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Fascist Modernist Landscapes: Wheat, Dams, Forests, and the Making of the Portuguese New State

Abstract

Fascist ideology held strong claims about the relationship between national soil and national community. It has been less noticed that this “ideology of the land” materialized in massive state campaigns that led to major environmental changes. This article examines three such campaigns undertaken by the New State, Portugal’s fascist regime—the Wheat Campaign (1929), the Irrigation Plan (1935), and the Afforestation Plan (1938)—to demonstrate the importance of crops, dams, and forests to the institutionalization of fascism. It argues that paying attention to such topics, typical of environmental historians’ narratives, suggests that instead of characterizing fascist regimes through the paradox of reactionary modernism, in which the ideology of the land constitutes the reactionary element, it is more productive to place intensive environmental management at the core of fascist modernist experiments.

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INTRODUCTION

In 2011 John McNeill recommended that environmental historians should write “environmental histories of things other historians care about.”¹ Fascism certainly qualifies, not only because of its political, economic, and cultural interest, but also because fascist regimes had clear environmental consequences. Fascist ideology held strong claims about the relationship between national soil and national community. “Blood and Soil” (*Blut und Boden*) and “Italy must be ruralized” were characteristic slogans of the fascist era. Indeed, rooting populations back into the soil was an important part of fascists’ characteristic project of national rebirth, promising transcendence and purpose to societies perceived to be facing the menaces of individualism, alienation, and instability.² If nationalism implied everywhere a discourse about nature, in the case of fascism—a vitriolic radicalized form of nationalism—such tendency was only more pronounced.³ This was not just a question of rhetoric: no fascist regime dispensed with intensive tinkering with the environment. The history of fascism thus demands a deep engagement with environmental history.

Political historians of fascism conventionally refer to back to the land movements as demonstrations of fascist regimes’ reactionary character and their overall rejection of modernity.⁴ Cultural historians have challenged this perception, insisting instead on the modernist dimensions of the phenomenon, a kind of political experiment in inventing a new national community.⁵ But even they refer to the ideology of the land as no more than a cultural atavism, failing to acknowledge that peasant cultural revival and praise of the national soil evolved out of massive state campaigns that led to major environmental changes. Regardless of their stance on fascism’s modernistic character, both of these scholarly traditions ignore the centrality of environmental change to the fascist experiment. This article seeks to remedy this oversight, thereby illustrating the significance of environmental analysis to the study of fascism and, at the same time, the importance of understanding fascism within the context of environmental history.

A number of scholars have already begun the discussion, many of them focusing on the German and Italian experiments with fascism.⁶ This scholarship has been particularly convincing in debunking the myth of Nazi environmentalism, demonstrating how technocracy and productivity consistently put aside conservationist ideals. But it is fair to say that the question of environmentalism is still central to such studies, with less attention given to the ways concrete environmental practices contributed to the making of a fascist regime. Instead of taking fascism as a given and then seeing how it relates to the environment, deciding if it is more or less conservationist, I think

it useful to engage directly with the historical dynamics of fascism.⁷ This approach incorporates the view that control of nature can equal political power, thereby demonstrating the value of examining the distinctive characteristics of the political regimes wielding that control.⁸ This article examines three major campaigns undertaken by the New State, Portugal's fascist regime—the Wheat Campaign (1929), the Irrigation Plan (1935), and the Afforestation Plan (1938)—to demonstrate the importance of crops, dams, and forests to the institutionalization of fascism.⁹ I argue that paying attention to such topics, typical of environmental historians' narratives, not only challenges the importance of traditionalism to fascism, revealing instead its modernist nature, but also illustrates the utility of applying environmental analysis to the broader history of fascism.

INTEGRAL WHEAT FIELDS

Every fascist regime of the interwar period implemented projects intended to make the national soil feed the national body.¹⁰ Food production campaigns such as Italy's 1925 *Battaglia del Grano* (Battle of Wheat), which was quickly reproduced in Portugal (1929) and later in Germany (1934), aimed at achieving independence from the vagaries of international markets. The notion of total mobilization, which Ernst Jünger in the early 1930s transferred from the trenches of the First World War to the whole of society, had its most obvious manifestation in these inaugural fascist campaigns for the production of bread.¹¹ Fascist regimes across Europe mobilized peasants, chemical industries, machine builders, agriculture scientists, radio broadcasters, and intellectuals to protect the national community.

In their relentless propaganda efforts, fascists insisted on a simple argument: dependence on foreign production, namely cheap cereals from the Americas, had not only impoverished peasants by driving them out of the fields, but it had also exposed their respective nations' vulnerability in case of war.¹² Characteristically, fascists championed a turn to autarky by increasing home production and supporting peasant populations.¹³ In Italy, Germany, and Portugal, liberal capitalism disappeared from the countryside, replaced by gigantic bureaucratic structures geared toward controlling food production, processing, and distribution.

In 1934 José Pequito Rebelo, a large landowner from Portugal's breadbasket, the southern region of Alentejo, could not suppress his joy when, upon entering Rome he read a large poster urging Italian farmers to apply the "Integral Method" to win Mussolini's Battle of Wheat.¹⁴ Rebelo had developed the Integral Method to improve and increase grain production on the thin soils of Alentejo. His system drew on the work of French, American, and Russian agronomists

interested in expanding wheat cultivation into semiarid regions, which he then applied to Mediterranean conditions. The Italian agriculture propaganda newspaper, *La Domenica dell'Agricoltura*, promised that the Integral Method converted wheat cultivation from a seasonal activity, with its labor peaks for harvest and sowing, into a year-round one, nursing the wheat plant at every stage of its development. Seeds were to be carefully placed in parallel rows spaced widely enough for peasants to move between them when weeding, fertilizing, or draining. For Pequito Rebelo, the orderly fields exemplified the Integral Method and signaled the transformation of large landholdings, owned by a single individual, into well-tended gardens that required the permanent presence of many industrious and attentive farmers.

Rebelo's agricultural ideas cannot be separated from his politics. He was a member of Luso-Integralism (*Integralismo Lusitano*), the radical conservative right-wing movement founded in 1914 that offered much of the ideological basis of the future fascist regime.¹⁵ Integralists shared with many other European reactionaries, particularly the followers of the French *Action Française* of Charles Maurras, a disdain for the abstract republic of individuals and classes, praising instead the eternal organic nation built on families and professional corporations or guilds.¹⁶ Not surprisingly, strong ideas about the national soil were central to Integralists' visions of the organic nation. António Sardinha, the most famous among Integralist intellectuals, celebrated the sedentary Lusitan tribes that inhabited the Portuguese territory in pre-Roman times who supposedly constituted the core of the Portuguese race.¹⁷ Sardinha exulted over a mythical "Atlantic Man" who year after year tilled the same soil where his ancestors were also buried. For Integralists, the cult of the ancestors and the cultivation of the land were deeply connected in a familiar mix of blood and soil. In 1915 Sardinha published a volume of collected poems, *The Epics of the Plain*, subtitled *Poems of Land and Blood*.¹⁸

Sardinha's telluric journey led him back to the plains of Alentejo, the southern region of the country where he was born and where Rebelo developed his Integral Method. The local abundance of Neolithic and Bronze Age vestiges surely contributed to his sense of communion with "the honorable farmers that have at all times stared at the horizon that I now stare at."¹⁹ Alentejo's political economy, with its predominance of large estates and their seasonal workforce, made the region an unlikely candidate for pastoral lyrics. Not only were the vast majority of properties not in peasant hands, but there existed as well a consensus about the negative social effects of the divorce between land ownership and the agricultural workforce. Since the end of the eighteenth century popular narratives consistently characterized the scarcely populated region as lawless and attributed its high rates of burglary and vagrancy, the highest in the entire country, to the weak bonds of its population to the land.²⁰ The large tracts

of fallow land, moors, and heaths also played into the metaphor of Alentejo as Portugal's Wild West.²¹

Integralists thus had no easy task in making Alentejo's soil the source of virtues of the organic nation.²² Pequito Rebelo focused his efforts not so much on verses but on inventing new agricultural machinery to support his Integral Method for grain production.²³ It did not matter that Alentejo shared with other Mediterranean regions, such as the Italian *Mezzogiorno*, many of the geographic characteristics that made wheat cultivation an unrewarding activity. Hoping to transform defects into virtues, Pequito Rebelo sought "refined techniques" to overcome poor natural conditions and to introduce extensive cereals cultivation as a "sort of horticulture" that had "a happy influence on society."²⁴ For Rebelo, the qualities of the national soil were not to be measured by its productivity but by its ability to "reveal the virtues of the race."²⁵

Although the scholarly literature has been justifiably emphatic about the importance of biological conceptions of human races to fascist ideologies, it has tended to overlook how fascists employed the notion of the national soil to demarcate the national community. As Rebelo put it, "if cereal cultivation is complex, demanding regularly ordered plants, weeding at each developmental stage, and constant defense against natural adversities; if all this is done using perfected tools that complement the inventive qualities of the farmer; then it must influence society for the better."²⁶ In short, Rebelo argued that the hard challenges of Alentejo's landscape created a virtuous national community.

For Pequito Rebelo the ordered lines of the Integral Method embodied the new social order advocated by Luso-Integralists, and he urged "our dictatorial government [to] follow the example of our sister dictatorships and show its agrophile intentions as the fundamental idea of administration."²⁷ More emphatically, he averred that "the political renaissance of the Latin people goes hand in hand with the apotheosis of Ceres. One just has to watch Mussolini calling himself the agricultural *condottiere*, designing and commanding the *Battaglia del Grano*, and asserting that *bisogna ruralizzare l'Italia*, "Italy must be ruralized."²⁸ Ruralization, he believed, should become one of the main features of Portugal's recently inaugurated dictatorial regime.

In fact, three years after the 1926 coup d'état that ended democratic rule in Portugal, and evoking the significance of wheat to the country's commercial deficit, the dictatorship launched a national mobilization for bread self-sufficiency under the motto "Our land's wheat is the border that best protects us."²⁹ The 1929 Wheat Campaign was the final result of several initiatives since the mid-1920s to promote wheat production and support wheat protectionism against the menaces of cheap foreign grain.³⁰ These programs

were based on proposals by large landowners and their organizations, such as the Central Association of Portuguese Agriculture, where Pequito Rebelo was a prominent figure. Bread Week (1924), the National Congress of Wheat (1929), the Wheat Train (1928), and the “best wheat spike” contest (1928) were all direct precursors of the Wheat Campaign, officially launched in 1929 with explicit reference to fascist Italy’s *Battaglia del Grano*. Mobilization to produce the most basic good—bread—brought large landowners selling cereal at prices guaranteed by the state together with agricultural machine builders, chemical industries producing fertilizers, and masses of sharecroppers reclaiming land.

From 1927 to 1933, the Alentejo wheat fields, which alone accounted for around 60 percent of the national production, increased their acreage by 28 percent, occupying no less than 391,000 hectares (ha).³¹ The total annual production of the country grew from 280,000 tons for the years 1925–29 to some 507,000 tons for the years 1930–34.³² The record crops of 1934–35, with their unprecedented surpluses that led the regime to proclaim the victory of the Wheat Campaign, were due mainly to the extension of grain cultivation into the poor soils of the heaths and to the replacement of vineyards by cereal. António Sousa da Câmara, the young geneticist and executive head of the campaign, summarized the process: “The attack by men and machines ripped the heaths. . . . The crimson spot rockrose, the bell heather, the broom, the rosemary, all that scented world, the heath’s soul, slowly disappeared under the turfs lifted by the plough.”³³ His nostalgic tone was probably due to his insistence that the campaign should be won by intensifying cultivation through new wheat varieties instead of relying on extending wheat acreage.³⁴

Such ecological transformations are common in environmental history narratives.³⁵ The Wheat Campaign meant the end of uncultivated lands in the Alentejo, a major goal of every Portuguese politician since the nineteenth century who promised to increase the productive output of the country.³⁶ The heathlands that occupied some 60 percent of the region in 1864 were gone by 1930, with sharecroppers assuming the status of heroes in this epic reclamation of the plain, at least in popular songs and political rhetoric.³⁷ Possessing no more than a pair of mules and a plow, and paying back to the large estate owner between a seventh and a third of the crop, sharecroppers sought the high grain prices of a protected national market as well as the subsidy paid by the campaign for each hectare of newly cultivated land. While the large landholder contracted directly with wage laborers to work the deeper clay soils of the property (the *barros*), sharecroppers had access only to the poorer thin schist soils (the *terras galegas*).³⁸ The latter, which constituted some 85 percent of the total area of the Alentejo, were traditionally left uncultivated as

heathlands or were under the practice of long fallow. In spite of a lack of phosphorous, these *terras galegas* had a rich reserve of nitrogen and organic matter supplied by the shrubs covering the heath. Increased availability of fertilizers since the end of the nineteenth century corrected phosphorous deficits, which allowed for the integration of these uncultivated lands into the grain economy of the country.

Following the Wheat Campaign, intensive use of these thin soils led to severe erosion problems and decreased productivity in the 1940s and 1950s, driving away many of the sharecroppers who had first reclaimed them. Social unrest and brutal suppression of strikes and demonstrations challenged the success discourse promoted by the regime's propaganda services. But in 1934 and 1935 the fascist New State could boast that for the first time in history the Portuguese soil gave bread to every Portuguese. The regime had allegedly established a connection between Portugal's population and its national soil with no equivalent in the country's past.

Indeed, the Wheat Campaign transformed Portugal's simple dictatorial regime into a fascist one, combining state corporatism and authoritarianism, manifested and institutionalized in the National Federation of Wheat Producers, the first among the multiple corporatist agencies of the New State.³⁹ The 1926 authoritarian military coup evolved into a fully fledged regime, governed a corporatist constitution adopted in 1933 that would last until 1974.⁴⁰ It replaced any form of liberal mechanisms of representation with ideological nationalism, a one-party state, systematic repression, and a social and economic corporatism formed by allegedly organic social unities, a combination that placed it among the family of European fascism. More than that, under the dictatorship of António de Oliveira Salazar (in power from 1932 to 1968), the development of corporatist structures in Portugal reached a degree rarely found in any other fascist regime. Be it rice, wine, cod, or fuel, every major product or raw material had a para-state corporatist institution controlling imports, prices, wages, and quality.⁴¹ The National Federation of Wheat Producers (FNPT) fit a pattern quite common for fascist regimes with their relentless urge for mobilization.

The FNPT arose in 1932 out of the organization of local "barns" set up by the Wheat Campaign to collect and store harvested grain as well as to distribute certified seeds.⁴² In 1935 those barns became wheat guilds, and in 1939 they integrated into the general corporatist structure of the Farmers' Guilds (*Grémios da Lavoura*). Although membership in the guild was compulsory for every landholder, only those with large estates were entitled to be electors and to be elected to its governing body. In the Alentejo, as elsewhere, this meant that large landholders totally controlled the guilds. The 230 guilds that covered the national territory worked as

the local agents of the FNPT, buying the wheat crop on behalf of the government, collecting statistical data, distributing certified seeds, and selling tools and fertilizers. By 1935, only three years after its creation, the FNPT built no fewer than three hundred new barns, constituting a striking material presence of the New State in the landscape. The expansion of storage capacity was necessary for the agency, which bought all the wheat produced by Portuguese farmers and brought to an end all market transactions.

The corporatist social structure manifested at the local level as *Casas do Povo* (Houses of the People), designed to promote basic welfare policies among rural workers and to replace any form of labor unionization.⁴³ The central regime hoped to put an end to social unrest in the Portuguese fields by building some four thousand of these institutions across the country, combining health and social service (retirement and unemployment savings), basic instruction, with local improvements such as sewage works. By 1940 about half of the Alentejo parishes had Houses of the People, integrating some 150,000 members. That figure climbed to almost 90 percent in 1950, an increase aimed first and foremost at alleviating the social problems rising from the large wheat estates. While there was little social turmoil in the region in the 1930s, between 1943 and 1962 the economic conditions of sharecroppers and wage laborers declined due to eroded and degraded soils and the introduction of mechanized farming, and the Alentejo became identified with the fiercest communist resistance to the regime.⁴⁴

The Houses of the People worked as institutions of social control over the masses of wage laborers and sharecroppers: in order to get the social benefits these groups had to show proper behavior by attending mass, being diligent at work, giving up demands for better conditions, and being respectful of social hierarchies.⁴⁵ Local elites formed the boards of directors for the Houses of the People. Funds for this primitive form of state welfare—the first to reach Portuguese rural populations systematically—originated out of the Agriculture Guilds and the National Federation of Wheat Producers. This was the fascist Portuguese corporatist regime at work, with every individual either integrated into a supposedly organic structure or becoming an object of violent repression by the National Republican Guard or the Political Police with possible transfer to concentration camps in the colonies.⁴⁶ As one of the grimmest slogans of Salazar's New State exhorted, "A place for everyone; each one in its proper place."⁴⁷ The creation of this "proper place" required replacing heaths with wheat fields and transforming the Alentejo into a monocrop landscape. In this way, the New State imposed its fascist ideology on the Portuguese people and landscape through major environmental change.

IRRIGATING THE PORTUGUESE GARDEN

Salazar was proud of the New State's central role in ushering the national economy in the direction of corporatism. As he stated, "The constitution should provide for the building of great works such as communications systems, sources of power, transportation networks, and electrical grids . . . whose plans ought to be designed and enforced by the State."⁴⁸ The 1935 Law for Economic Reconstitution embodied Salazar's vision of developing a nationalist economy under the direction of the state. The law mainly supported roads, harbors, irrigation dams, public buildings, and national defense.⁴⁹ Such efforts, typical for many state policies of the Depression years, manifested Portugal's fascist New State on the nation's territory.⁵⁰ That same year, the regime launched its Plan for Agriculture Hydraulics; in 1936 the government created the Board for National Electrification and the Board for Internal Colonization; two years later, it set in motion an ambitious new Afforestation Plan. Indeed, the entire Portuguese landscape was to be profoundly changed by the growth of Salazar's New State.

Despite the success of the Wheat Campaign, Salazar had never been a great enthusiast for the Alentejo's wheat landscapes. The regime's propagandists liked to focus on his modest rural origins from the hilly Beira Interior region, very different from the southern plains and its large wheat estates. More significantly, as a young scholar Salazar wrote a famous article denouncing deviation from historical Portuguese agricultural practices and the production of wheat in areas more appropriate for horticulture.⁵¹ He argued that vineyards, olive trees, flowers, and orchards should be the dominant elements of the Portuguese landscape, sustaining a virtuous community of modest Catholic smallholders. He did not share Pequito Rebelo's visions of an integral methodology for transforming horticulture into wheat cultivation. The would-be dictator contended, "after covering the grain deficit, it is natural to improve the fatherland's soil . . . following the principles of agronomic science."⁵² He proposed to irrigate the land to "get the most from our climate and soil."⁵³ Thus it came as no surprise that after the success of the Wheat Campaign, Salazar turned the state's attention toward diversifying production on the national soil. Irrigation and its promises of abundance, as asserted by the 1935 Law for Economic Reconstitution, would become a recurrent subject for the regime and its imagery throughout its entire duration.

The New State's irrigation plans had their origins in the turbulent years of the republic (1910–26) and in the work of the engineer Ezequiel de Campos.⁵⁴ Campos was the first to transform general rhetoric of the benefits of irrigation into a concrete plan that would be the basis of every irrigation proposal in the decades to come. Campos sought to create a coherent scientific plan for Portugal's development

as a whole. The fall of the Portuguese monarchy and the Republican coup in 1910 provided Campos the opportunity to present his ideas for building the nation. His plan integrated conservationist principles made popular by Americans Gifford Pinchot and Theodore Roosevelt with the Portuguese tradition of internal colonization projects.⁵⁵

As a deputy in 1911 Campos proposed to the recently formed National Assembly a law on unreclaimed land that explicitly recognized the conclusions approved in the National Conservation Congresses of 1909 in Seattle and of 1910 in Saint Paul as guiding principles.⁵⁶ He saw the future of the nation as directly correlated to the conservation of natural resources: to manage soil, water, forests, and minerals properly was to manage society properly. In his widely quoted *A Conservação da Riqueza Nacional* (The Conservation of National Wealth), a thick volume of more than seven hundred pages published in 1913, Campos presented his whole program to save Portugal from the path of “decadence.”⁵⁷ He depicted social problems through a series of maps focused on population density, emigration numbers, and rainfall distribution.⁵⁸ The maps measured the deficit of national resources and showed the irrationality of Portuguese population distribution. They revealed that Portuguese emigration mainly followed a path from the densely populated regions of Portugal’s rainy northwest to Brazil and the United States, while the dry lands of the south, namely the Alentejo region, could be considered a no-man’s-land. The maps made the central thrust of Campos’s plan virtually self-evident: colonize Portugal’s south with people from the nation’s north.

Such significant population redistribution would only be possible with a drastic change of the southern landscape. Major hydraulic structures would irrigate the semiarid lands, thus allowing settlers from the north to practice profitable agriculture. Subdividing the large wheat estates of the south would, planners believed, sustain a virtuous community of proud farmers: “The Republic was born for every Portuguese,” Campos claimed, “offering a homestead to anyone willing to cooperate with the strengthening of the Nation. There is no Republic while a single large landowner remains.” Campos also stated, “There is almost no difference between the social condition of the Far West and our Alentejo: both are lands to colonize, the only disparity being that the free lands from the Rockies . . . to the Pacific shores are mainly Public Domain while among us the Alentejo is private property.”⁵⁹ He took his analogy still further: “Tomorrow may the Alentejo be a promised land, a new California.”⁶⁰

Campos believed that scientific management of natural resources was key to Portugal’s success. Riots and looting in search for provisions in the capital city in 1917 and the unwillingness of the countryside to contribute to Lisbon’s hunger relief seemed to confirm Campos’s diagnosis that Portugal was a poorly organized country and

excessively dependent on foreign trade. This view pushed him toward supporting a shift away from traditional liberal politics toward rule by the learned elite. Together with his left-leaning companions of the *Seara Nova* (New Harvest) movement, he called for a national government of experts immune to party rivalries, a revolution from above to save Portugal from chaos and decadence.⁶¹

Campos and his friends were not alone in their distrust of democratic values. In fact, they sought allies for all their reform projects. In the *Revista dos Homens Livres* (Free Men Magazine) they joined forces with anarchists, conservative monarchists, and even with radical right-wing Integralists such as Pequito Rebelo. All that mattered was to gather forces against traditional party politics, for the only authentic dividing line was not “between left and right. . . but between men of the twentieth century and men of the nineteenth century.”⁶²

The New State implemented many of Campos’s proposals in the 1930s. Trigo de Morais was the civil engineer in charge of designing the Hydraulic Plan of 1935 that intended to build dams to support internal migration.⁶³ For Morais, irrigation was the solution for Portugal’s demographic problem: “The most efficient solution both in the Metropolis and in the Colonial Empire for relocating surplus metropolitan population lies in Public Works focused on land reclamation by water and in its multipurpose use.”⁶⁴ Each new dam in the south constituted the opportunity to divide large properties into small homesteads, sustaining the pastoral Eden of Portuguese fascist ideology.

Trigo de Morais became head of the National Commission for Agriculture Hydraulic Works in 1933. That same year the commission prepared a Plan of Studies and Constructions that became the Plan of Hydraulic Works. The commission created a map of Portugal, reminiscent of Campos’s, showing population distribution across Portugal as well as the locations of twenty irrigation areas that, in 1933, amounted to a total of 106,000 ha. The commission planned to irrigate more than 400,000 ha by 1950, which, it argued, would sustain some 100,000 people, or 10 percent of the excess population as quantified by Trigo de Morais.

In 1949 Salazar’s regime inaugurated two of the plan’s main dams. Significantly, one of the dams was named after Trigo de Morais and the other honored Salazar, complete with a bronze effigy of the dictator placed against the cement. The inaugural speech by the minister of public works suggested that the dam was the perfect embodiment of Salazar: “The dam is a work that establishes order and security; that regulates and foments the economy; that offers work, revenues and welfare; that uses the country’s own resources to develop the many diverse fields of activity of its population. . . . Would there be any other material achievement, any other monument . . . which would

better express the benefits derived from two decades of rule of the political regime inaugurated on the glorious day of May 28, 1926?"⁶⁵

Salazar, present at the ceremony, answered with his own speech. Salazar recalled his early life as a small farmer, noting the importance of a regular water supply for anyone tasked with tilling the land. But he emphasized that "Water won't be only a factor of more abundant production . . . it will be as well the health of the people, the joy and freshness of the landscape." He finished his speech with the call "Irrigate! Irrigate!" The implication was clear: green irrigated fields constituted the proper landscape in which the regime's trilogy "God, Fatherland, and Family" could bloom.⁶⁶

Despite the early rhetoric, by 1974—the end of Portugal's fascist regime—only 76,000 ha were irrigated.⁶⁷ Furthermore, irrigation failed to draw new settlers in the large properties of the south. Instead just the opposite occurred. Large landowners kept their estates undivided and profited from state investments in an expensive hydraulic infrastructure that they never paid back. Portugal's New State Irrigation Plan was directly inspired by the American example of federal water control under the auspices of the Bureau of Reclamation, and it suffered from similar failures.⁶⁸ Instead of supporting small farmers, massive irrigation works served to subsidize well-established agribusiness.⁶⁹ The growing infrastructural power of the New State first and foremost benefited large landowners who backed the regime, thus contributing to the deep inequality that plagued the Alentejo region. Real change, political or demographic, stagnated because the Hydraulic Plan's supposed beneficiaries gained no political representation and censorship of the press guaranteed that criticism of public policies never reached the public sphere. Instead, the New State's propaganda machine publicized figures associated with the new dams as if everything happened according to the plan.

But dams did bring big material changes. One just has to look to the Portuguese food supply, namely the huge increase in rice production that earned that grain the status of a key staple in the national diet. The 20,000 tons of rice produced between 1925 and 1929 rose to 156,320 tons in 1954 and 1958, making the country self-sufficient in that grain. The higher demands of water by rice in relation to other crops implied a lower total area of irrigated land than initially projected, but more importantly, rice also demanded a seasonal workforce that, rather than settling in low-density areas, traveled each year from north to south and back again after the job was done. Trigo de Morais's statements about "irrigation expelling the communist plague and strengthening the conservative basis of the Nation by reclaiming land and dividing property" never occurred, with irrigation promoting instead the proletarianization of the rural workforce.⁷⁰

COLONIZING THE COMMONS

The failure of southern colonization plans is even more stark if we look at the record of the Board of Internal Colonization, created in 1936 to colonize state-owned land, communal land, and those private properties watered by hydraulic works. The board modeled its plans on the *Bonifica Integrale* (integral reclamation) in fascist Italy and on the Nazi settlement proposals of Richard Walther Darré, who headed the SS Race and Settlement Office and was responsible for designing the would-be settlements of Germans in Eastern Europe.⁷¹ As in Italy and Germany, the new settlements in Portugal were intended to exemplify the new society promoted by the New State, founded on the goal of producing virtuous communities by rooting them in the land.

As already discussed, state irrigation projects failed to revolutionize landholding practices, especially in the south. None of the large wheat-growing estates became homesteads for northern settlers. Instead, colonization took root in the north, where communal land still predominated and the presence of the state was limited.⁷² In the Barroso region locals depended on cattle, in particular on the locally famous Barrosã Cow, as their main source of income. Their first concern was thus to guarantee enough acres for pasture. They reserved the best communal fields for cattle grazing while shepherds drove sheep and goats to poorer soils. The agricultural scientists who dominated the Internal Colonization Board bemoaned that the best soils of the valleys were communal and the slopes of the hills were divided into private properties planted with rye. A survey conducted by the board found that individuals without cattle occupied the lowest level of the region's social pyramid. It also concluded that the high proportion of households managed by single women (14%) was determined by the indecorous way of life of male and female shepherds, which promoted, in their view, improper sexual conduct. The task of the board was then double: to bring new settlers from overpopulated areas into the isolated Barroso region and to convert local people to the moralizing activity of agriculture, namely by cultivating seed potatoes.

The survey identified areas for agriculture, cattle, and forests. The first goal was to change the use of 3,330 ha of commons, of which only 38 ha were at the time used for agriculture. The board scientists blamed the region's social inequalities on the local obsession with cattle, noting significant income disparities between large cattle owners and small farmers. The scientists calculated that overall income would triple if local people shifted from raising cows and sheep to cultivating potatoes. An increase in potato production would also contribute to the national import substitutions effort, making the

country self-sufficient in a strategic staple whose lack had been severe during the First World War.

Aldeia Nova do Barroso (New Village of Barroso) was to serve as an example of the new virtuous community of potato growers. Settlers from other regions of Portugal, where cattle were secondary to other agricultural practices, were to occupy the pilot village. The plan called for forty-five new homesteads, with each settler receiving 17.25 ha divided between agricultural land (11.25 ha) and forest area (6 ha). The state also provided each settler family with three cows, three pigs, and twenty sheep, agricultural tools, and a two-story home designed according to the region's folk-building traditions by the architects of the Agricultural Department in the Lisbon office. The houses occupied an area of some 600 meters by 320 meters planted with trees to divide the properties geometrically and produce a garden-city effect. The buildings, with piped water but no electricity, lined the main street in double rows. A public fountain and a primary school sat at the southern edge of the town, also built based on a model designed by the region's central services. The northern side of town housed the chapel and the water reservoir that overlooked the entire panorama. The Department of Agriculture Technical Assistance building was a few kilometers outside of town, providing the space for storage of agricultural machines and a central location for the region's extension services.

The intentions of the engineers and architects of the Board of Internal Colonization were clear: following their Italian and German counterparts, they intended to design a virtuous rural community where technical assistance and moral indoctrination were part of the same endeavor.⁷³ The initial efforts to convert local communities from raising cattle to agriculture succeeded, with seed potatoes playing a crucial role in the region's economy.⁷⁴ But this was not enough to overcome the general failure of the entire project at the national level. At the beginning of the 1960s, the board had built only about five hundred new households, roughly 30 percent of its original projection.⁷⁵

The Board of Internal Colonization's impact on the northern common lands paled, however, in comparison to the other state agency occupying the commons, the Forestry Service. Of the total 532,000 ha of communal wasteland in northern Portugal identified by the Forest Service's 1935 survey, some 420,000 ha of mountainous terrain were to be forested in the next thirty years. This ambitious goal came out of the Afforestation Plan of 1938, which was largely funded by the 1935 Law of Economic Reconstitution (discussed earlier). The Afforestation Plan did not aim to sustain a virtuous community of small landowners by dividing the commons; instead, it promoted the conversion of common property into state forests. These forests would supply new industries and contribute a new energy source to

the country. Such justifications of the plan were certainly in tune with the regime's economic policy of putting the national soil in service of the national economy. More than aiming at self-sufficiency—products such as pine resins were to be mainly exported—the forestation effort was to further root economic activities in the national soil. Forest engineer J. C. F. Themudo concisely stated this goal: “Divine Providence gave us Salazar thus guaranteeing the continuity of our Fatherland! . . . Shouldn't we guarantee the continuity of the Portuguese people by taking inexhaustible raw materials from such poor subsoil and converting this small corner of Europe into an industrialized country?”⁷⁶

Another argument for the afforestation of the commons was the perceived sadness produced in any nationalist soul by eroded mountain slopes that embodied the carelessness of local communities. The official propaganda services praised the plan and decried a “Portuguese landscape being desolately eroded as a result of uncovered mounts, burned by sun and frost” and blamed shepherds for destroying every brush or young tree.⁷⁷ The propagandists thus held shepherds and communal customs responsible for the decay of the national landscape. In addition to reforesting Portugal's mountains, the regime argued, the Afforestation Plan would end the irregularity of Portuguese rivers and contribute to increased precipitation across the country.⁷⁸

State foresters covered 271,000 ha of mountain wastelands previously held in common with pine trees by 1968. Although many accounts describe it as another failed plan, the Afforestation Plan had real effects on northern districts like Vila Real or Viseu. Newly planted pine forests not only supplied successful industries like furniture making, resin production, and, later, paper pulp, but they also contributed to the end of those pastoral communities that relied on communal lands for their support. These communities did not go quietly. Indeed, many people staged protests against the appropriation of the commons by the Forest Service.⁷⁹ Oral accounts of villagers in areas of intense forestation furthermore suggest, although do not prove, that afforestation of the common lands contributed to massive migration in the 1960s to coastal urban areas as well as to other European countries, namely France.⁸⁰ Despite the ruralization rhetoric of Salazar's regime, afforestation failed to fix local people to the land.

CONCLUSION

Mountains covered with forests, green irrigated plains, productive wheat fields: this was the idyllic landscape of Salazar's New State, ready to be consumed in stylized images designed by propaganda services for illustrated journals, schoolbooks, newsreels, and mass exhibitions.⁸¹ Maps depicting the supposedly traditional habits and

landscapes of each region proliferated beginning in the 1930s, reproducing ad nauseam the trope of the Portuguese garden planted by the sea. Mass media depicted Portugal as a theme park, celebrating the work of the New State and ignoring that large wheat estates remained one of the most oppressive spaces of the regime, that state forests were strongly resisted by local populations, and that irrigation dams did not produce the promised community of modest smallholders.

New State projects rarely manifested as originally planned, but they nevertheless have relevant historical meaning. The first corporatist institutional forms of the New State grew around expanding wheat cultivation; irrigation made rice into a major national staple and contributed to the food independence of the country; forests and internal colonization put an end to communal forms of property integrating populations into the national economy. The national soil did indeed feed the national community; a new corporatist organic state was put in place; and larger portions of the population integrated in the nation. In other words, Portugal's fascist regime arose out of intense environmental change.

Forests, dams, and wheat brought more Portuguese under the influence of the central government, which seems in accordance with the usual characterization of Salazar's regime as traditionalist. But this was no traditional back to the land. This was instead a large-scale modernist experiment accomplished through modern technology and mass media. While technology and ideology transformed Portuguese soil into a national economic resource, displacing its previous role as the basis of local communal habits, propaganda performed the task of celebrating wheat as "the border that better defends us," dams as the embodiment of Salazar's task of ordering Portuguese society, and forests as the epitome of well-tended national landscapes. Studying Portugal's fascist regime and its efforts to manage nature in support of the state unveils its modernist dimensions. The Nazi concept of "blood and soil" and Mussolini's notion that "Italy must be ruralized" represent equally modernist mottos of the fascist era pointing at major environmental changes. Environmental history may thus suggest that instead of characterizing fascist regimes through the paradox of reactionary modernism, in which the ideology of the land constitutes the reactionary element, it is more productive to place intensive environmental management at the core of fascist modernist experiments.

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Notes

This article benefited immensely from previous discussions with Manuel Villaverde Cabral on the fascist ideology of the land. I am also thankful for the insightful comments offered by the referees as well as to the suggestions and comments made by Lisa Brady, editor of *Environmental History*.

- 1 John R. McNeill, "Future Research Needs in Environmental History: Region, Eras, and Themes," in *The Futures of Environmental History: Needs and Opportunities*, ed. Kimberley Coulter and Christof Mauch (Munich: Rachel Carson Center, 2011), 13–15.
- 2 Roger Griffin, *Modernism and Fascism: The Sense of a Beginning under Mussolini and Hitler* (Palgrave Macmillan, 2007); Emilio Gentile, *The Struggle for Modernity: Nationalism, Futurism, and Fascism* (Westport: Praeger, 2003).
- 3 On nature and nation, I find the following references particularly helpful: Richard White, "The Nationalization of Nature," *Journal of American History* 86 (1999): 976–86; Jorge Cañizares-Esguerra, *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World* (Palo Alto: Stanford University Press, 2006); Sarah B. Pritchard, *Confluence: The Nature of Technology and the Remaking of the Rhône* (Cambridge: Harvard University Press, 2011); Chandra Mukerji, *Impossible Engineering: Technology and Territoriality on the Canal du Midi* (Princeton: Princeton University Press, 2009); Thomas Lekan and Thomas Zeller, eds., *Germany's Nature: Cultural Landscapes and Environmental History* (New Brunswick: Rutgers University Press, 2005).
- 4 Zeev Sternhell, "Fascist Ideology," in *Fascism: A Reader's Guide*, ed. W. Laqueur (Berkeley: University of California Press, 1976); Robert Paxton, *The Anatomy of Fascism* (New York: Knopf, 2004); George L. Mosse, *The Fascist Revolution: Toward a General Theory of Fascism* (New York: Howard Fertig, 1999).
- 5 On fascism as modernism, see Roger Griffin, "Modernity, Modernism, and Fascism. A 'Mazeway Resynthesis,'" *Modernism/Modernity* 15 (2008): 9–24; Peter Fritzsche, "Nazi Modern," *Modernism/Modernity* 3 (1996): 1–22. Also Jeffrey Herf, *Reactionary Modernism: Technology, Culture, and Politics in Weimar and the Third Reich* (Cambridge: Cambridge University Press, 1984). The notion of reactionary modernism was an important first step in overcoming previous scholarship that had identified fascism simply as the negation of enlightened modern Europe.
- 6 Franz-Josef Brüggemeier, Mark Cioc, and Thomas Zeller, eds., *How Green Were the Nazis? Nature, Environment, and Nation in the Third Reich* (Athens: Ohio University Press, 2005); Frank Uekötter, *The Green and the Brown: A History of Conservation in Nazi Germany* (Cambridge: Cambridge University Press, 2006); Thomas M. Lekan, *Imagining the Nation in Nature: Landscape Preservation and German Identity, 1885–1945* (Cambridge: Harvard University Press, 2004); Thomas Zeller, *Driving Germany. The Landscape of the German Autobahn, 1930–1970* (New York: Berghahn Books, 2007); Marco Armiero and Wilko Graf von Hardenberg, "Green Rhetoric in Blackshirts: Italian Fascism and the Environment," *Environment and History* 19, no. 3 (2013): 283–311; Marco Armiero, "Introduction: Fascism and Nature," *Modern Italy* 19, no. 3 (2014): 241–45; Paul Josephson, *Industrialized Nature: Brute Force Technology and the Transformation of the Natural World* (Washington, DC: Island Press, 2002).
- 7 For such purposes the Portuguese case presents an important advantage: the marginal political expression of environmentalism. After all, the first national park in the country was only passed into law in 1971. Environmental historians focusing on the environmentalist movement would be limited in Portugal

- mostly to a narrative of absences. No wonder then that engineers and agricultural scientists play such an important role in my story. For such absence, see Luísa Schmidt, “Ambiente e políticas ambientais: escalas e desajustes,” in *Itinerários*, ed. Manuel Villaverde Cabral, Karin Wall, Sofia Aboim, and Filipe Carreira da Silva (Lisbon: Imprensa de Ciências Sociais, 2008), 285–314.
- 8 Toby C. Jones, *Desert Kingdom: How Oil and Water Forged Modern Saudi Arabia* (Cambridge: Harvard University Press, 2010); Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley: University of California Press, 2002); Gabrielle Hecht, *The Radiance of France: Nuclear Power and National Identity after World War Two* (Cambridge: MIT Press, 1998); Mukerji, *Impossible Engineering*; Pritchard, *Confluence*.
 - 9 On the fascist nature of the Portuguese New State, see Fernando Rosas, “O salazarismo e o homem novo: ensaio sobre o Estado Novo e a questão do totalitarismo,” *Análise Social* 35 (2001): 1031–54; Luís Reis Torgal, *Estados Novos Estado Novo* (Coimbra: Imprensa da Universidade de Coimbra, 2009): 289–367; Manuel De Lucena, *A Evolução do sistema Corporativo português: O Salazarismo*, Vol. 1 (Lisbon: Perspectivas & realidades, 1976); Manuel Villaverde Cabral, “Portuguese Fascism in Comparative Perspective,” working paper presented at the *International Political Science Association, XIIth World Congress*, Rio de Janeiro, 1982; Manuel Loff, “O Nosso Seculo e Fascista!”: *O Mundo Visto por Salazar e Franco (1936–1945)* (Oporto: Campo Das Letras, 2008). For a contrasting position, based primarily on the lack of a so-called true fascist movement as the ones in Italy and Germany, see António Costa Pinto, *Salazar’s Dictatorship and European Fascism: Problems of Interpretation* (New York: SSM/Columbia University Press, 2005); Manuel Braga da Cruz, *O Estado Novo e a Igreja Católica* (Lisbon: Bizâncio, 1998). Unfortunately, most of the international literature on generic fascism when mentioning the Portuguese case tends to quote exclusively Antonio Costa Pinto’s important work, overlooking the rich and expanding literature that has dealt with Salazar’s regime as fascism. Such a tendency has meant a downgrading of the importance of the Portuguese case to discuss fascism at large.
 - 10 Carol Helstosky, *Garlic and Oil: Food and Politics in Italy* (Oxford: Berg, 2004); Alexander Nützenadel, *Landwirtschaft, Staat un Autarkie: Agrarpolitik im faschistischen Italien, 1922–1943* (Tübingen: Max Niemeyer, 1997); Gustavo Corni and Horst Gies, *Brot – Butter – Kanonen: Die Ernährungswirtschaft in Deutschland unter der Diktatur Hitlers* (Berlin: Akademie Verlag, 1997); Mark B. Cole, “Feeding the Volk: Food, Culture, and the Politics of Nazi Consumption, 1933–1945” (PhD diss., University of Florida, 2011); Fernando Oliveira Baptista, *A Política Agrária do Estado Novo* (Oporto: Afrontamento, 1993).
 - 11 Ernst Jünger, “Total Mobilization (1930),” trans. Joel Golb and Richard Wolin, in *The Heidegger Controversy: A Critical Reader*, ed. Richard Wolin (Cambridge: MIT Press, 1993), 122–39. On the importance of Jünger’s concept for a general understanding of modernity, see Peter Sloterdijk, *Eurotaoismus: Zur Kritik der politischen Kinetik* (Frankfurt am Main: Suhrkamp, 1989).
 - 12 For a general discussion on the relations between war and food, see the important book by Lizzie Collingham, *Taste of War: World War II and the Battle for Food* (New York: Penguin, 2012).
 - 13 Although farm produce always deserved a protectionist regime under fascism, it is not consensual about the effects of such policies for the different constituencies.
 - 14 José Pequito Rebelo, *O Método Integral, 1923–1942* (Oporto: Edições Gama, 1942), 167–71. On the Italian Battle of Wheat and its role in Portuguese fascism,

- see Tiago Saraiva, "Fascist Labscapes: Geneticists, Wheat, and the Landscapes of Fascism in Italy and Portugal," *Historical Studies in the Natural Sciences* 40, no. 4 (2010): 457–98.
- 15 The prefix *Luso* means "Portuguese," after the Roman province of Lusitânia that roughly corresponds to the contemporary Portuguese territory. See Manuel Braga da Cruz, "O Integralismo Lusitano e as origens do Salazarismo," *Análise Social* 18 (1982): 137–82; António Costa Pinto, *Os camisas azuis: ideologia, elites e movimentos fascistas em Portugal* (Lisbon: Estampa, 1994).
 - 16 Eugen Weber, *L'Action Française* (Paris: Fayard, 1985; 1st ed. 1962); Robert O. Paxton, *Vichy France: Old Guard and New Order 1940–1944* (New York: Columbia University Press, 2001).
 - 17 Ana Isabel Sardinha Desvignes, *António Sardinha (1887–1925), Um Intelectual no Século* (Lisbon: Imprensa de Ciências Sociais, 2006), 200–3; José Manuel Sobral, "O Norte, o Sul, a raça, a nação—representações da identidade nacional portuguesa (séculos XIX–XX)," *Análise Social* 39 (2004): 255–84.
 - 18 António Sardinha, *A Epopeia da Planície, Poemas da Terra e do Sangue* (Lisbon: Restauração, 1960; 1st ed. 1915).
 - 19 Quoted in Desvignes, *António Sardinha* (ref. 21), 204.
 - 20 José Pacheco Pereira, "As lutas sociais dos trabalhadores alentejanos: do banditismo à greve," *Análise Social* 16 (1980): 135–56.
 - 21 Jaime Reis, "A lei da fome: as origens do proteccionismo cerealífero, 1889–1914," *Análise Social* 15 (1979): 745–93.
 - 22 On the dichotomy north/south and its relation to nationalist discourses, see José Manuel Sobral, "O Norte, o Sul."
 - 23 Quite interestingly, Pequito Rebelo developed an entire set of new agricultural machinery adapted to the application of the Integral Method. For him there was no doubt that artifacts do have politics. See José Pequito Rebelo, "A evolução da utensilagem do Método Integral," in Rebelo, *O Método Integral*, 181–88.
 - 24 José Pequito Rebelo, *A Terra Portuguesa* (Lisbon: Ottosgráfica, 1929), 62–63.
 - 25 *Ibid.*, 64.
 - 26 *Ibid.*, 64.
 - 27 Rebelo, *A Terra Portuguesa*, 66. Here Rebelo refers to Mussolini's Italy and Primo de Rivera's Spain.
 - 28 *Ibid.*, 51. The expressions *battaglia del grano* (Battle for Wheat) and *bisogna ruralizzare l'Italia* are used in Italian by Pequito Rebelo.
 - 29 In 1928 wheat alone represented 12 percent of the total Portuguese imports, responsible for 22 percent of the external deficit. The best source for the Battle of Wheat is José Machado Pais, Aida Maria Valadas de Lima, José Ferreira Baptista, Maria Fernanda Marques de Jesus, and Maria Margarida Gameiro, "Elementos para a história do fascismo nos campos: A 'Campanha do Trigo': 1928–38 (I)," *Análise Social* 12 (1976): 400–74.
 - 30 I discuss the Wheat Campaign in more detail in Tiago Saraiva, "Fascist Labscapes."
 - 31 In 1929 the Alentejo districts of Beja, Évora, and Portalegre counted for 58 percent of the Portuguese wheat production.
 - 32 D. R. Victória Pires, "Le Portugal et les Travaux d'Amélioration des Céréales atdes Plantes Fourragères," *Académie d'Agriculture de France*, June 27, 1973, 929–48.
 - 33 António Câmara, "Grandes Ofensivas," *Agros* 21 (1938): 13.
 - 34 On the importance of new wheat varieties for the campaign, see Tiago Saraiva, "Fascist Labscapes."
 - 35 See namely, Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford University Press, 1982).

- 36 The campaign followed a trend that dated already from the previous century, namely through the raising of the wheat tariff by Elvino de Brito in 1889. See the writing of the very same dictator, António d'Oliveira Salazar, *Questão Cerealífera: O Trigo* (Coimbra: Imprensa da Universidade, 1916).
- 37 José Cutileiro, *A Portuguese Rural Society* (Oxford: Clarendon Press, 1971).
- 38 The best discussion of the different nature of soils in Alentejo and their relation to the wheat campaign is Mariano Feio, *Le Bas Alentejo et l'Algarve* (Lisbon: Congrès International de Géographie, 1949).
- 39 This argument was already made by Machado Pais et al., "O fascismo nos campos," 388–89.
- 40 On Salazar's corporatist state, see Manuel de Lucena, *A evolução do sistema corporativo*; Fernando Rosas and Álvaro Garrido, eds., *Corporativismo, Fascismos, Estado Novo* (Coimbra: Almedina, 2012).
- 41 Manuel de Lucena, *A evolução do sistema corporativo*.
- 42 A detailed description of the evolution of the National Federation of Wheat Producers may be found in Manuel de Lucena, "A coordenação económica da Lavoura: significado e evolução (III)," *Análise Social* 15 (1979): 287–355. See also *Federação Nacional de Produtores de Trigo 1933–1963, subsídios para o seu historial* (Lisbon: Editorial Império, 1963).
- 43 Dulce Freire, "Estado Corporativo em Acção; sociedade rural e construção da rede de Casas do Povo," in *Corporativismo, Fascismos, Estado Novo*, ed. Fernando Rosas and Álvaro Garrido (Coimbra: Almedina, 2012), 273–302.
- 44 José Pacheco Pereira, *Conflitos sociais nos campos do sul de Portugal* (Lisbon: Publicações Europa-América, 1982).
- 45 Paula Godinho, *Memórias da resistência rural no Sul. Couço 1958–1962* (Lisbon: Celta, 2001).
- 46 João Madeira, Irene F. Pimentel, and Luís Farinha, *Vítimas de Salazar—Estado Novo e Violência Política* (Lisbon: Esfera dos Livros, 2007); Paula Godinho, *Memórias da Resistência*.
- 47 Irene Flunser Pimentel, *A cada um o seu lugar: a política feminina do Estado Novo* (Lisbon: Temas e Debates, 2011).
- 48 Quoted by Fernando Rosas, *Salazarismo e Fomento Económico. O primado do político na história económica do Estado Novo* (Lisbon: Editorial Notícias, 2000), 58.
- 49 Fernando Rosas, *O Estado Novo nos Anos 30* (Lisbon: Estampa, 1936).
- 50 For a comparison of interwar economic policies of different regimes, see Charles S. Maier, *In Search of Stability: Explorations in Historical Political Economy* (Cambridge: Cambridge University Press, 1987).
- 51 Salazar, *Questão Cerealífera*.
- 52 *Ibid.*, 121.
- 53 *Ibid.*, 123.
- 54 For a more detailed description of Campos's proposals, see Tiago Saraiva, "Laboratories and Landscapes: The Fascist New State and the Colonization of Portugal and Mozambique," *HoST, Journal of History of Science and Technology* 3 (2009); http://johost.eu/vol3_fall_2009/3.pdf.
- 55 On the long tradition of Portuguese internal colonization projects, see Manuel Villaverde Cabral, *Materiais para a história da questão agrária em Portugal—Séc. XIX e XX* (Porto: Inova, 1974). For the American conservationist movement during the Progressive era the bibliography is, of course, vast. See namely, Samuel Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920* (Cambridge: Harvard University Press, 1959); Donald Worster, *Rivers of Empire: Water Aridity, and the Growth of the American West* (New York: Oxford University Press, 1985); Donald J. Pisani, *Water, Land and*

- Law in the West: The Limits of Public Policy, 1850–1920* (Lawrence: University Press of Kansas, 1996).
- 56 Ezequiel de Campos, *Pregação no deserto* (Porto: Lello & Irmão, 1948), 20–22.
- 57 Ezequiel de Campos, *A Conservação da Riqueza Nacional: a grei, os minerais, a terra, as matas, os rios* (Porto: E. De Campos, 1913).
- 58 From 16,000 in 1900, the number of Portuguese annual emigrants rose to 31,700 in 1910. From 1900 to 1930, the total flux of emigrants was some 900,000 people. The total Portuguese population was 5,446,760 in 1900 and 6,802,429 in 1930.
- 59 Campos, *Conservação da riqueza nacional*, 460.
- 60 Campos, *Pregação no deserto*, 18.
- 61 Manuel Villaverde Cabral, “The Seara Nova Group (1921–1926) and the Ambiguities of Portuguese Liberal Elitism,” *Portuguese Studies* 4 (1988): 181–95.
- 62 Rui Ramos, *A Segunda Fundação*, in *História de Portugal*, vol. 6, ed. José Mattoso (Lisbon: Círculo de Leitores, 1994), 552.
- 63 For biographical data on Trigo de Moraes, see António da Silva Vieira, *Trigo de Moraes segundo alguns depoimentos* (Lisbon: Agência Geral do Ultramar, 1967).
- 64 A. Trigo de Moraes, *Sempre o Problema da água* (Lisbon: Agência Geral das Colónias, 1945).
- 65 *Diário de Notícias*, May 30, 1949.
- 66 This trilogy was also the one used by the French Vichy regime, which should not surprise us considering that its leader Maréchal Pétain openly quoted Salazar’s New State as its main source of inspiration.
- 67 Such numbers include as well those of the Alentejo Irrigation Plan launched in 1957. Fernando Oliveira Baptista, *A Política Agrária do Estado Novo* (Porto: Afrontamento, 1993), 80.
- 68 For the direct relations between Portuguese civil engineers serving the New State and the American Bureau of Reclamation, see Tiago Saraiva, “Laboratories and Landscapes.”
- 69 Donald Worster, *Rivers of Empire*; Donald J. Pisani, *Water and American Government: The Reclamation Bureau, National Water Policy, and the West, 1902–1935* (Berkeley: University of California Press, 2002).
- 70 Cabral, *Materiais para a história*, 102–6.
- 71 Maria E. O. Silva, *A propriedade e os sujeitos: colonização interna e colónias agrícolas durante o Estado Novo* (PhD diss., New University of Lisbon, 2011). For the Italian experience, see Frank M. Snowden, *The Conquest of Malaria: Italy, 1900–1962* (New Haven: Yale University Press, 2006); Alexander Nützenadel, *Landwirtschaft, Staat un Autarkie: Agrarpolitik im faschistischen Italien, 1922–1943* (Tübingen: Max Niemeyer, 1997). For the work at the SS Race and Settlement Office, see Michael Thad Allen, *Business of Genocide: The SS, Slave Labor, and the Concentration Camps* (Chapel Hill: University of North Carolina Press, 2005).
- 72 Junta de Colonização Interna, *Relatório de Trabalhos e Contas de Gerência: Ano de 1943* (Lisbon: Ministério da Economia, 1945).
- 73 On the propaganda efforts of the regime for inventing a folk culture, see Margarida Acciaiuoli, *Exposições do Estado Novo: 1934–1940* (Lisbon: Livros Horizonte, 1998); Daniel Melo, *Salazarismo e Cultura Popular (1933–1958)* (Lisbon: Imprensa de Ciências Sociais, 2001).
- 74 See the annual report of the technical services for the year 1958, where the low price of a certified potato is considered one of the main problems for the region’s welfare: Junta de Colonização Interna, *Colónia Agrícola do Barroso, Relatório da actividade da colónia (ano de 1958)* (Lisbon: JCI, 1959).

- 75 Junta de Colonização Interna, *Elementos estatísticos sobre colonização interna fornecidos ao International Bank for Reconstruction and Development*, 1960; SNI, *Colonização Interna* (Lisbon: Ministério da Economia, 1940).
- 76 SNI, *Repopoamento Florestal* (Lisbon: Ministério da Economia, 1940), 22.
- 77 Ibid.
- 78 Ministério da Agricultura, *Plano de Povoamento Florestal* (Lisbon: Imprensa Nacional, 1940).
- 79 Dulce Freire, "Os baldios da discórdia: as comunidades locais e o Estado," in *Mundo Rural: Transformação e Resistência na Península Ibérica (Século XX)*, ed. Dulce Freire, Inês Fonseca, and Paula Godinho (Lisbon: Colibri, 2004): 191–224.
- 80 Brouwer, *Planting Power*, 162–69.
- 81 For a systematic review of the propaganda efforts of the regime and the complex interplay between tradition and modernism, see Acciaiuoli, *Exposicoes*, and Acciaiuoli, *Antonio Ferro*.

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