites and bourgeoisie] were never affected by emigration or concerned by environmental degradation, nor did they experience the need to reclaim development or regional balance at all".⁹ In 1977, the fight against "the colonization of the Ebro valley" was christened by Angel Delgado in the collective work entitled *El Bajo Aragon expoliado*, which was edited by Mario Gaviria (1977: 148-215).

The "plunder, an insolent and brutal pillaging" or the "colonization of the Ebro valley" could not have been implemented without repression and censorship. Following the suicides and deaths from avoidable environmental disasters, the Catholic church in Aragon gave its support to energy companies. Local priests, alongside residents harmed by the Mequinenza dam, publicly denounced the state's repression. The regional antifrancoist journal *Andalán* would also be censored due to its coverage of the struggle from 1973 to 1975. Issue 26 was censored because the journal "criticized the mayor of Mequinenza and the archbishop of Zaragoza for favoring the company ENHER to the detriment of forty needy families who were reluctant to move to the new town, and who had lost their support when the parish priest was replaced" (Forcadell, 1997: 56-60). In 1973, the parish priest was removed because during mass one day he said: "today instead of speaking about the Gospel, I am going to explain what is happening in Mequinenza so that you know the truth of

3. Local Archive of Saragossa (AMZ), Communist Party Collection, 'El partido comunista ante los problemas agrarios hoy', *Nuestra Bandera*, 53, 1967, p. 16-23 and *Juventud Obrera*, 86, September 1964 and 97, August 1965.

4. Government Delegation Archive in Aragón (ADELGA), Police Collection, box 4, April 1973; ADELGA, SIGC Collection, b. 2 and 4, March 1973 and 1 June 1976; *AIT-CNT órgano de la Confederación Nacional del Trabajo*, num. 9, IV time, December 1976, p. 3.

5. *Ofensiva*, May 1972, in AMZ, CP Collection, 'Política General del PCE. 1950-1977' files, b. 42505; General Administration Archives (AGA), Interior Collection, 'Memorias de los Gobiernos Civiles' files, b. 52/475, *Memoria del Gobierno Civil de Huesca de 1972*, 1973; *Mundo Obrero*, XLIV, 9, 8 May 1974.

6. ADELGA, Police, b. 5, subversive propaganda *Ebro*, num. 30, May-June 1973 and num. 35, March-April 1974.

7. *Ibidem*.

8. ADELGA, Police, b. 2, February 1972.

9. ADELGA, Police, b. 23, 24 April 1976.

what is happening".¹⁰ A year later, the same thing happened to the priest of Fabara, Wilberto Delso, who was active member of the assemblies against nuclear plants and large dams, and a friend of the former priest of Mequinenza (Corral Broto, 2015).

In Galicia, in the first novelized testimony against the Castrelo do Miño's dam, we can observe the same reasoning of this energy colonialism and the "cult of kilowatt hour" (see citation below). Stories about water coloniality gave rise to the "dam novels", which offered narratives of the tragedies and as "syntaxis of memory" (Moncada 1994; Llamazares 2015; López-Vega 2017):

What follows could have happened in Castrelo do Miño, in Maus de Salas, in Vegas de Camba, in Frieira, in Portomarín, in San Estaban do Sil, in the Peares, in Velle, in Montefurado, in Pontenovo, in Quereño, in Eume, in Portodemouros... That is, in any of the Galician villages where large dams were built - poverty for the majority, wealth for the minority. These dams transformed their lands, their houses and their own inhabitants into at thing so complex, so abstract, and so tragic that they called it the KILOVATIO/HOUR. We decided to title this novel "Morrer en Castrelo do Miño" because in Castrelo do Miño could have happened, as we call it, the untold story. But above all, because of what the role of Castrelo do Miño within the useless struggle sustained for years by the Galician people - always offended and subjugated - against the barbaric and alienating invasion of the dams meant - and still means. And because, in Castrelo do Miño, many things died. (Fernández Ferreiro, 1978: 7)

3 Mining and energy colonialism

The mining runoff that polluted the rivers was a source of frustration for the whole Francoist fishing elite, who enjoyed spending their weekends on hunting and fishing trips. An Asturian lawyer and friend of José Antonio Suanzes - a minister and President of the National Institute of Industry - developed an environmental conspiracy theory about the river pollution. He loved fishing for salmon, but they had all disappeared from the Asturian rivers in the 1950s due to mining and industrial pollution. In a letter to his friend and

minister, the lawyer suggested that the politicization of Asturian miners could be responsible for the black water in the river.¹¹

The complaints against the cellulose fiber industry and the coal-fired power stations were backed by top rural elites of the Franco regime, as well as by the powerless small farmers (Corral Broto 2012a). Francoism wiped out any hint of compensation and ruthlessly suppressed penalties during the July 18th pardons (Corral Broto, 2018). The regime was able to nullify any proven scientific evidence of industrial pollution, even after the thorough scientific investigations conducted on behalf of the claimants. Capitalist appropriations of scientific investigations, which were overseen by the scientists of the State, always saved industrialization. Many of the large landowners that complained about coal-fired power plants were removed from office, and they subsequently sold their land and emigrated to the big cities (Gaviria, 1977: 119-128). Mayors who let complaints proliferate were also removed from office, such as in Escatrón (Saragossa).¹² Coal mines fueled coal-fired power plants, which in turn produced acid rain and serious public health damages. Agrarian and medical experts explained and quantified the damages caused by Escatrón's coal-fired power plant, but these reports were ignored by industrial engineers, whose response demonstrated their loyalty to the cult of the kilowatt hour:

Before concluding this report, we believe that it is appropriate to emphasize the value of the wealth produced by the Escatrón Coal-Fired Power Station for Spain, considering the multiplying power of electricity in Industry, which according to economists can be considered to be of the order of 50 times its value... 720,000 (kw production) X 0.8 (price) X 50 = 2,880 million pesetas. Saragossa, February 27, 1967. The engineer.¹³

The regional archival records allow us to analyze this mining colonization at a local national

11. Historical Archive of State Society of Industrial Participation (AHSEPI), 'Archivo Altos Cargos. Presidentes Varios' Collection, 'Juan Antonio Suanzes' files, Correspondencia con Luís Álvarez Hevia, 30 June 1952.

12. Local Archives of Escatrón (AMEsc), box E.3.2.6., file, Libro de Actas files 1966-1968, 9 September 1966.

13. AMEsc, box K.1.2.3., "Urbanismo. ENCASO" files.

10. ADELGA, SICG, b. 3, October 1973.

scale. The problem with the extraction of coal and its burning in the coal-fired power stations was that these operations were conducted for export purposes. The coal was not consumed in the producing regions, which absorbed the pollution and bore the environmental damages. Barcelona, Tarragona, Sagunto, Valencia, Seville, Bilbao, and Madrid were the destinations of the electricity network. This was precisely what Gaviria and his collaborators denounced as "internal colonialism" (Gaviria 1977: 119-128). One of these collaborators was the economist and organic intellectual of the Aragonese Socialist Party, José Antonio Biescas Ferrer. Under the pseudonym *Normante* in *Andalán* press magazine, he defined the plight of the mining province of Teruel as the exploitation of its mining resources by capitalists from outside the region. Biescas Ferrer said, "the beginning of a typical colonial exploitation in which the laying of railway lines had a clear meaning [...] simply to extract increasing quantities of [iron and coal]", further explaining that this process was not intended for the development of industry in the "extraction" region. Therefore, he demanded a "fair and well-balanced regional development" plan (Figure 1). The Socialist Party affirmed in *Andalán* that "in energy matters, the party supports the socialization of the mining exploitations [...] and the creation of differentiated electricity tariffs, an old aspiration of Alto Aragon, which would mean, if implemented, the disappearance of a de facto colonial situation".¹⁴



Figure 1: "Mining colonization" described by Biescas Ferrer. Source: *Andalán*, num. 76, 1 November 1975, p. 5.

14. *Andalán*, May 1977, p. 6.

In Galicia, the As-Encobras coal-fired power plant project also shaped another "extraction region". Protesters argued that "Galicia's electricity needs are more than satisfied". The company Lignitos de Meirama S.A., together with a coal-fired power plant of Unión Fenosa, stated after the death of an activist: "under any point of view, the industrial exploitation of a deposit of one hundred million tons of lignite, capable of supplying a 550 MW coal-fired power plant for a quarter of a century, deserves the title of 'public utility'". The local priest Ramón Varcárcel, a law graduate and member of the Comisiones Labriegas, took a stand against the pro-company collaboration of the Catholic church with these words: "The Church is on the side of the system, what the hell is it going to help! We have to get rid of the Church we have".¹⁵ The cult of kilowatt hour, religious collaboration with energy companies, state repression, and low compensations were also evident in this conflict (Lanero 2013).

4 Techno-coloniality: heavy industry and nuclear plants

Peasant and underground trade unions started to mobilize public opinion about both over-polluted sites in 1972. In Monzón, a socialist activist led legal actions against the air and water pollution of Monsanto and other chemical industries located there. After the reconstruction of the UGT trade union in 1976, they linked public concerns with urban pollution and speculation in Saragossa worker districts with the rural pollution in Monzón and Sabiñánigo. They asked themselves "when did [dictatorship's press and media] speak out against pollution? When did they put a stop to urban outrages? Never. This, and all exposed above, is the result of a government, a form of state, contemptuous of popular will and serving a few".¹⁶ The denunciation focused on technological colonialism, as we can see in Figure 2. During the economic openness of the 1950s, the French company Pechiney-Ugine-Kuhlmann purchased 50% of the

15. *Ya*, 20 February, 1977, 'Mañana, segunda ocupación de tierras de As Encobras'; *Diario* 16, 16 February 1977, 'As Encobras: volvió la calma'.

16. *El Socialista aragonés*, num. 3, March 1976.

shares of the Hidro-Nitro company in Monzón (Huesca). According to Biescas Ferrer, the heavy chemical industry was installed there "due to the difficulties encountered by the multinationals in the existing anti-pollution legislation on the other side of the Pyrenees". Silicomanganese and refined ferromanganese were products that emitted "strong pollution during their manufacture and which are mostly exported" (Biescas Ferrer 1977, 193). Etino Química became a subsidiary of Monsanto Ibérica, a company which was set up in Monzón. Cementos del Cinca was founded in 1956 to produce cement and concrete. Monzón was known for being one of the most polluted cities in Spain. Since 1973, the provincial sanitation board tried unsuccessfully to close these industries because of their industrial pollution (Corral Broto 2011).

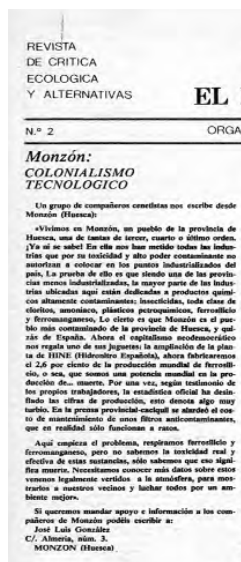


Figure 2: "Technological colonialism" in Monzón. Source: *Alfalfa*, num. 2, 1977.

In Sabiñánigo, the financial group of Urquijo Bank and its subsidiary, EIASA, along with industries such as CEPISA (Celulosa del Pirineo), Compañía Aragonesa de Industrias Químicas, and Fósforos del Pirineo, were all created in the Gallego River valley. The industrial pollution of the Gallego River forced the establishment of an interprovincial commission in 1957, which did not manage to stop the pollution.¹⁷ At present,

17. ADELGA, Water Collection, b. 5, 18 November 1957.

this area is known as one of the most contaminated places in Spain due to the accumulation of a pesticide composed of lindane by Inquinosa (Bosque 2019). The violence that was carried out in order to protect polluters was part of a permanent state of environmental injustice and corruption. As previously mentioned, the regime did not hesitate to absolve the polluters in the July 18th commemorative pardon (Corral-Broto 2018). According to Gaviria, these peripheral rural spaces were essential because "they become or will become a support for undesirable activities, i.e., those activities that need a lot of space to disperse pollution" (Gaviria, 1997: 94).

After the development plans of 1964, working class districts in Saragossa (Aragón), Erandio (Basque Country), Seville (Andalusia), and Barcelona (Catalonia) suffered from overcrowding, industrial pollution, and lack of decent living conditions (Hormigón, 1999; López Romo 2011; Gorostiza Langa 2014; Corral Broto 2015a; Gorostiza et Sauri 2017; Nicolás, Salgado, et Ubierna 2016, 31). In 1968, two workers in Erandio were killed in a demonstration against industrial pollution. In 1974, a local Sevillian protester died, and the following years brought similar fatalities, the last of whom was Gladys del Estal Ferreño in 1979, shot by a Guardia Civil at a protest against the construction of a nuclear power plant in Tudela (Navarre). In Saragossa, a city designated as a 'Pole of Development', four out of sixteen districts began campaigns against industrial and urban pollution in 1972, in Utebo, La Almozara, El Picarral, and Las Fuentes.¹⁸ The residents of Utebo's suburb and Las Fuentes launched campaigns against industrial hazards because of labor accidents and explosions that caused ten deaths between 1973 and 1976.¹⁹ In La Almozara, Las Fuentes, and El Picarral, a peripheral workers district association said that the regime did "not expect that workers would reach old age" and asserted that "workers are also human beings".²⁰ These associations explained explicitly in their underground press magazines "why people go away from the city buzz, looking

18. ADELGA, Police, b. 26, 15 November 1976.

19. ADELGA, Police, b. 24, July 1976; ADELGA, SIGC, b. 4, 25 June 1976; *Andalán*, num. 92, 1 July 1976, p. 5.

20. ADELGA, SIGC, b. 4, June 1976.

for pines every week, on every three-day weekend".²¹ In Barcelona, in the districts of Poble Nou, Nou Barris, Horta, and El Carmelo, neighborhood communities fought in vain against chemical industries and speculation projects (Figure 3).²² In the Valencian working landscape, there was a struggle over access to nature and outdoor recreation around El Saler and La Albufera (Hamilton, 2018). The working-class districts of Murcia and Seville, Carmona, Jaen, Granada, and Huelva also reclaimed green spaces and fought for the monitoring of industrial and air pollution and better environmental conditions (Escudero Andújar 2007; Pérez Cebada 2015; Contreras Berra 2018). In peripheral communities from north to south, a link emerged between environmental security inside and outside the factories that were placed close to workers' housing. In 1972, the Manifest for Aragón's Communist Party asserted: "In Spain, Aragón definitely has what we could call, without any kind of exaggeration, an internal colonization situation, which will lead inexorably to the economic, social and political degradation and the fall of our region".²³



Figure 3: Protest against Fertrat chemical industry (Poble Nou, Barcelona 1975). Source: Arxiu Històric Poble Nou.

The final feature of this technological coloniality had to do with what was called "technofascism". The ambitious National Energetic Plan (PEN in Spanish) appeared in 1974. Nuclear plans

were severely criticized, and the backlash against them was considered an anti-imperialism struggle because of the financial aid and support they received from the United States and West Germany (Figure 4). In Aragón, Galicia, Basque Country and Catalonia, the opposition to these nuclear power stations was led by local communities called "antinuclear committees". Democratic coordinating committees organized maydays, festivals and anti-nuclear marches. From 1975 to 1977, rural and urban actions against nuclear projects were also supported by the Democratic Coordination committee, which claimed a "democratic management of natural resources" to respond to pillaging and plundering.²⁴



Figure 4: AEORMA's poster against nuclear plants and the Ebro River transfer. Source: ADELGA, Police Collection, b. 26, 1975.

The issue was brought to light through the lens of an environmental justice perspective. In 1977, the Communist Party analyzed environmental issues, calling them "an unfair distribution of ecological sacrifices" in the following statement:

24. *Andalán*, num. 92, 1 July 1976, p. 5; ADELGA, 'Derecho de Reunión. Conferencias y actos públicos denegadas' Collection, b. 167, 9 November 1976; *II Asamblea de Aragón*, Juventudes Comunistas de Unificación de Aragón, March 1977 ADELGA, Police, b. 27.

21. *Especial Camo Ebro*, *ibid.*

22. *Butifarra!* Num 1, 1975.

23. *Ofensiva*, May 1972.

*Unequal development allows monopolies to exploit life-sustaining raw materials, to lower prices (agrarian products, minerals, water and energy), to exploit manpower (essentially through underemployment in the rural areas, which forces people to emigrate without any requirement in terms of wage, security, and working conditions), and to enact an unfair distribution of ecological sacrifices (polluting industries, nuclear power stations, experimental military camps). If these kinds of explorations were to disappear, it would end monopolist capitalism as well.*²⁵

5 Internal colonialism and environmental coloniality

Paradoxically, the first use of "internal colonialism" in Spanish politics came from Ledesma Ramos, who was the founder of Falange, the fascist party (Love 1989). He used the concept of "internal colonization" to describe Rio Tinto SA as having "an atmosphere of colonial exploitation that is irritating to the moral dignity and economic interests of the Spanish". Ramos first used the term "internal colonialism" in Spain to describe the conspiracy between the Spanish liberal regime and English government officials and industries in Rio Tinto (Ledesma Ramos 1940). However, the theory of internal colonialism emerged in Spain out of the concepts developed by environmental and sociological thinkers such as Gaviria, Naredo, Biescas Ferrer, Beiras, López-Aranguren, and Navarro, as we have discussed above.

Gaviria analyzed the specialization in "areas producing natural resources, raw materials, and energy, called residual rural spaces, and areas transforming and consuming these resources". The latter were considered developed areas. "Specialization", said Gaviria, "goes against the complex balance of ecosystems; there is a flow of goods in a colonially organized manner, and as a consequence, there is some way to rationalize this system, such as land use planning" (Gaviria, 1977: 93). He asked himself, "how can a population oppose a polluting activity, which is basically a

colonization operation on its air, for example?" In addition, he answered, "that the water belongs to those who work it, the minerals belong to those who live above them, and the air belongs to those who breathe it. This is a way of establishing a popular, regional and local sovereignty over the so-called national sovereignty, which in the end was nothing more than the making of concessions of water, electricity, or mines to the dominant classes and groups" (Gaviria, 1977: 96). He thought that "the concrete regional autonomy should be based on its own natural resources".²⁶ For him, a new democratic society should overcome "the internal and external imperialist aspect of Spanish capitalism" (Gaviria, 1977: 97); and this new society should seek "new energies, mainly solar, and treat renewable and non-renewable resources with the utmost ecological care (soil, fauna, flora, food, health, pleasure, etc.)" (ibidem).

The Galician economist and politician, Xosé Manuel Beiras, also expounded upon the issue of regions and nationalities in Spain. According to Beiras, there "is a manifestation of the uneven development of capitalism. This gives rise to the combination of different forms of class exploitation with the phenomena of internal colonialism".²⁷ The socialist and scholar Mariano Aguilar Navarro theorized that in the Canary Islands "the germ of a mixed colonialism could be constituted, since in it can be detected deformations of internal colonialism and new versions of classic colonialism. In the Canary Islands, the regional problem is associated with a conflictive and tense situation".²⁸

The concept of "internal colonialism" emerged within these environmental struggles and continued to be used until the 1980s (López Aranguren 1977; Hind 1984; Love 1989). González Casanova had already stated in the 1960s that the relatively interchangeable nature of the notion of colonialism and colonial structure was not only international but also intranational (2006). He analyzed the hierarchical relationship between center-periphery inequalities, between urban and

26. *Pueblo*, 27 April 1977, p. 6.

27. *Andalán*, num. 68/69, 1 and 15 July 1975, p. 16.

28. *Pueblo*, 14 February 1977, and *Cuadernos para el Diálogo*, num. 126, 12 February 1977, p. 39, Mariano Aguilar Navarro, «Entre el colonialismo y el olvido».

25. AMZ, CP Collection, 'Política General del PCE. Antes de 1977' files, b. 42505, 1976.

rural inequalities, and between metropolitan and colonial societies. In Spain, the theories of Gunnar Myrdal and Eduardo López Aragonés influenced the understanding of environmental coloniality that was first described by Gaviria, Naredo, or Biescas Ferrer, and was subsequently diffused in various regions by local press magazines such as *Andalán* (Garcés Sanagustín, 1997: 109-36). Beyond Spain, criticisms of "internal colonialism" in the management of natural resources emerged from similar struggles against environmental coloniality that occurred in different places at the same time, such as Hawaii, California, Arctic Canada, Québec, and Brittany (Blackford 2004; Libecap 2007, 12-13; Sandloss et Keeling 2012; Bécot 2015).

We propose here a concept of "environmental coloniality" based on the coloniality of Franco's modernity, which contains the three aspects of the modern-colonial world system: coloniality of power, coloniality of knowledge and coloniality of being (Wallerstein, 1974 and 2008; Escobar, 2000; Dussel 2000; Mignolo 2000; Lander 2000; Escobar, 2006; Castro-Gómez et Grosfoguel 2007). The modern colonial matrix enhances disparities between who gets knowledge, power, and identity. The rural residual and urban peripheral spaces, according to Gaviria, were colonized by ideals of mainstream progress, which were based on energy colonialism and its new gold - the kilowatt hour over community life. We have proven that an environmental coloniality existed in Francoist Spain, which also proves that González Casanova was right. Paradoxically, a country that initiated colonialism underwent a reversal of this system in order to achieve the same growth rate as Western society.

We must acknowledge that thinking of coloniality as a non-reversible phenomenon has evident analytical limits. The environmental struggles described here, along with the internal colonialist interpretation of Francoist Spain, have shaped the West as a space and subject of colonial appropriation. We must take a post-colonial, critical, and decolonial approach to studying Europe and the West, because the colonial matrix makes, remakes, and unmakes power, beings, and knowledge, especially when it comes to natural resources and the environment (Escobar 2006;

Corral 2013). In other words, the modern colonial project was designed to reconquer and subdue the West itself, because commodity frontiers are always in a state of constant mobility (Moore 2000).

The environmental coloniality of Francoist Spain helped to delineate the differences between the environmental coloniality of liberal and democratic countries. We have seen that a *hard* environmental coloniality implied the supremacy of the kilowatt hour regarding scientific expertise, lack of compensation, and environmental violence and repression. In the case of hydro-power dams, France and Italy were examples of *soft* environmental coloniality, because, since the 1930s, French electricity companies were compensated financially for any expropriation or complaint. In the Alps, compensation policies focused on inhabitants' permanence and tourist development during the *houille blanche* developmental era (Dalmasso 2008). Environmental disasters in France (Malpasset Dam, 1959) and Italy (Vaiont Dam, 1963) were not followed by media censorship (Huber et al 2016). The brutal actions of the *Guardia Civil* from 1968 to 1979 demonstrated the violent culture of repression, which originated in the famous *año de los tiros* of Rio Tinto. This environmental struggle occurred in 1888 (Chastagnaret, 2017), and was still ongoing during the Francoist regime, at least until 1979. A social and environmental history of the Francoist regime shows that behind the "simple overflow" was an old matrix that, like a *boomerang* effect, was eliminating livelihoods, extracting natural resources, and reproducing a new commercial obsession - the kilowatt hour. The brutality of the state, the total defenselessness of the laborers, and the laziness and negligence towards those affected by environmental damage created a higher degree of environmental coloniality between an authoritarian, a fascistizing or fascist regime, and a democratic one.

6 Conclusions

The environmental coloniality of Francoist Spain was what led to new struggles during the transition to democracy. Environmental coloniality had a degree of achievement and structural violence

that depended on regional and political economic issues. The colonized peripheries included urban areas occupied by the working class, the countryside, the mountains, and the fishing areas. The countryside - the provinces that Francoism tried so hard to win over - betrayed him. This led to the victory of the moderate UCD and socialist PSOE at the first national democratic elections in 1977, and in local democratic elections in 1979, even in eminent agrarian and landowners' provinces (Táboas 2018).

Colonialism and authoritarianism are intertwined in the political system of Francoism, in that they all point towards a developmentalist model, typical of Capitalist Modernity. In this model, natural resources exist for the purpose of being extracted and used for manufacturing goods. This is only possible through "violent discipline of labor" and fascist repression of any kind of protest against the privatization of nature and the expulsion of inhabitants from the territories (environmental refugees). This scenario is a good example of coloniality of power and being, which is complemented by "technofacism", in which the knowledge of the territories is erased by the scientific management of the territory and orientated to the needs of the internal and external market. It is a techno-industrial model of territorial management that involves the disappearance of traditional biocultural knowledge that is highly valuable for community sustainability, such as agricultural and livestock knowledge. This process of epistemicide is an essential part of the coloniality of knowledge imposed by capitalist modernity. Coloniality of the territory is evident through the imposition of industrialization or energy production projects located in peripheral territories within the State. This phenomenon followed the model of environmental (in)justice in the 70s and 80s. Finally, social resistance led to a cycle of struggle within Franco's regime, which has not been studied until now, and which challenges the dominant historiographical narrative of "absence of social protest". In fact, there were struggles for resources with evident environmentalist profiles that anticipated and linked other (de)colonial struggles, and that set the precedent for the environmentalist movements of the Political Transition.

Francoist Spain developed a higher degree of environmental coloniality regarding undercompensation, repression, and violence. These were the aspects that characterized Francoist environmental coloniality: first, and materially speaking, a significant decrease and undervaluation of economic compensation for environmental damages; second, the increased repression of environmental unrest, which ranged from removal of officials from office to police control and repression of public disturbances; and, third, the more widespread misuse of civil and criminal justice (Cabana and Lanero 2009; Corral-Broto, 2015).

Mario Gaviria, Biescas Ferrer, José Manuel Naredo, López Araguren, and Mariano Navarro discovered and developed the concept of the *boomerang* effect of the modern-colonial world-system, the pillaging of natural resources, and internal colonialism. Working class organizations and rural and urban peripheral residents helped define environmental justice, rights, and citizenship against Franco's environmental coloniality. They also fought against government secrecy and private environmental policies by promoting a democratic environmental public sphere in order to manage natural resources as common goods in a way that was inter-regional and well-balanced. Finally, they linked internal risks and catastrophes inside and outside the factory. In this way, they envisioned jobs integrated with better environmental conditions. To paraphrase Gaviria, proper care for ecological systems - *cariño ecológico* - will end the colonial rule of extractivism and pollution.

References

- [1] Acosta Bono, Gonzalo, Angel del Rio Sánchez, Lola Martínez Macías, and José Luis Gutiérrez. 2004. *El canal de los presos (1940-1962). Trabajos forzados: de la represión política a la explotación económica*. Barcelona: Critica.
- [2] Barciela, Carlos, María Inmaculada Lopez, Joaquín Melgarejo, and José Antonio Miranda. 2001. *La España De Franco (1939-1975). Economía*. Madrid: Síntesis.
- [3] Barciela, Carlos. 2015. "The Disasters of Leviathan: The Economic Crisis of Autarky in Spain, 1939-1959". *Journal of European Economic History*, 3: 175-199.
- [4] Bécot, Renaud. 2015. "Aux racines de l'action environnementale du mouvement syndical québécois, 1945-1972". *Bulletin d'Histoire politique*, 23(2): 48.
- [5] Biescas Ferrer, José Antonio. 1977. *Introducción a la economía de la región aragonesa*. Zaragoza: Alcrudo Editores.
- [6] Blackford, Mansel G. 2004. "Environmental Justice, Native Rights, Tourism, and Opposition to Military Control: The Case of Kaho'olawe". *The Journal of American History*, 91(2): 544-571.
- [7] Bosque Gella, J. B. 2019. "Lindane waste in Sabiñánigo (Aragon) left by Inquinosa, Spain". *EJAtlas*. Available at <https://www.ejatlases.org/print/vertidos-de-lindano-en-sabinanigo-por-inquinosa> (last access 6/17/2021).
- [8] Cabana, Ana, and Daniel Lanero. 2009. "Movilización social en la Galicia rural del Tardofranquismo (1960-1977)". *Historia agraria: Revista de agricultura e historia rural*, 48: 111-132.
- [9] Campo Vidal, Manuel. 2007. *La cara oculta dels pantans de Franco*. Documentary. Lua Multimedia.
- [10] Carr, Raymond, and Fusi, Juan Pablo. 1979. *España, de la dictadura a la democracia*. Barcelona: Planeta.
- [11] Castro-Gómez, Santiago, and Ramón Grosfoguel, ed. 2007. *El giro decolonial. Reflexiones para una diversidad epistémica más allá del capitalismo global*. Bogotá: Siglo del Hombre Editores.
- [12] Chaney, Sandra. 2008. *Nature of the Miracle Years. Conservation in West Germany, 1945-1975*. New York: Berghahn Books.
- [13] Chastagnaret, Gérard. 2017. *De fumées et de sang. Pollution minière et massacre de masse, Andalousie - XIXe siècle*. Madrid: Casa de Velázquez.
- [14] Contreras Becerra, Javier. 2018. "Movimiento vecinal y movimiento andalucista. Construcción de la ciudadanía y aprendizaje democrático en Andalucía (1963-1987)". Granada: Universidad de Granada.
- [15] Corral-Broto, Pablo. 2011. "Sobreviviendo al desarrollismo. Las desigualdades ambientales y la protesta social durante el franquismo (Aragón, 1950-1979)". *Ager*, 10: 111-155.
- [16] Corral-Broto, Pablo. 2012a. "Expertise and Rural Protest Against Industrial Pollution from Early to Miracle Years in Francoist Spain (1945-1965)". In *Naturaleza e Ciudades. O viver entre águas doces e salgadas*. Edited by Gercinar Silverio Gandara, 214-231. Goinia: Editora da PUC de Goiás.
- [17] Corral-Broto, Pablo. 2012b. "De la plainte légale à la subversion environnementale: l'aménagement des rivières dans l'Espagne franquiste (Aragón, 1945-1979)". *Vingtième Siècle*, 113: 95-106.
- [18] Corral-Broto, Pablo. 2013. "Sobre la sociedad ambiental. Un intento de decolonizar el franquismo y el desarrollismo desde Europa". *Halac. Belo Horizonte*, 2(2): 133-159.
- [19] Corral-Broto, Pablo. 2015a. "Las políticas públicas bajo el Franquismo: la gestión de la contaminación entre 1939 y 1979". *Andalucía en la historia*, 47: 18-23.
- [20] Corral-Broto, Pablo. 2015b. *Protesta y ciudadanía: conflictos ambientales durante el franquismo en Zaragoza (1939-1979)*. Zaragoza: Publicaciones del Rolde de Estudios Aragoneses.
- [21] Corral-Broto, Pablo. 2018. "Historia de la corrupción ambiental en España, 1939-1979. Franquismo o industrialización? HISPANIA NOVA. Primera Revista de Historia Contemporánea on-line en castellano. Segunda Época, 16: 646-684.
- [22] Cuesta, José María. 2001. *La despoblación del Sobrarbe ¿Crisis demográfica o regulación?* Zaragoza, CEDDAR.
- [23] Dalmasso, Anne. 2008. "Barrage et développement dans les Alpes françaises de l'entre-deux-guerres". *Journal of Alpine Research*, 96(1): 1-12.
- [24] del Arco, Miguel Ángel. 2007. *Hambre de siglos: mundo rural y apoyos sociales del franquismo en Andalucía oriental (1936-1951)*. Granada: Comares.
- [25] del Arco, Miguel Ángel. 2010. "Hunger and the Consolidation of the Francoist Regime (1939-1951)". *European History Quarterly*, 40(3): 458-483.
- [26] Dussel, Enrique D. 2000. "Europe, Modernity, and Eurocentrism". *Nepantla: Views from South*, 1(3): 465-478.
- [27] Escobar, Arturo. 2000. "El lugar de la naturaleza y la naturaleza del lugar: ¿Globalización o postdesarrollo?" In *La colonialidad del saber: Eurocentrismo y ciencias sociales. Perspectivas latinoamericanas*. Edited by Edgardo Lander, Edgardo, 113-145. Buenos Aires, CLACSO.
- [28] Escobar, Arturo. 2006. "Political Ecology of Globality and Difference". *Gestión y Ambiente*, 9(3): 24-44.
- [29] Escudero Andújar, Fuensanta. 2007. *Dictadura y oposición al franquismo en Murcia: de las cárceles de posguerra a las primeras elecciones*. Murcia: Servicio de Publicaciones de la UM.
- [30] Fernandez Ferreiro, Xosé. 1978. *Morrer en Castrelo do Miño*. A Coruña: Edicions do Castro.
- [31] Gaviria Labarta, Mario. 1977. *El Bajo Aragón expoliado: un informe*. Zaragoza : DEIBA.
- [32] Gaviria, Mario. 1974. *Ni desarrollo regional ni ordenación del territorio: el caso valenciano*. Madrid: Ediciones Turner.
- [33] González Casanova, Pablo. 2006 (1969). *Sociología de la explotación*. Buenos Aires: CLACSO.
- [34] Gorostiza Langa, Santiago. 2014. "Potash extraction and historical environmental conflict in the Bages region (Spain)". *Investigaciones Geográficas*, 61: 5-16.
- [35] Gorostiza, Santiago and Cerdà Ortega Miquel, 2016 "The unclaimed latifundium': the configuration of the Spanish fishing sector under Francoist autarky, 1939-1951". *Journal of Historical Geography*, 52: 26-35.
- [36] Gorostiza, Santiago, and David Sauri. 2017. "Dangerous assemblages: Salts, trihalomethanes and endocrine disruptors in the water palimpsest of the Llobregat River, Catalonia". *Geoforum*, 81: 153-162.
- [37] Hamilton, S. R. 2018. *Cultivating Nature. The Conservation of a Valencian Working Landscape*. Seattle: University of Washington Press.
- [38] Hind, Robert J. 1984. "The Internal Colonial Concept". *Comparative Studies in Society and History*, 26(3): 543-568.
- [39] Hormigón, Mariano. 1999. *La historia de la industrialización de Zaragoza*. Zaragoza: Cámara de Comercio e Industria.
- [40] Huber Amelie, Gorostiza Santiago, Kotsila Panagiota, Beltrán María J, and Armiero Marco. 2016. "Beyond 'Socially Constructed' Disasters: Re-politicizing the Debate on Large

- Dams through a Political Ecology of Risk". *Capitalism Nature Socialism*, 28(3): 48-68.
- [41] Lander, Edgardo, ed. 2000. *La colonialidad del saber: eurocentrismo y ciencias sociales. Perspectivas Latinoamericanas*. Buenos Aires: CLACSO.
- [42] Lanero Táboas, Daniel. 2013. "Comunidad rural, conflicto socioambiental y organizaciones políticas en la Galicia de la transición. El caso de 'As Encrobas', 1976-1977". *Halac*, 2(2): 160-196.
- [43] Lanero Táboas, Daniel. 2018. *El disputado voto de los labriegos: cambio, conflicto y continuidad política en la España rural (1968-1986)*. Granada: Comares.
- [44] Ledesma Ramos, Ramiro. 1940. *Breviario del pensamiento español. Antología*. Madrid: Ediciones Fe.
- [45] Libecap, Gary D. 2007. *Owens Valley Revisited. A Re-assessment of the West's First Great Water Transfer*. Stanford: Stanford University Press.
- [46] Llamazares, Julio. 2015. *Distintas formas de mirar el agua*. Barcelona: Alfaguara.
- [47] López Aranguren, Eduardo. 1977. "Subdesarrollo regional, colonialismo interior y dependencia". *Sistema*, 16: 65-77.
- [48] López Romo, Raúl. 2011. *Años en claroscuro. Nuevos movimientos sociales y democratización en Euskadi (1975-1980)*. Bilbao: Servicio Editorial de la UPV.
- [49] López-Vega, Martín. 2017. "Periferias emancipadas. Políticas de la representación espacial en la Iberia reimaginada". Iowa: University of Iowa.
- [50] Love, Joseph L. 1989. "Modeling Internal Colonialism: History and Prospect". *World Development*, 17(6): 905-922.
- [51] Mairal, Gaspar. 1993. "Perder el pueblo." *Revista de Antropología Social*, 2: 185-237.
- [52] Marías Cadenas, Sescún, and Pablo Corral Broto. 2006. *Testimonios y vivencias: centenario del Canal de Aragón y Cataluña, 100 años, 1906-2006*. Zaragoza: Ediciones 94.
- [53] Marín i Corbera, Martí. 2008. "Familiares pero desconocidas: las migraciones interiores durante el régimen franquista". In *El franquismo y la transición en España. Desmitificación y reconstrucción de la memoria de una época*. Edited by Damián A González Madrid, 61-95. Madrid: Los libros de la Catarata.
- [54] Martín Aceña, Pablo, and Elena Martínez Ruiz. 2009. "La edad de oro del capitalismo español: Crecimiento económico sin libertades políticas". In *España en cambio. El segundo Franquismo, 1959-1975*. Edited by Nigel Townson, 1-22. Madrid: Siglo XXI.
- [55] Menjón, Marisancho. 2006. *Jánovas. Víctimas de un pantano de papel*. Zaragoza: Pirineum.
- [56] Mignolo, Walter D. 2000. *Local Histories/Global Designs: Essays on the Coloniality of Power, Subaltern Knowledges and Border Thinking*. Princeton: Princeton University Press.
- [57] Moncada, Jesús. 1994. *Camí de sirga*. 1a ed. a Els llibres de butxaca. (Els llibres de Butxaca; 21). Barcelona: La Magrana.
- [58] Moore, Jason W. 2000. "Sugar and the Expansion of the Early Modern World-Economy: Commodity Frontiers, Ecological Transformation and Industrialization". *Review (Fernand Braudel Center)*, XXIII(3): 409-433.
- [59] Nicolás, Iñaki de, Pablo Salgado, and Jabi Ubierna. 2016. *Pegatas de Euskal Herria. 1965-1979*. Andoaín: Aise Liburuak.
- [60] Pérez Cebada, Juan Diego, ed. 2015. "Contaminación, Una Historia Oculta (AH 47)". *Andalucía En La Historia*, 47.
- [61] Pinilla, Vicente, ed. 2008. *Gestión y usos del agua en la cuenca del Ebro en el siglo XX*. Zaragoza: Prensas Universitarias de Zaragoza.
- [62] Sabio Alcutén, Alberto. 2011. *Mediano. El ojo del pasado*. Huesca: Diputación de Huesca.
- [63] Sanagustín, Ángel Garcés. 1997. "El nuevo regionalismo y el proceso autonómico en Andalán". In *Andalán 1972-1987. Los espejos de la memoria*. Edited by Carlos Forcadell, 109-136. Zaragoza: Ibercaja.
- [64] Sandloss, John, et Arn Keeling. 2012. "Claiming the New North: Development and Colonialism at the Pine Point Mine, Northwest Territories, Canada". *Environment and History*, 16: 5-35.
- [65] Sanz, Carlos. 2005. "La ayuda al desarrollo de la República Federal Alemana a España (1956-1970)". *Historia Contemporánea I*, 30: 179-203.
- [66] Swyngedouw, Erik. 2007. "Technonatural revolution: the scalar politics of Franco's hydro-social dream for Spain, 1939-1975". *Transactions of the Institute of British Geographers*, 32(1): 9-28.
- [67] Swyngedouw, Erik. 2015. *Liquid Power: Contested Hydro-Modernities in Twentieth-Century Spain*. Cambridge: The MIT Press.
- [68] Valero-Matas, Jesús A, Juan R Coca, and Sergio Miranda-Castañeda. 2010. "The Migratory Flows in Spain: An Analysis of the Migration and Immigration Input from European Union". *Papeles de Población*, 16(65): 233-256.
- [69] Wallerstein, Immanuel Maurice. 1974. *The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York: Academic Press.
- [70] Wallerstein, Immanuel Maurice. 2008. *L'universalisme européen. De la colonisation au droit d'ingérence*. Paris: Demopolis.



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