

Augmented Regimes

Italian Political Environments between Liberalism and Fascism (1860s-1930s)

▼ **ABSTRACT** This article combines environmental and political history approaches, and explores the relationship between the environment and the political with regard to regime-building processes. In doing so, it proposes a procedural and process-oriented approach to the analysis of Italian liberal and fascist regimes (1860s-1930s) from the perspective of environmental politics and management. Based on the empirical case of the Pontine Marshes, the article addresses the question of whether distinctive liberal and fascist features existed in relation to the environment and proposes three areas worthy of further investigation that bridge the distance between environmental and political history. The first of these areas being the decision-making process over the environment; the second, the systems of environmental knowledge production that a regime accepts and deploys in environmental management; the third, the principles behind environmental intervention or non-intervention.

▼ **KEYWORDS** Political environments, Environmental politics, Pontine Marshes, Italian liberalism, Italian fascism

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Introduction: bridging environmental history and the political

The relationship between environmental history and the political can be articulated at two levels. The first level is the actual political use of its works of scholarship. Willian Cronon stated that, as other historiographical trends emerged in the 1960s and 1970s, environmental history has always moved within a political horizon of intervention, both in the past and in the present. Its emergence is traced back to awareness within the United States (US) of the dangers of radioactive contamination from the fallout of nuclear bomb tests, oil spills, water and air pollution; to the 1962 best-seller book *Silent Spring* by Rachel Carson and the establishment of the first Earth Day in 1970; to a series of environmental laws by the US Congress (Hughes, 2016: 38-39); to the Earthrise photograph of Earth taken from lunar orbit by astronaut William Anders in 1968 that showed the planet in all its vulnerability. The connection between environmental history and the environmental movement relied also on the fact that the majority of the first wave of environmental historians considered themselves environmentalists and framed their own works as contemporary political interventions. Even scholars whose work has been less explicitly political, have consciously sought to contribute to contemporary environmental politics (Cronon, 1993: 2-3). In recent years, the political side of environmental history also emerged in the form of stories of non-US and non-Western wars or colonial domination, workers' being disciplined in factories and labour rights being curtailed, and women's work being devaluated and disempowered (Barca, 2017). Moreover, the need to address "the moral problem of living on earth" (Cronon, 1992: 1374) appears evident in the common and long-lasting way of framing stories of the environment from the past as cautionary tales. Over time, discussions of environmental concerns have newly energised historical questions, and vice versa historical questions have been posed in search for lessons to be learned and topical issues to be further explored (e.g. Worster, 1979; Wright, 2017; Carey Jr, 2021).

The second level concerns the position of scholarly endeavours of environmental history in the broader canvas of historiography. Despite the ubiquitous "political subtext" of most stories about past environments (Cronon, 1992: 1361), some elements of the field have long prevented an intended engagement with scholarship in political history. The early major lines of scholarly development – and debate as well – of the discipline have been, on the one hand, intellectual and cultural dimensions and, on the other hand, material and economic ones (Cronon, 1990). Environmental historians showed interest in what people have thought about the natural environment, how they have expressed their ideas of nature in literature and art, how attitudes and concepts have affected human actions regarding

environmental phenomena. This line of inquiry has been pursued to such an extent that J. Donald Hughes claimed that “environmental history can be a sub-field of intellectual history” (Hughes, 2003: 25). According to Donald Worster, the “mental interaction” between humans and nature is only one of the three strands of the field. The other two strands being first, the study of “nature itself”, including humans from an ecological point of view, the behaviour of species – including those cultivated and domesticated – and the flow of materials; and second, the exploration of the socio-economic interaction between humans and nature, meaning processes of production and reproduction with a close connection to agrarian history and issues of pollution and contamination (Worster, 1989).

The transnational character of ecoregions and ecosystems, ecological connections between countries, migration waves, the environmental impact of transnational industries, export agriculture, and international trade have produced an understanding and a practice of environmental history as transnational history (Evans, 2010). One of the major, and most interesting, characteristics of environmental history is tied to the fact that it has proposed spatial and temporal frameworks of unusual magnitude. Historical phenomena can be analysed at the global or continental level, over the course of a century, a millennium, or even beyond (Locher-Quenet, 2009: 24-25). Temporal and spatial scales were unusual, especially from the perspective of European national historiographies whose elective scale has been the nation-state (Acker-Warlouzet, 2022: 26-27). It is not a coincidence that in some European countries – Italy for instance – environmental history was defined in opposition, and as a reaction to, political history (Winiwarter et al., 2004: 514-515). These two factors – the economic and cultural roots and the natural phenomena which pay no heed to political borders – have been hampering the development of political environmental history, a realm of the discipline in which the nation-state focus is a relevant unit of analysis (McNeill, 2010: 359).

In the midst of such a manifold relationship between environmental history and *the political*, two ongoing parallel processes have created a space for a fruitful discussion between environmental and political histories: the former calling for the politicisation of the environment and the latter redefining its contours – namely its methods and objects of study (Forum, 2015). Political theorists have defined the political as negotiating dynamics among powers and values of enduring communities, and as expressions of powers that cannot be restricted to institutionalised practices. Consequently, the political consists in “the opening of a space” of encounters for those who do not take part in a historic-specific socio-political order; in other words, the political is a process of altering the *status quo* of a polity rather than a situation preserving a static network of power relations. Mustafa Dikeç has conceptualised the spatial dimension of the political as “the polemical space where a wrong can be addressed

and equality can be demonstrated". Thus, he described the political as a window of opportunity for "democratic pronouncements" (Dikeç, 2005: 171-172, 185-186). Shifting from political theory and political geography to environmental history, calling the environment "political" has meant the acknowledgment that individuals and communities make choices about how to use resources and how to respond to new risks and crises. In making choices, competing interests that are structured by power relations emerge and give rise to environmental politics. Dynamic power relations and environmental policies are made – and thus can be analysed – "through the lens of scientific knowledge, systems of social, emotional, and economic value, and political institutions and influence". (Robson, 2021).

This article enriches those definitions by showing both the role of the environment in reconfiguring the relationship among human and non-human actors and exploring a polity's reconfiguration that leads towards non-democratic pronouncements. More precisely, the political is understood as a window of opportunity for political transformation, but not necessary as a democratisation path. This article addresses the political of the environment by linking national political regimes with related environmental politics and management models, and articulates the attempt of disentangling political environmental history from the claims of political regimes with respect to their environmental undertakings. In doing so, it draws on current scholarly reflections stressing the power of nature to act as a trigger for, and as a factor influencing the institutional agenda of governmental bodies. Interpretations of political regimes in the light of the environmental history perspective are emerging and those reflections mirror the complex relationship between levels of political praxis and institutions and the temporal and spatial scales of potential actions to be taken. If, on the one hand, the political dimension of environmental history has contributed to breaking the monopoly of the nation-state as the unit of historiographical analysis of political issues; on the other hand, the focus on the role of the environment has made room for interesting overlapping between nation-based phenomena and international policies (Anker, 2020), and the perspective of the non-human actors has augmented our understanding of national – and mostly nationalistic – political regimes on more material grounds (Saraiva, 2016; Fleischman, 2022). In fact, it cannot be denied that the state has interacted with the environment (Reflections, 2022) and, among other means, "environmental issues are subjected to a political and historical 'force of gravity' that makes them rotate around nation-states and their institutions" (Armiero-Hardenberg, 2014: 3). Liberal, authoritarian, and democratic regimes – Western political categories that fit the geographical scope of this article – have had environmental attributes, premises, and implications that are worthy to be explored in order not to confine the interest of the discipline

to a selection of green topics (Armiero, 2016: 50-53). This article avoids a thematic analysis and instead looks into the mechanisms and trends of environmental and political interaction since it stands out as an inevitable discussion of our times, in which climate alarmism and injustices require the reconsideration of founding structures – values and procedures – of current political formations. This paper builds on the view and goal that Stefan Couperus and Liesbeth van de Grift stated in introducing the recent forum on ‘Environment and Democracy’ for the *Journal of Modern European History*:

[W]ithout reconsidering and deconstructing the intricate historical relationships between the political and the environmental, little imaginative space remains to create agendas of change that have the ability to come to terms with the anthropocentrism, the conflicting temporalities and the geographies of injustice and inequality of the (recent) past (Couperus-van de Grift, 2022: 4).

This article historicises specific entanglements of the political and the environment occurring in Italy between two regimes – the liberal (1861-1922) and the fascist (1922-1943). It pays particular attention to shifts and ruptures in order to identify specific lines of tension and areas of concern that pertain to either formal and informal liberal or fascist institutions through the aforementioned lens of knowledge production systems, social and economic values, political missions, and institutional involvement. This article argues that distinctions between liberalism and fascism in Italy can be traced in the decision-making process, environmental knowledge production, and approach informing environmental transformation. The goal of this contribution is by no means to find normative definitions of both liberal and fascist environments in Italy or in Europe. Instead, it would rather launch a conversation around crucial nexuses of politics and environment able to enrich scholarly debates and choices towards more inclusive and just environmental governance. This article wishes to open a debate about the potential of the environment in redefining “the contours of the political” (Forum, 2015).

Lines of tension and areas of concern are identified on the ground of empirical research – whose findings are only partially published – and recent literature on Italian liberal and fascist environments. The article mobilises the case study of the transformation of the Pontine region, which is to be found south of Rome, across liberal and fascist Italy. Given its material and rhetoric trajectory, the selected region acts as a valuable entry point to explore questions of continuity and changes across regimes. Well before the Italian unification (1861-1870), the region had attracted many partial and non-decisive reclamation efforts by Popes – in particular Pius VI in 1777 – and local aristocrats (Masetti, 2011; Martone, 2012; Bevilacqua, 2015; Bevilacqua, 2017), and in the late nineteenth



Figure 1: Natural Reserve Pantani dell'Inferno located within the Circeo National Park, Pontine region. June 2022.

Source: photo R. Biasillo.

century it appeared as an unavoidable reference in all national debates on potential reforms of wetland areas. Being the largest wetland in Italy with a surface of 30,000 hectares, its definitive reclamation happened under fascist rule in 1930s and was showcased by Mussolini's government as the most impressive environmental and social enterprise of the regime (Armiero-Biasillo-Hardenberg, 2022: 24-25, 37-38). In summation, within a fifty-year time span, the Pontine Marshes passed from being the national symbol of economic backwardness and social unrest to a nationalistic and powerful symbol of authoritarian order and fascist fertility (Caprotti, 2007; Caprotti 2008; Caprotti-Kaika, 2008). The fascist reclamation of the Pontine Marshes is still present in public debates in contemporary Italy and has become a favoured topic in revisionist post fascist discourses in the context of a new politics of memory (Stewart-Steinberg, 2016).

The following sections introduce the state of the art on research about Italian political environments in the late nineteenth and early twentieth centuries; reconstruct notable aspects of environmental management and policies tracing the progressive transformative process of the fascistisation of nature; conclude by proposing new paths along which the environment and the political can meet with each other and identifying new common grounds.

The Italian Context

The processes of nation- and state-building in Italy started in 1861 – with the proclamation of the unified Kingdom – and continued to 1870 – with the annexation of the Papal States, and most importantly Rome. The fascist government that came to power in 1922, constituted a major institutional and political shift which affected the development of Italian institutions. The new fascist government progressively undermined free and voluntary-based political participation and deliberation. Italian historiography has extensively explored the relationship between liberal and fascist eras focussing on institutions, societies, and administration, while searching for ruptures and continuities.

This regime shift seemed not to have represented a watershed in environmental transformation, since historians have widely acknowledged the extraordinary economic growth experienced during the post-war period – and related consequences of the economic boom after the 1950s – as the pivotal moment in terms of environmental and ecological changes (Biasillo, 2018; Paolini, 2020). Long-term environmental continuities spanning liberal and fascist periods represented the interpretative framework of Italian environmental history. First, since the formation of the new Kingdom, the focus of successive governments was to increase agricultural production which involved severe deforestation, progressive privatisation of the collective landownership, and agricultural modernisation and mechanisation. Second, the hazardous effects brought by the late development of heavy and large-scale industrialisation, and heightened by the principles of free markets and *laissez-faire* economic policy, created major environmental problems all over the country, especially in the so-called “industrial triangle” between Genoa, Turin and Milan (Corona, 2017: 33-62). These first two elements led to a third one, the country’s environmental vulnerability, its exposure to disasters, and its typical hydrogeological unbalance due to a combination of political choices and physical characteristics of the peninsula (Bevilacqua, 2005: 6-8). Finally, another broad theme is the struggle for energy sources in a country that has poor mineral resources, and the attempt to address this through building a large number of hydroelectric plants in mountainous areas (Malanima, 2006; Armiero, Biasillo, Hardenberg, 2022: 54-56).

There is another reason that makes this comparison even harder to draw, besides the aforementioned long-lasting environmental trends. Neither Italian liberalism nor Italian fascism were monoliths: they had undergone inner transformations. The major ruptures in the composition of ruling classes occurred between 1861 and 1922. These were widely reflected in the institutional and legislative architecture of the liberal state, and have therefore been discussed by historians (Cammarano, 1999; Cammarano, 2000). Conversely, the twenty years of uninterrupted fascist government

under Benito Mussolini concealed political changes undergone by Italian fascism itself and rephrased them through a teleological narrative. As such, idiosyncrasies and adjustments of Mussolini's regime for the most part have not garnered sufficient attention from scholars.

From an environmental history perspective, a break has been identified in environmental policies, the interpretations of natural phenomena, and in extreme events during the liberal era (Biasillo, 2013; Novello-McCann, 2017: 466-471; Rohr 2020). With respect to the Italian case, the term "ecoliberalism" has been coined to address the "codependent relationship between ecological transformations and nation-building processes during the liberal era." Such a co-dependent relationship began with a process of significant adjustment which started in 1882. During the last four decades of the nineteenth century, the basic tenets of the liberal approach to nature were: the full emancipation of citizens from any kind of legal, ecological, or social constraints; protection of the entitlements of property owners and middle-class urban dwellers; and the maximization of wealth and profit. Until 1882, these three principles determined the lack of regulation in the exploitation of nature, while after that date, they led the liberal state to develop some forms of environmental protection. A disastrous flood hitting the city of Verona and the surrounding countryside occurred in 1882 and garnered national attention. The flood played a key role in problematising the relationship between the liberal state and regulation beyond the environmental realm, and, after that very extreme event, in devising regulatory laws along liberal principles. Environmental protection took the form of the state's direct intervention to control risks and remediate damage and it was a way for Italian liberal governments to correct the spillover effects from the previous lack of regulation (Biasillo-Armiero, 2019: 71).

As part of a wider historiographical debate on authoritarianism and the environment within and beyond Europe, historians have also explored Italian fascism from an environmental perspective. Those studies have showed how, on the one hand, fascism portrayed itself as the regime of regeneration and reclamation, both in the social and natural context, in opposition to the liberal decay that had produced "a degenerated landscape and a weak people" (Armiero-Hardenberg, 2013: 287). On the other hand, fascist studies outlined how conservative elements and the reinvention of an ancient Roman tradition blended with a season of scientific and technological innovation that increased the yield of crops along with the introduction of new methods of animal husbandry in the typical fascist form of "alternative modernity" (Saraiva, 2016: 3-6). The environment was always presented "as a challenge, as an obstacle to be defeated, as an object to be conquered, and as a territory to be defended from external enemies" (Dogliani, 2014: 256). More recent environmental historiography has explored the results of the introduction of these new scientific

and technological innovations in the African possessions of fascist Italy when managing agrarian (Sollai, 2021) and water and infrastructure developments (Caglioti, 2022). Under fascist rule the relationship between fascism and the natural environment did not evolve in a linear fashion, it was also marked by inconsistencies, disarray, and unplanned developments which collided with the propagandistic narrative of a coherent political discourse (Dogliani, 2014: 252; Biasillo, 2021).

Moving along these lines of continuity and discontinuity across, and within political regimes, an additional set of elements can enrich the comparison between Italian liberalism and fascism. The following section boosts the comparative approach by reflecting on a few distinctive features of each regime and, thus, stressing discontinuities rather than continuities.

Cuius Regio Eius Natura

The possibility to filter and understand regime-building phenomena by looking at, and through, the environment relies on the assumption that social (encompassing the political) relations and environmental dynamics are interconnected and reciprocally constituted (Engel-Di Mauro, 2014: 11-12). Thus, a theory of historical transformations could always be classified as “socioecological”, given that transformations stem from the interplay of social and natural mutations (González de Molina-Toledo, 2014). Also, the very conceptualisation of the environment as a historical subject makes room for a richer and environment-based understanding of any aspect of the past, inclusive of political regimes. Humans have always been “‘environing’ as they [went] along with their business... The environment ... is constantly being produced by the combined economic and cognitive practices” that societies undertook (Sörlin-Warde, 2009: 8).

The following subsections present three procedures whose potential uses are the exploration of new paths and the steering of innovative understandings of the relationship between the environment and the political: decision-making processes, environmental knowledge production, and approaches to environmental transformation.

Decision-making process over the environment

In 1865, the Kingdom of Italy issued its first administrative reform outlining the network of bodies and officials involved in the implementation of laws. The two pillars of the 1865 reform were the municipality and province and, at least on paper, they responded to hierarchical and centralised organizational principles. Prefects – heads of provinces appointed by the Ministry of Interior – and mayors – appointed by local

constituencies – were envisioned to act as the *longa manus* of the state on the ground. The 1865 reform was meant to be provisional, even if it remained in use until 1927, and was subjected to amendments according to the needs of the bureaucratic apparatus of a newly born state (De Nicolò, 1996). A suspicious attitude towards local bodies informed the geographical distribution of administrative power and generated an attempt to keep under control the activity of municipalities and provinces. However, the reform ultimately resulted in “a tension between the two centres of power, the state and municipality” rather than a mono-centric order (Romanelli, 1995: 126-129). Indeed legal, and financial institutions, charities, city councils and politicians, ministerial officials and offices, and residents and associations cut across the vertical lines of power designed by the administrative law.

The implementation and transformation of the decision-making process concerning environmental matters can be traced back through focussing on a geographical area of high relevance in terms of environmental politics during both the liberal and fascist eras, the Pontine region. This region encompassed different ecosystems – lakes, dunes, meadows, plains and forests on hilly terrains, wetlands, fields, and urban areas (Postemp-ski, 1907: 69) – thus presenting a high variety of water and land uses (Sansa, 2020: 190). The ecological complexity of the Pontine Marshes corresponded to the difficulty of its administration that was always negotiated between state, provincial, and municipal levels.

The first environmental challenge in the area became visible to the central authorities during the development of the railway network. While building the railway infrastructure of the country, the committee appointed to evaluate the effect of malaria revealed that the Pontine region presented a “severe and extremely severe” risk of malaria infection. The administrative apparatus thus started to launch initiatives led by actors either co-operating or competing among themselves (Snowden, 2002: 118-121). Public health, in fact, appeared on the list of concerns of the Ministry of Interior and, in the 1880s, two of its bodies in the Pontine region, the municipal medical service – inclusive of a hospital – and provincial council of public health, brought a new élan to the improvement in the conditions of rural and urban communities (Healthcare reports, 1882-1885). In 1885, the Italian Parliament passed a special law granting financial support for projects of hygienic improvement proposed by municipalities; however, the major municipality of the Pontine area did not apply for funds (Gigliesi, 1885: 7-8). Public health remained a constantly under-funded branch of the state and required a degree of collaboration among different administrative levels that was never achieved in the area. As a consequence, non-state actors filled the gap. In 1909 the Red Cross launched and financed a joint form of assistance focussing on the vast rural area of the Pontine region, in conjunction with independent initiatives

carried out by the local Catholic bodies. Also, local private landowners and a Milanese entrepreneur contributed, according to their limited means, to reduce the numbers dying from malaria. Before World War One, Pontine landowners introduced small-scale innovations – such as nets in peasants' houses and the distribution of quinine –; shortly after World War One, an entrepreneur from Lombardy emerged as the main supporter of another independent institution, the National Institute for the Antimalaria Reclamation of the Pontine Region. His efforts were sponsored by the Bank of Rome and the Italian Agrarian Society (*Istituto nazionale per il risanamento antimalarico della regione pontina*, 1927: 24-25). A reduction in mortality from malaria and an improvement in living standards only became apparent after a decade of intervention and were mainly due to the efforts of the Red Cross. Of note was a number of Red Cross reports which indicated that there had been a major improvement of the living standards of rural communities around 1915.

The management of the area did not limit its scope to hygienic improvements. A second set of actors focussed on agrarian productivity of the marshland. These actors revolved around activities and directives of the Ministry of Agriculture that, compared to the Ministry of Interior, had a less hierarchical organisation and communicated horizontally throughout different branches of the Ministry, with each branch encompassing technical councils and committees (Melis, 1995: 195). Major efforts to increase land productivity applied to the two vast forested stretches – the Mountain and Maritime Forests – and fields that were either permanently or semi-permanently flooded. Since management for these actors meant agrarian and hydraulic improvements, the core element of their proposals rested on how to extract the full economic value of local natural resources. Further, another goal was to address the organisation of multiple and stratified property regimes over water and land (Underprefect of Velletri, 1871; Curis, 1928: 76-77). As a matter of fact, commoners, speculators, within and outside the local community, provincial and municipality officials, and the state forest administration all targeted natural resources, competed for them, and enacted different management strategies.

The forest became a hub for conflicting management models. Based on the municipal code, in 1881 a group of commoners, led by a member of the opposition formation in the city council, formed a committee – the Committee of herders, fishermen, marsh sailors, and builders – acting in defence of the customary rights of collecting wood and stones, accessing meadows, and tax-free fishing against the process of land privatisation (Capponi, 1881). This collectivist approach proved to be successful and a decade later, a latter attempt by the Ministry of Agriculture to tackle the mounting social discontent via a revitalisation of common land, combined with the emergence of socialism and the Socialist Party. This convergence resulted in a legally recognised, but short-lived users' association, the

Agrarian University (Stella, 1910). The Agrarian University started a small-scale reclamation project bringing together the collective rights of farmers and agrarian modernisation thanks to the adherence of hundreds of peasants, along with the technical and administrative guidance of the Ministry of Agriculture, and the financial support of an agrarian cooperative banking institute (Raffaele, 1918; Prefectural commissioner, 1918; 'Corriere di Terracina', 1918). An alternative to the collectivist modernising management model was the national forestry administration which was driven by a nature conservation approach. The national forestry administration – a branch of the Ministry of Agriculture – when called upon to approve other proposals of environmental transformation, halted decisions over massive tree clearings in the 1890s (Forestry administration, 1895; Prefecture of Rome, 1895). From the early 1910s, it invested time, energy, personnel, and money into the elaboration of economic plans allowing for a profitable use of the forest as resource according to the scientific principles of the time (Capponi, 1914). Moreover, behind the intervention of the national forestry administration lied a third rationale for the management of the area: since 1871, the municipality was using the vast common land in the private interest of its own officials and creditors; without a long-term restructuring plan to shore up the extremely precarious municipal budget which had a high structural debt. The environment played a vital role in the functioning of local municipalities, from financing education to boosting the local economic activities, from providing the poor with their means of sustenance to paying for the modernization of all urban services and facilities (De Fabritiis, 1907).

As well as the forest, the land dedicated to growing crops became a hub for conflictual management models. Throughout the liberal period another type of institution participated in the decision-making process concerning the governance of the environment, the consortium of private landowners. The Pontine Marshes held four consortia: the Consortium for the hydraulic Pontine reclamation, the Piscinara consortium, the agrarian consortium of Piperno, the hydraulic consortium of Sezze (Piperno and Sezze being two municipalities of the area) (Cons. Pont. e consorzi minori concentrati, 1926: III). The major concerns of the consortia were the defence of allegedly private fields from customary rights, and the attempt to attract state investments to improve the value and yields of local fields. The consortia governed the area under their jurisdiction in conjunction with the Ministry of Agriculture, which at times was contested with local landowners failing to comply with the legal obligations towards the state, resulting in the Ministry eventually taking over the administration of the consortia from 1917 to 1927 (Cons. Pont., 1917). At the beginning of the new century, the Ministry of Public Works also produced plans for the drainage of the cultivated zones but, again, for those plans to be implemented local landowners needed to provide financial means, however

landowners adopted all the possible strategies to delay discussions over the introduction of taxes and contributions. Furthermore, they sought ways to prevent them from giving their approval (Barra Caracciolo, 1907; *Relazione*, 1914; *Cons. Pont.*, 1919: XXXVII). As we have seen, external actors offered their views also on the hydraulic and agrarian reclamation: a full-reclamation project as a form of private speculation was proposed by former Prussian army general Fedor Maria von Donat in 1886 (Donat, 1886), and by a group of businessmen from Berlin forming the *Pontiniches Syndekat* at the beginning of the new century (Folchi, 2000: 50-51).

Such environmental management (or mismanagement) began to evolve into more centralised dynamics with the onset of World War One. During the global conflict, natural resources, food production, the workforce, machineries, and energy became subjects of national interest and were administrated centrally. In 1922, when the fascist regime took over the liberal order in the Kingdom, the architecture of the decision-making process dramatically evolved. The first step was the imposition of a single property regime – the private one – encompassing lands and waters: a 1924 law phased out (at least in principle) all customary uses and established a specific commissariat whose task was to sort out all legal procedures still pending in ordinary and special courts (Royal Decree-law, 22 May 1924, n. 751; converted in Law 16 June 1927, n. 1766). Although customs did not disappear, associations made up of commoners progressively lost their political power in favour of a national association created in 1917, to ensure that foot soldiers – mostly farmers – would receive a plot of land in property as a reward for their military service and sacrifice. This association of and for veterans – the *Opera Nazionale Combattenti* (ONC) – saw its statute reformed in 1923 and 1926 with the purpose of linking the agrarian reclamation to the spread of small and middle-acreage private farms (Novello, 2003: 190-194; Ciccozzi, 2007: IX-XVII). The ONC became a state agency: the suppression of users' associations directed peasants towards the ONC contributing to the neutralisation of socialist mobilisation and incorporate social demands into state control; the government also provided the ONC with land. In 1931, the government nationalised 18,000 hectares of Pontine marshlands and transferred them to the ONC. This association ran the reclamation project until 1934 (Menassé, 1965: 45, 50-51).

The ONC replaced and incorporated not only commoners' associations, but also private landowners' collective bodies and more decentralised branches of public administration and became a "growing administrative empire" (Morgan, 2012: 318). In 1927 another fascist decree ended the liberal experience of the four autonomous local consortia and merged them into a single institution under the extraordinary administration of a governmental official. The Ministry of Agriculture that had supported technically and financially initiatives on the ground merged

with the Ministry of Industry, Trade, and Work and formed the Ministry of National Economy (Royal Decree, 5 July 1923, n.1439); in 1926, the forestry administration was replaced by a militarised body, the *Milizia Forestale Fascista* (Royal Decree, 16 May 1926 n. 1066).

If this section opened with the liberal administrative reform, the last element of the fascistisation of the decision-making process over the environment is the 1927 fascist administrative reform (Clary, 2018: 14-15). Municipal administration lost its independence from the Ministry of Interior and was passed under the guidance of a so-called *podestà* appointed by the government. After decades of strenuous resistance against state intervention in natural resource management, the *podestà* of the most important municipality in the Pontine area agreed to transfer the communal land to the ONC in 1928 (*Verbale di conciliazione e transazione*, 1928) marking the end of grassroots initiatives and any local authorities' political leverage.

To sum up, two significant shifts signal the change of the political regime in Italy: first, the quantitative reduction of voices and institutions involved in the decision-making process over the environment; second, the qualitative alignment of proposals over the environmental management of the area and the disappearance of administrative conflicts in the process.

Systems of environmental knowledge production

The progressive disempowerment of local actors intertwined with the evolution of ideas and forms of knowledge concerning the management of ecosystems. Liberal Italy had inherited and preserved – fully or partially – locally based traditional systems of environmental management and proposed different coexisting models of interpretations and interventions based on the combination of traditional, scientific, and politicised knowledge production systems. The case of the Pontine Marshes therefore offers interesting insights on the trajectory of the environmental knowledge production across the nineteenth and twentieth centuries.

Water management had been at the core of human-nature relations for centuries: agriculture followed the rhythm of the ebbs and flows of water (Allegri-De Bonis, 1984; Gruppuso, 2022) and the maintenance of dikes was a crucial part of the water-soil balance. In fact, the nature of soil, abundance of water, and mild climate generated the ideal conditions for the vegetative cycle of aquatic plants on the beds of dikes. The presence of plants significantly affected the water runoff and increased the extent of flooded areas reducing the surface of drained fields where crops could grow. Throughout the nineteenth century, in autumn and winter, humans used to drag underwater chains of scythes across the banks in order to

lower the height of plants. However, during the spring and summer milder water temperatures allowed for the use of trained and guided water buffalo that walked into the channels to trample over plants. Employing buffalo was everything but a cheap solution: buying, sustaining, looking after, and replacing these bovid animals was quite expensive; their passage damaged the channels' banks in a way that those banks could not be rented out as pastures; the animal solution was limited to warmer months as buffalo were very sensitive to cold water and farmers did not want any disease to spread across local herds. Finally, when buffalo were no longer strong and healthy, they were slaughtered and butchered.

In the 1880s, members of the Pontine consortium of landowners decided to invest in modern cutting machinery which was to be imported from France and Germany. A decade later a second attempt followed: the president of the consortium reached out to other reclamation consortia in Italy asking for assistance on how to replace buffalo with modern waterproof weed cutters. On their advice, more than forty European companies producing agricultural machines were contacted of which there were only fourteen expressions of interest and of these there was none that could provide innovative designs for weed cutting machinery for the Pontine Marches which could replace the buffalo. Buffalo therefore can be considered, as they were at the time, the real "engineers" of every-day reclamation practices (Cons. Pont., 1891: 45-48). By the end of the nineteenth century, 220 buffalo served in clearing the dikes. In the late 1910s, and in parallel with state intervention in the consortia administration, the number of animals started to decrease paving the way for a mechanical solution. Since buffalo represented one of the main outgoings of the consortia's accounts, this decreasing trend was due to the high costs associated with sustaining each animal, especially under the dire economic conditions that the war had brought to the country and to the consortia (Cons. Pont., 1918: VIII).

A steep decrease along with the deliberate removal of the buffalo as working animals in the 1920s generated conflicts, as it acted as a further leverage to the disempowerment of local communities via the destruction of long-lasting wetland ecosystemic relations. In 1924 – the year of the law banning customary rights –, the government official in charge of the administration of the consortia announced publicly the end of using animals to clear the dikes. In this announcement he stated that a "very remarkable" shift was about to happen: the fascist regime had finally managed to put an end to a "general prejudice", namely "the opinion, as rooted as wrong, that only buffalo [could] have kept ducts well clear". Consequently, all the remaining buffalo – around 170 – were sold and replaced with floating steam or oil powered weeding machines (Cons. Pont. e consorzi minori concentrati, 1926: V).

Such a technical and energetic revolution resulted in the ending of the relationship between central and local powers and showed that fascism did



Figure 2: Female buffalo, Pontine region, 2006.

Source: Wikimedia Commons. Available at: https://commons.wikimedia.org/wiki/File:Bufala_Agro_Pontino.JPG

not intend to govern the environment by preserving the existing and long-lasting balance among natural elements. The opposition to the continued use of the buffalo was ultimately a part of a wider struggle against the marshland, its local knowledges and practices, and its interspecies relationality. A government official implemented a technology-driven approach to nature and reported a contemptuous opinion about locals and their practices:

It is no surprise that having to give up a traditional belief appears annoying and humiliating, but what can we say about one of the most prominent members of the consortium, who publicly declared during the summer 1924 that he would have asked to be beheaded if all the buffalo were sold? Of course, on December 31 of that same year, when the consortium did not own a single buffalo any more, that very landowner decided not to keep the promise! (Cons. Pont., 1918: XI).

A noticeable difference between the two regimes also emerges when considering the use of knowledge when launching state projects. Although liberal interventions remained limited in scale and scope, proposals and preparatory materials moved from direct observations and scientific surveys focussing on the geology of the area. This recurring reference to

liberal engineers was mostly directed to Napoleonic scientist Gaspard de Prony (1818). His lexicon and descriptions appeared in the text by Pietro Castellini, chief engineer of the Genio civile in Rome, on the state of the art of reclamation works in the Pontine region at the time of national unification (Castellini, 1871). The hydrography of the area as reconstructed by Prony formed the basis of the education of future engineers of the Kingdom. Nonetheless, fieldwork in the Pontine region was part and parcel of the training of new state technicians and educational activities produced more technical and scientific knowledge. For instance, attention to the combination of soil and water was a unique feature of the area. Running waters crossed

semi-liquid state of soil, namely muddy soil slipping to the point that embankments re-built almost every year since centuries, slowly dropped and disappeared and sank into a lower level of slime. In that stretch of the Ufente river, such semi-solid soil [manifested] a strong sinking power and soil samples taken at the beginning of the century had demonstrated that slime reached around 18 m under the sea level (Meli, 1894: 4).

The last scientific survey dated in the early twentieth century when the Ministry of Public Works adopted a more proactive approach towards the reclamation of malaria environments in the province of Rome (the same province of the Pontine Marshes). The first study – and related reclamation project – was released by engineer Giuseppe Barra Caracciolo in 1905 and moved exactly from a detailed overview of water, agrarian, and soil conditions. The second one, mostly an updated version of the former, came out on the eve of World War One (Relazione, 1914).

The fascist regime reversed the order between knowledge and intervention and asked scientists and technicians to make envisioned transformations happen rather than asking them to measure interventions on reported information and data (Fumian, 1979; D'Antone, 1990: 126-128). Fascist scientists did not describe soil via its chemical, geological, and agrarian characteristics, but soil became a “techno-political” category in which the political sphere had to provide frames and objectives, while the technological sphere had to determine the feasibility of political plans (Sottilaro, 1938). Livio Gaetani, the secretary of the National Fascist Union of Agrarian Technicians, stated that agricultural techno-policies sprang from either “a technologized politics” or “a policy-oriented technology” (Gaetani, 1937: 82). In the Pontine Marshes the implementation of techno-fixes in order to remodel the distribution of power and nature-human relationship began in the mid-1920s: mechanic drainage systems and the building of an electric grid took place in large estates of landowners who supported the local unit of the Fascist Party (Cons. Pont., 1925; Cons. Pont. e consorzi minori concentrati, 1926: LXII). In

1934, at the end of the fascist reclamation programme, the area counted 22 drainage plants pumping water outside of the vast plain (Cons. Pont., 1934: appendix).

Besides professionalisation and militarisation of scientific production and institutions under fascist regime (Caglioti, 2021: 165), this case-study highlights the different role of science in liberal and fascist societies; the shift from nature-based solutions to technology-based solution; the radical reinterpretation of the relationship between science, technology, and politics proposed by Italian fascism; the complete disregard for place-based and traditional knowledge systems during the authoritarian regime. Approaching fascist knowledge production systems over the environment from the perspective of political history and with a focus on both 1920s and 1930s complements – and questions to some extent – historiographical interpretations that acknowledge the agency of science in shaping fascism while considering the technical “revolution” as an essential component of European interwar right-wing regimes (Saraiva, 2016). The successful attempts to subjugate science and scientists to political imperatives that took place in the 1920s led to a new conceptualisation of science that paved the way to instrumental and propagandistic usage of high-modernist practices, whose ultimate authoritarian dimensions were naturalised, and then concealed.

Approaches to environmental transformation

The distinctive interaction between forms of knowledge and policies of intervention introduces a third line of separation between liberal and fascist environments. Essentially, this is how actors involved in transformative processes approached existing environments and planned their interventions in relation to needed or unwanted transformations. In the Pontine Marshes, flood-prone fields and forest expanses constituted the two main ecosystems in this transformation.

The plain portion of the region located between the hills and dunes had undergone significant hydrostatic improvements between 1768 and 1796 when Pope Pius VI had built a network of channels cutting across private estates and linking to a major water duct. This duct divided the plain in two halves and unloaded excess water into the Tirrenian sea (Bevilacqua, 2017; Masetti, 2011: 98-102). A century later, private owners started to envision the space beyond the limits of wetlands and perceive the century-long balance between the water and land either as a disorder or as an outcome of recent mismanagement (Ferrajoli, 1891). For the first time, in the 1880s, cyclical inundations of fields were classified as flooding events and water levels began to be measured and monitored. In 1885 sources mention the presence of two rain gauges and, based on the

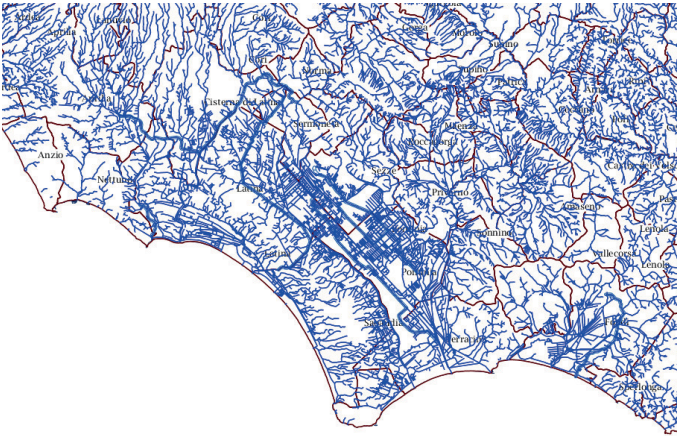


Figure 3: Natural and artificial watercourses in the Pontine region.

Source: Wikimedia Commons. Available at: https://commons.wikimedia.org/wiki/File:Mappa_corsi_d%27acqua_Agro_Pontino.png

data collected over the period 1885-1890, private owners declared that the water had overcome the high-water mark on several occasions, even within the same year (Cons. Pont., 1891: 131-140, 18).

The perceived exceptional character of those inundations derived from the combination of two paths that private owners took to convince the state to reclaim the area and to avoid investing their own money in territorial improvements, given that the agreement between the state and the consortia assigned ordinary maintenance to the latter (Ministry of Trade, Arts, and Public Works, 1862?). On the one hand, private owners stressed the excessive burden placed on them through taxes to maintain the eighteenth-century infrastructure, while facing exceptional environmental circumstances and against poor yields. To reduce their contributions, they also reduced the scope of the reclamation to the hydraulic aspect. Due to the resistance of these local actors to invest in reclamation projects and the need to keep the existing drainage system functioning, the state subsidised landowners in 1878 and 1886 (Parliamentary Acts, 1885: 1-11) and, being an exception among other Italian consortia, covered 40% of the ordinary maintenance costs (Cons. Pont., 1917: IX; Cons. Pont., 1918: III-VIII; Cons. Pont., 1920: VII). A rise in the private contribution to the consortia's expenses occurred only during World War One and generated conflicts among its members and the administrator appointed by the Ministry of Agriculture. On the other hand, private owners had placed great hope in the new interventionist policy of the state. In the late 1870s and early 1880s, with over 1 million hectares of wetlands, the Italian

state inaugurated a new phase of public environmental management: first, in 1878, the state, province and municipality conducted the joint hydraulic and agrarian reclamation of the *Agro Romano*, the surrounding countryside of Rome; second, in 1882, the so-called Baccarini law was issued and aimed to provide support amounting to 75% of the costs of reclamations classified as of public interest – namely reclamations targeting the improvement of hygienic and economic conditions of communities – with private owners paying the balance. The 1882 law also included fiscal measures to attract private investments in newly reclaimed areas (Novello, 2003: 22, 29, 43, 113).

State and local actors striving for a new balance between water and land, and socio-economic improvements, and increasing national and international attention paid to the state of the Pontine Marshes notwithstanding, the region was still described as “unfortunate and forgotten by all” and an “embarrassment” to a modern country (Donat, 1886: 2). Indeed, the liberal state did not plan for a radical transformation of the area or change the design of the inherited water and power infrastructures.

Speaking of environmental transformation, it is worthy to further explore a specific section of the Pontine area. Besides privately owned fields, the other section of the marshes that local and state sources describe as been mismanaged, was the Maritime Forest. A coastal forested area of around 14,500-10,000 hectares – according to different estimates – represented the largest plain forest in the country from a forestry perspective. The forest represented the main source of livelihood for rural communities, and a valuable deposit of wealth for the municipal administrators. As a consequence of municipal corruption and abuses in the government of forest resources and after decades of pending court cases, in 1910 the state forestry administration decided to intervene and bring order and progress to the neglected region. The direct state intervention was justified by the forest code which placed century-old forests under the administrative jurisdiction of the Ministry of Agriculture. State officials interpreted the forest as a site to produce lumber, thus adopting a scientific and quantitative approach, which formed the premises of a proposed economic plan (Giove, 1919). For the first time, a comprehensive project re-imagined methods of governance and uses of forest resources that concerned the whole estate and not only single portions. The keywords of such a “comprehensive project of a rationale plan of management” (Representative of the mayor of Terracina, 1910) were “economic improvement” and “natural conservation” (Talarico, 1911).

Liberal officials moved from the evaluation of the situation on the ground: around 200 clearings with tents and herding areas dotted the forest and offered shelter during the autumnal, winter, and spring months to about 3,000 commoners. The plan in progress acknowledged the existence of those clearings – in spite of their informal characters – and included

them in the economic evaluation and potential exploitation of the forest (Capponi, 1914). Officials then progressed slowly as different levels of the government were in conflict with each other, resulting in the project only being finalised in 1919. The plan divided the forest in six sections and arranged cuts and seedlings progressively with the aim of “restoring” the order within a forest populated by different-aged plants without an economic criterion. Moreover, wide internal communication roads would have to be opened allowing for an economic exploitation of the forest and for more efficient control services and logistics. The forest official who drew up the plan declared that there was “no grounded reason” either from an economic or forestry perspective to justify such a radical transformation of the forest (Giove, 1919). The project remained on paper since it generated a new struggle around the exercise of customary rights which due to conflicting legislative directives seemed impossible to be solved (Request to the Court of Velletri, 1919).

In the case of both the plain and forested sections, the administrative impasse and the conflict between local and state actors produced liberal conservative environments, but this lack of radical transformation was not only the result of disaccord. It was indeed the outcome of a well-intended approach that informed liberal environmental politics: the state acted along the guidelines of reparation, recovery, and conservation (see also Hall, 1998; Agnoletti, 2013). Already in 1923, the fascist regime questioned this approach and took action “to moralise the environment” through dictating its order over the complex and stratified relationship between communities and ecosystems (Prefect of Rome, 1923). The moralising project revolved around two principles: the defence of powerful landowners and the establishment of private properties in an area that had long been managed as a large common property. The criminalisation of commons and commoners justified the plan of radical transformation of the wetlands and very likely led to the conservation of existing ecosystems never informed fascist environmental politics. In 1926 the new management plan produced by fascist officials in charge of the local administration announced the beginning of the “colonisation and integral reclamation”, described as “a process of re-population, regeneration and valorisation of the vast but unhealthy and abandoned region”. The plan envisioned the Pontine region as a vast plain divided into mostly large private farms (between 200 and 450 hectares) in which extensive, mechanised, and modern agriculture was to be used (Prefectural commissioner, 1926). This plan came as a shock for both the minister of National Economy and the local Forest Committee (Stampacchia, 2000: 299-233) and, within the space offered by an authoritarian regime, inside and outside the Fascist Party some opposing voices emerged, but the local *podestà* had already sold the wooden resources of the forest. In 1928 the Pontine Marshes were tamed by the fascist regime (Ciucci-Cialfi, 1925). The forest became



Figure 4: Inauguration ceremony of the newly built provincial town of Littoria, 18 December 1932.

Source: Wikimedia Commons. Available at: https://commons.wikimedia.org/wiki/File:Inaugurazione_Littoria_001.jpg

a tourist destination for urban dwellers (Cons. Pont., 1928) and in 1933 only a tiny fraction of the original forest was preserved, or replaced with non-autochthonous species, which symbolised the fascist transformative power. In 1934 the area looked completely different, and a new province was created out of trees, animals, waters, and migrant communities and permanent residents who have cohabited in this fluid environment.

The newly constituted Pontine *Agro* – literally, a cultivated area – under the supervision of the specific para-state institution became populated by loyal fascist families from the Veneto and Emilia Romagna regions (Renes-Piastra, 2011: 26-32; Fuller, 2020).

The environment of political regimes: three interpretative paths

This article has focussed on one dimension of the relationship between the environment and the political, specifically on the dimension of the regime-building process. In doing so, it proposes a procedural and process-oriented approach to the analysis of political regimes from the perspective of environmental history, and offers three potential paths for further exploring the de-democratisation – in a broad sense – of environmental politics (and politics in general) and the politicisation of the environment. The three paths are the following: the decision-making process

over the environment; systems of environmental knowledge production that a regime accepts and deploys in the environmental management; principles behind the environmental intervention – either transformative or conservative. If the first path is a well-established entry point for any analysis of a regime shift, the second and the third proposed two paths that can enrich our understanding of political regimes, inclusive of the environmental element. In two ways environmental history proves to augment the interpretation of political phenomena: by questioning clear-cut and almost naturalised periodisations; by recasting the role of practices and the materiality of history. As this article illustrates, the 1922 shift from the liberal to fascist regime is not the only relevant watershed year to reconstruct the advent of the fascist regime. Based on the environment of the Pontine Marshes, the pivotal year is 1928. Relying also on research conducted by environmental historian Wilko Graf von Hardenberg, “practical and material aspects” of “a national idea of nature interacted with the broader political structures” and permit to reflect on how liberalism and fascism functioned on the ground through the lenses of conflicts and bureaucratic apparatuses (Hardenberg, 2021: 6-10).

The case-study deployed to support this analysis can be considered paradigmatic, in spite of the conservative character of the Pontine Marshes during the liberal era and its swift transformation during Mussolini’s regime. Exactly for the combination of opposite temporalities of historical transformation, the region offers the ideal setting for this kind of investigation. Furthermore, the comparative approach to analyse the region appeared also in sources, as the fascist intervention was conceived – as per usual – in opposition to the liberal management of the area. Mussolini’s regime exploited the area also from a propagandistic point of view to showcase, and to materialise, the power into the geography of the nation. While this comparison pertains to Italian liberal and authoritarian regimes, the three aforementioned paths demonstrate to be relevant political aspects shared by modern-day environmental struggles: in case of declaration of environmental emergency or public interest, who has the right to decide over a contested environment? Whose knowledge is valuable and trustable, and what are limits and potential of science? And in effect, to what extent is official science contingent on the political context? Given that we live in the Anthropocene, should we preserve or transform our environments to move forward to a more just and sustainable relationship between communities and natures?

The proposed procedural and process-oriented definition of Italian political environments is not the only methodology to investigate the same research questions. Whether distinctive liberal and fascist features exist in relation to the environment would undoubtedly benefit from a thematic approach as well. How did the two regimes conceptualise cases of environmental depletion? This article quickly mentions the change of

interpretation from administrative mismanagement and moral disorder. Moreover, what if we enter into matters of legislative interventions and local conflicts? How did the two regimes act in the aftermath of a disaster? And, of course, during the twentieth century the environment opened new frontiers for state intervention: from inner colonisation projects to war mobilisation; from nature conservation to the control of mobility through the leverage of land.

The ambition of this article is not to be exhaustive or normative. It represents an attempt to elaborate an answer to frequently posed questions, to contest the often claimed divergence between political and environmental history, and to make room for the environment in defining the contours of the political.

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