

# *The Mistral*

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*A Windswept History  
of Modern France*

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CATHERINE TATIANA DUNLOP



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A WINDSWEPT HISTORY OF  
MODERN FRANCE

*Catherine Tatiana Dunlop*

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Frontispiece: François Huard, *Haie de peupliers sous le vent*, 1824.

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# Introduction

When the mistral sweeps across Provence, it brings a wild and restless energy to the world-famous landscapes of southern France. Carefully tended farm fields become scenes of total disorder. Snapped vines hang lifelessly off trellises and unripened fruits lie bruised and strewn about the ground. Stalks of wheat that typically stand strong and upright fold down together into a single mass, becoming an inland sea of golden waves. Meanwhile, Provence's actual sea, the ancient and storied Mediterranean, loses its azure color as the mistral pushes against its surface, cloaking its churning waters with a layer of white foam. Near the limestone cliffs that fall into the sea, clouds of dust and pine tree pollen dance frantically about, painting the air with dashes of yellow. The only place to find serenity in this windswept landscape is above you. Even as it unleashes chaos and destruction below, the mistral cleanses and purifies the sky, chasing the clouds away and leaving a brilliant clear blue atmosphere in its wake.

Seizing and jostling everything in its path, the mistral produces an impressive range of sounds. It finds the cracks between roof tiles and around windowpanes, turning habitable structures into musical instruments that whistle and shake under its force. French novelist Émile Zola likened the mistral's presence in a *mas*, a traditional stone farmhouse of the region, to an unseen visitor that "moaned and sobbed wildly" as it made its way through hallways, slamming doors as it slipped through the building.<sup>1</sup> When nineteenth-century botanist Charles Martins found himself immersed in the mistral near the summit of Mont Ventoux, he recalled "a noise like an artillery detonation that seemed to rattle the mountain down to its foundations."<sup>2</sup> Further to the south, at the Old Port of Marseille, writer Alphonse Daudet likened the mistral to a symphony conductor that took all the clamors from Mediterranean ships



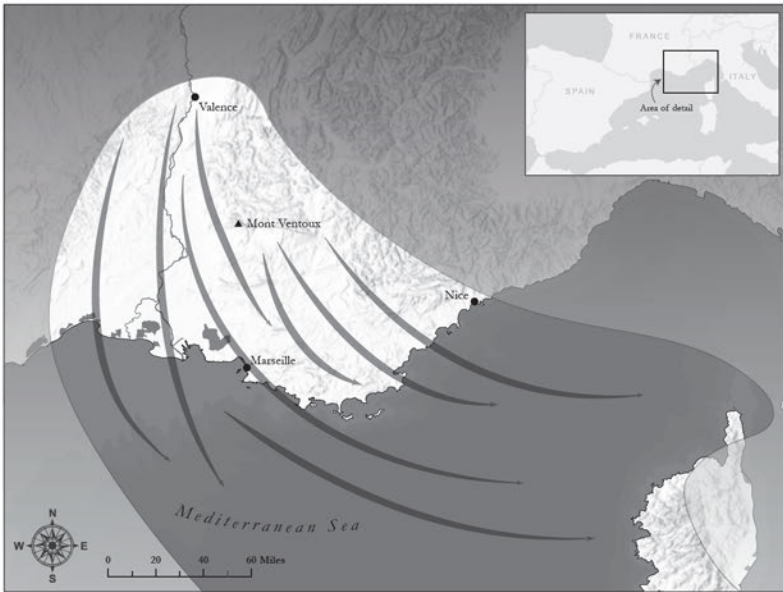


Figure 0.1. Map of the mistral's maximum wind zone. The mistral originates from the inland mountains in south-central France and gusts downward through mountain valleys, open plains, and coastal wetlands, eventually terminating over the Mediterranean Sea. Created by Adam Creitz, Geospatial Core Facility, Montana State University–Bozeman.

and crews and “rolled them up, drove them, mixed them up with its own voice, and made of them a music that was crazy, wild, and heroic.”<sup>3</sup>

On a bigger scale, we can think of the entire geography of Provence as a vocal cord system in which the mistral's icy breath descends from the frigid peaks of the Massif Central, pushes through the narrow throat of the Rhône River valley, and bursts forth with a tremendous howl as it opens up into the plains of the Crau, the wetlands of the Camargue, and the open waters of the Mediterranean Sea (see figures 0.1 and 0.2).<sup>4</sup> The part of the sea that surrounds Marseille, the Gulf of Lion, purportedly got its name from the “lion's roar” of the mistral.<sup>5</sup> Some have even likened the cadence of Provençal, the regional language spoken in Provence, to the sound of the mistral itself. “This dialect,” declared the Marseillais writer Victor Gelu, “is brutal and impetuous like the wind from the northwest that gave birth to it and imprinted it with its storm-like cachet.”<sup>6</sup>

It is not easy for people to withstand the sheer physical force of the mistral. Ex-votos hung on church walls across the South of France thank God for sparing the lives of travelers whose carriages crashed to the ground or whose boats sank to the depths of the sea in the midst of the mistral's roar. In his travel writing, renowned eighteenth-century



Figure 0.2. Map of Provence. While this historic region lost its official status during the French Revolution, it remained, in the minds of many Provençaux and tourists from the outside, a distinctive part of France with a unique environmental character as well as a special culture. Created by Adam Creitz, Geospatial Core Facility, Montana State University–Bozeman.

mountain climber Horace Bénédict de Saussure—a man who was no stranger to extreme environments—recalled how he was nearly swept away by a gust of the Provençal wind while visiting the ancient city of Arles. The experienced Alpine climber was standing on a rooftop terrace, admiring the city’s Roman arena, when “a puff of the mistral with an extreme violence seized me without warning.” The wind, he recalled, “would have thrown me into the street” if he had not clung to a chimney on the slope of the roof.<sup>7</sup> Another famous visitor to Arles, the outcast modern artist Vincent van Gogh, called the task of painting outdoors in the mistral nothing less than “the devil’s own job.”<sup>8</sup> In order to keep his canvases from flying away in the wind, he had to hammer his easels into the limestone soil or pin them to the ground with his hands and knees.

As van Gogh’s paintings beautifully demonstrate, the natural world, too, bows down to the invisible force of the mistral. Across the Provençal countryside, pine trees are frozen in a backward-leaning pose, their trunks and branches arching dramatically to one side. The wind may be temporarily gone, but the trees are forever marked by their encounters with the mistral, stuck in a position of futile resistance (see figure 0.3).<sup>9</sup>



Figure 0.3. Coastal pine trees near the Calanques National Park in Cassis. The flag-like structure of the trees results from frequent gusts of the mistral. Photo by author.

Nature's other forms of bending are more ephemeral. When the mistral blows, water in the Bays of Cassis, Toulon, and Marseille moves away from the shore rather than toward it, creating reverse wave patterns in the sea. Not to be forgotten are the animals—the water birds and wild horses who cluster their bodies together in the Camargue wetlands for protection when the mistral is gusting. Popular proverbs—"it takes a mistral to pull the tail off the donkey" and "it takes a mistral to dehorn the bulls"—point to the mistral's power over animal life.<sup>10</sup>

Altogether, the mistral's harrowing impact on bodies and landscapes reveals a side of Provençal nature that is far more ferocious than the region's heavily marketed image as a warm, inviting, and sumptuous vacationland. Blowing for approximately a third of the year, at speeds that often exceed sixty miles per hour, the mistral gives Provence a Janus-faced quality.<sup>11</sup> "Poetic Provence is nonetheless a savage landscape," the nineteenth-century French historian Jules Michelet warned his readers, asserting, "The gusts of winds, brisk and powerful, can have a fatal grasp . . . It is a nature that is capricious, passionate, angry, and charming."<sup>12</sup> Joseph Conrad, in his novel set in Marseille, used the mistral to emphasize the surprising toughness of a place that on its surface appeared soft and temperate. "The mistral howled in the sunshine," Conrad



observed, “shaking the bare bushes quite furiously. And everything was bright and hard, the air was hard, the light was hard, the ground under our feet was hard.”<sup>13</sup>

Unleashing the mistral’s hidden power from the dusty corners of the archives, this book is about an unstoppable, unruly force of nature that routinely filled Provence with its mighty presence during the century following the Revolution of 1789 and, in so doing, pushed back against the centralizing power of the French nation-state. The mistral’s violent and restless materiality prevented France’s modern political and economic leadership from establishing the kind of permanent technological infrastructure, efficient national economy, and moderate climate conditions that they desired in Provence. Meanwhile, for those Provençaux seeking greater autonomy from Paris, the mistral’s ability to overpower central planning and disrupt modernization schemes turned it into a model for regionalist resistance. By the end of the nineteenth century, the Provençal population understood the mistral to be something much more than just the weather; it had become a cherished part of their regional identity. Challenging and shaping both nation- and region-building projects in Provence, the mistral emerged as a powerful nonhuman force for historical change during a crucial turning point of modernity.

### Placing History in the Mistral Windscape

For all its power to shape, and even dominate, the lives of people in Provence, the mistral is missing from most accounts of French history.<sup>14</sup> What explains its absence? By and large, scholars have tended to view the spaces of history from an anthropocentric perspective, downplaying the unruly weather features of historical landscapes while emphasizing people’s capacity to govern their surroundings. This human-centered approach to the past is often reinforced by the historical documents that scholars use. Most of the old maps found in French archives depict the territory of Provence through the lens of its shifting human-made geographies: as a *provincia* in the Roman Empire, as a trading center in the sixteenth-century Mediterranean world, or as a modern administrative region locked inside the borders of a centralized French nation-state. These anthropocentric maps promote the misleading illusion that natural environments existed merely as backdrops to history—nonthreatening, malleable, and passive—while human beings actively transformed territory according to their will. Together with the entire human-generated historical archive, maps of European territory have helped to silence a reality that is becoming all too clear in the age of

climate change: natural environments and weather systems exert their own dynamic pressures on history, whether people like it or not.<sup>15</sup>

By shedding light on the active natural forces that have transformed European territory and the societies that inhabited it, this study seeks to fundamentally reframe our understanding of who (or what) has the power to shape history. This book focuses our attention on a natural geography that has always existed within the confines of a broader French polity, but whose energetic presence never fit neatly into the governing structures of the French state. The mistral windscape presents an intriguing new kind of geographic framework for historians: a natural region that had no fixed boundaries or legal jurisdiction but one that generated a distinctive sensory environment that people felt, experienced, and embodied from the bottom up.<sup>16</sup>

Unlike the trade winds that sweep across vast open oceans, the mistral is a classic example of an inland-generated “local wind,” whose direction, temperature, and speed are all determined by the unique shape of regional landforms.<sup>17</sup> Its movement through the southern French landscape is stimulated when an imbalance occurs between a high-pressure zone in the mountainous areas of central France and a low-pressure zone over the Mediterranean Sea. When such a pressure imbalance forms, particularly in the winter and the spring, the cold air sitting atop the Massif Central and the Alps begins to stream downward toward the Gulf of Lion. As it descends, the mistral’s air molecules journey through tight mountain valleys, which compress the wind like a garden hose, further enhancing its intensity. By the time the mistral reaches the boundless terrain of the Rhône valley and the Camargue wetlands, its mountain-generated air can feel like a hurricane.

Crucial to understanding the mistral’s role in history is recognizing that its windscape is not simply an ephemeral zone of air movement that comes and goes with the seasonal cycles of the Mediterranean climate. To the contrary, the mistral’s windscape has become *part of* France’s internal physical makeup, concretized, over the centuries, in the biogeography of southern France: in the flora and fauna that have successfully adapted to the wind-impacted space. From the tiny low-lying plants that sprout from the stony peaks of Mont Ventoux to the cliffside bird dwellings of the Alpilles, to the fish that swim in the salt-encrusted deltas of the Camargue, every living thing in the South of France is bound into a web of coexistence with the mistral’s northwesterly gusts.<sup>18</sup> Like the animals and plants around them, human beings, too, have rendered the mistral windscape visible over time through their built environment. From their mas farmhouses to their towering cypress hedgerows, Provençaux have actively shaped the wind-adapted look of the region that they in-



habit. The mistral windscape thus offers an ideal geographic frame for exploring the day-to-day relationships between a regional community of Europeans and the volatile zone of air that has surrounded them.

A hundred years ago, the *Annales* school, a movement of historical thought founded in France during the 1920s, attempted—with some successes and some notable failures—to merge the study of geography with the study of history. Influenced by a dark time when the flames of nationalism raged across Europe, *Annales* school scholars sought refuge and solace in the long-term material and nonhuman factors that shaped history, rather than in the flashy yet fleeting history of its political regimes. In his late-in-life study, *The Identity of France*, the school's leading student, Fernand Braudel, set out to explore “the relations—multiple, intertwined, elusive—between the history of France and the physical territory by which it is confined, sustained and in a way (though not of course completely) explained.”<sup>19</sup> Significantly, Braudel understood France not as singular place, but as a collection of places, each shaped by a combination of natural and human factors. His endeavor was to excavate the “many-shaped and multicolored fragments of the mosaic that is France.”<sup>20</sup>

Building on Braudel's goal of elevating the material reality of France in the story of its past—while invigorating his approach to history with more recent scholarly perspectives on body, place, climate, and the environment—this book presents a fresh, multilayered view of French geography that sees naturally occurring regional ecosystems and sub-national regional communities as deeply entangled and engaged in a constant state of interaction. The result is a study that brings Provence's blustery southern windscape—a subject that has primarily attracted the attention of scientists and climate modelers—into dialogue with France's wider political, economic, scientific, and cultural transformations during the century following the French Revolution. My analysis hinges on multiple overlapping territories: an empowered state space managed from Paris, a politically defunct yet culturally influential southern French region, and a naturally occurring windscape with no official borders. Throughout the book, these three distinct kinds of territory overlap, intersect, and clash, making for a novel analysis of French center-periphery relations that integrates the dynamism of regional environments.

### The Origins of France's Master Wind

Compared to the young nation-states taking shape in nineteenth-century Europe, the mistral's territorial presence is incredibly ancient. According to geologists, the mistral first appeared on Earth nearly 3.2 million

years ago, during the mid to late Pliocene era, when the upward thrust of tectonic plates produced new mountain ranges that altered the flow of the air in their vicinity.<sup>21</sup> The mistral's genesis corresponded with the creation of what European scientists now term the Mediterranean Biogeographical Region (see plate 1). Extending across a broad swath of the Mediterranean zone, in a manner that cuts through national boundaries, this ecological region is characterized by dry, warm summers and cool, wet winters. Since the Pliocene era, the Mediterranean Biogeographical Region has been home to a raucous family of small-scale winds—the mistral, the tramontane, and the sirocco, among others—whose powerful gusts form a key component of the Mediterranean climate system.

The first human documentation of the mistral did not appear until the sixth century BC, when Greek sailors landed on the northern coast of the Mediterranean and built a settlement that they named Massalia (now Marseille). Calling the wind surrounding their outpost the *melamboreas*, or the black Boreas, the ancient Greek settlers brought with them a mythological understanding of winds as mighty supernatural forces that exerted great power over human beings. Personified as a gruff god with a full beard and flowing robes, Boreas was feared and respected by the Greeks. In his second-century *Geography*, their leading geographer, Strabo, referred to the *melamboreas* as a wind so mighty that it “overturns chariots and strips men of their weapons and their clothes.”<sup>22</sup> Later, when the Romans conquered Provence, they replaced the name Boreas with their own term: *circius*. Rather than invoking masculine gruffness, the term *circius* expressed the wind's disorienting, whirling quality.<sup>23</sup> The Roman writer Seneca described the *circius* as a wind that ravaged Gaul and shook its buildings, while the emperor Augustus, during his stay in the region, reportedly built a temple in honor of the fierce northwesterly wind.<sup>24</sup>

The current name for the same wind—*le mistral*—entered the French language during the seventeenth century from Provençal, the regional language spoken in parts of southern France. The Provençal terms for the wind—*maistral*, *maistrau*, and *mistrau*—all derive from the Latin word *magistralis* or *magister*, meaning “the master.” Significantly, Provence's neighboring Mediterranean coastal polities all used the same term in their own languages to describe a strong, northwesterly wind: *mestral* (Catalan), *maestral* (Spanish), and *maestrale* (Italian).<sup>25</sup> The name “mistral” thus emerged from a period in time when winds played a central role in a thriving early modern Mediterranean economy that brought Catalans, Spanish, Italians, and Provençaux into a maritime trading network. Together with other prominent Mediterranean winds, the mistral



structured and constrained the sail-powered movement of goods and people across their shared sea.

Before the social and economic transformations wrought by an intensive modernization period in nineteenth-century Europe, people in Provence—most of whom worked outdoors—conceived of the mistral as a sort of natural “master” to be approached with humility, fear, and respect. The early modern landscape that took shape in Provence can be read as an index of climate adaptations developed for and by working people. Shepherds, millers, farmers, sailors, and fishers developed region-specific tools—ranging from low-lying stone shelters to windmills to thoughtfully crafted boats—to help them move through, cultivate, and shelter themselves and their animals in their windblown surroundings. Well before the age of modern meteorological stations, poor and illiterate people developed their own savvy forms of weather knowledge based on generational experience, muscle memory, and their careful observations of things like leaves, pine cones, and sails that moved in the wind. Approaching the mistral with a mindset of caution, the nonmodern Provençal population did not seek to triumph over their region’s unique “weather world,”<sup>26</sup> but rather to use their place-based knowledge to sensibly adapt to it.

New attitudes toward regional environments in nineteenth-century France erased many of the traditional relationships that working people in Provence once shared with the mistral. As France entered a forward-thinking era of fast-paced industrial, technological, and political “advancement,” scientific and government elites challenged sustainable regional strategies for living and working in tandem with the mistral, proposing, instead, to use a combination of state power and modern technology to quell the wind’s ferocious power. This book uncovers how post-Revolutionary French governments of all stripes—monarchies, republics, and empires alike—took aggressive actions against the “disobedient” force of nature that persistently rattled the southern reaches of their realm.<sup>27</sup> Within the halls of the central French government, the dominant attitude toward the mistral became one of hostility and confrontation, with the goal of liberating the southern French landscape and economy from the throes of its ancient regional wind.

### Taming the Mistral? National Unification and the Struggle for Environmental Order

The new policies and practices toward the mistral that emerged in French government circles after the Revolution of 1789 reflected broad national priorities for achieving territorial order through environmental

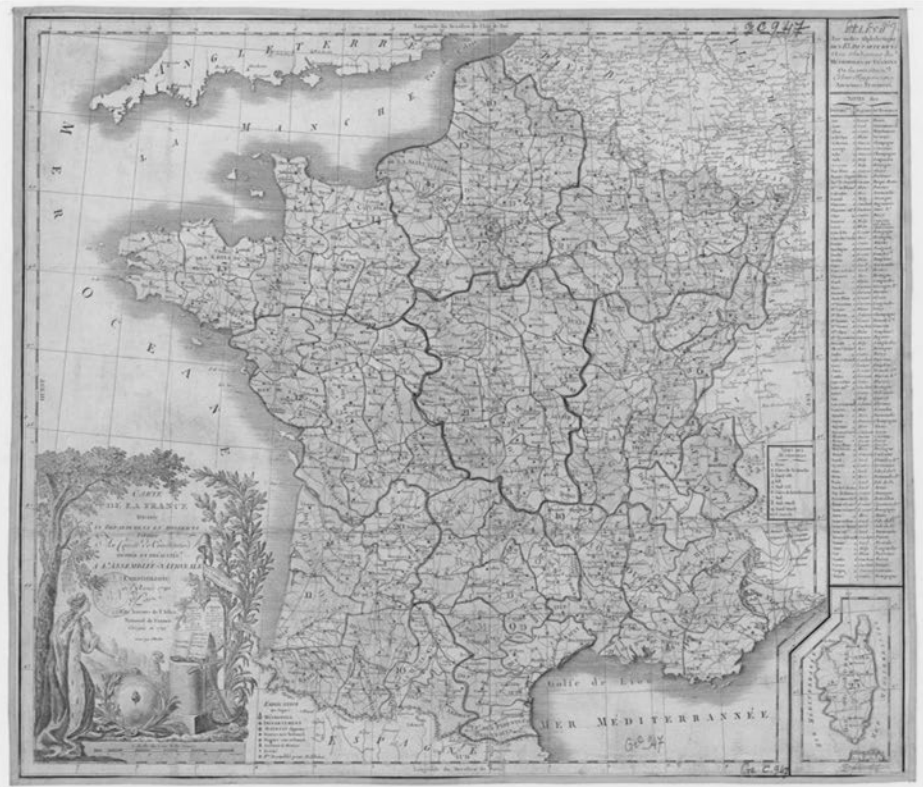


Figure 0.4. Seeking national unity and equality, French revolutionaries created a new map of France in 1790 that replaced historic noble-led provinces with modern administrative units called departments. Over the next century, government officials would use the power of the central state administration to tighten their grip over far-flung provincial populations and their unruly natural environments. *Carte de la France divisée en départements et districts, vérifiée au comité de constitution, dédiée et présentée à l'Assemblée nationale constituante, en l'année 1790, par les auteurs de l'Atlas national de France, corrigée en 1792* (Paris: Dumez, 1792). Bibliothèque nationale de France, département des cartes et plans, GE C-947. Source: gallica.bnf.fr/BnF.

control. Less than a year after revolutionaries stormed the Bastille and upended the social order of Europe's most powerful monarchy, zealous mapmakers redrew the internal political boundaries of France, replacing centuries-old provinces like Provence with new administrative units, called departments, to be managed from Paris (see figure 0.4). By erasing France's noble-led historic provinces from the map of France, the revolutionaries hoped to cement a seamless political geography to mirror a newly unified national community held together by collective principles of liberty, equality, and fraternity.<sup>28</sup> From that point for-



ward, nation-building ambitions in France became closely wedded to the strategic design and alteration of physical territory.<sup>29</sup> But even as post-Revolutionary French governments took meaningful steps toward achieving internal colonization, the country's ecological and climatic diversity remained stubbornly vibrant, dynamic, and real. Like the patchwork of patois-speaking peoples that they encountered across France, post-Revolutionary administrators faced a mosaic of ecoregions that were difficult for central planners to comprehend, much less control.<sup>30</sup>

For the post-Revolutionary French state, the mistral represented instability and disorder. Like the migrating sand dunes of the Landes<sup>31</sup> or the rising floodwaters of the Seine<sup>32</sup>—the mistral came to be viewed as a disruptive force of nature that threatened to impede the nation's economic growth, prosperity, and safety. Whether conservative or republican, nineteenth-century French regimes asserted bureaucratic and technological control over provincial territories in the name of "progress."<sup>33</sup> Beginning under the reign of Napoleon Bonaparte, the central French government used its department administrators to gather and compile environmental knowledge about French regions, dedicating pages of detailed reports to ecological features and weather patterns from all across the country. The topographical indexes and statistical studies that they produced were then placed in the hands of Parisian bureaucracies that sought a legible view of the territories under their management.<sup>34</sup> State ministries and agencies ranging from agriculture to meteorology, maritime navigation to public health, all utilized modern forms of environmental and climatic knowledge to serve the public good through top-down initiatives.

This book excavates today's Provençal landscape as a living physical archive to document the territorial modifications, techno-fixes, and research enterprises undertaken by an activist nineteenth-century French state to make the South of France safer from the mistral.<sup>35</sup> Lining the countryside like sentries are thick, imposing rows of scientifically planned cypress hedges, many of them planted with assistance from experts in the Ministry of Agriculture who advocated for the use of natural barriers to create wind-free microclimates for growing fruits and vegetables for export by rail to national markets. Coastal hillsides around Provence are still covered with thousands of pine trees—the legacy of Emperor Napoleon III's massive state-sponsored afforestation plan to slow the wind's movement through landscape modification.<sup>36</sup> High atop the summit of Mont Ventoux, a hulking concrete weather observatory stands as a reminder of the efforts made by Third Republic meteorologists to replace local climate knowledge with a sophisticated national system of mechanized weather observation.

A burgeoning modern French economy reinforced the state's administrative integration of national territory in the nineteenth century. During this period, the French nation-building project emerged in parallel with the economic consolidation of territorial space through a robust capitalist infrastructure subsidized by political leaders who stood to profit from the accumulation of national wealth.<sup>37</sup> In the metropole as well as across the French overseas empire, steam-powered railway networks, canals, and ports descended like a spider's web, replacing older regionally based forms of transportation, food production, and energy. Traditional wind-centered industries in Provence such as grain milling and small-craft maritime commerce could not withstand the pressures from this emerging large-scale economic system. The crumbling stone windmills scattered across the coastlines and hilltops of late nineteenth-century Provence—their sails torn and their wings broken—became historical vestiges of a place- and community-based economic system that had once flourished in the region and was now obsolete (see figure 0.5).

But even as Provence became enmeshed in national-scale political and economic orders, the mistral's mercurial behavior brutally exposed the limits of French internal colonization. Against all human efforts to render it civilized, predictable, and manageable, the mistral—driven by nothing more than the laws of physics—pushed back with overwhelming violence. In mathematical terms, the force that moving air exerts onto a surface is defined as  $F = pA$ , with force ( $F$ ) equaling pressure ( $p$ ) times the projected surface area facing the wind ( $A$ ).<sup>38</sup> But nineteenth-century French officials did not have to be experts in physics to grasp the mistral's unstoppable power over Provence. The mistral wrecked every single anemometer that the French National Weather Service installed to track the wind's duration and speed on Mont Ventoux. Nineteenth-century agricultural reports documented dozens of fruit and grain harvests that were devastated by the mistral despite scientific advances in "weather-proof" farming. Steam-powered ships—the ultimate symbols of France's modern industrial economy—met their match when the mistral smashed them like toys against the cliffs of the Mediterranean shore. At a time when the French nation-state was flexing its administrative and economic power over its territory, the mistral became a forceful and bone-chilling reminder that provincial environments were not so easily quelled.

The mistral's natural resistance to human meddling had an intriguing effect on the formation of nineteenth-century regional identity in Provence, a key focus of this book. For those Provençaux wary of the nation-state's increasing power over their *petite patrie*—their "little





Figure 0.5. Postcard of Daudet's windmill in Fontvieille. During the nineteenth century, regionalist writers and artists from Provence elevated windmills in the public imagination from utilitarian structures into Romantic icons of a bygone rural age. The windmill's broken sails were restored by a historic foundation in the twentieth century. © Cd13, Museon Arlaten-musée de Provence.

homeland”—the mistral’s ability to destroy mechanisms of outside control turned it into a natural symbol of bottom-up regional defiance. Not unlike the French *maquis* who turned to their rural scrubland ecosystem as inspiration for their wartime resistance, Provençal regionalists seized upon the mistral’s uncontainable power as a metaphor for their own independence and pride. Though Provence’s rivers had been canalized and its forests scientifically administered, the air—which the renowned nineteenth-century French geographer Élisée Reclus called “the great atmospheric sea”<sup>39</sup>—evaded the managerial hand of the centralizing French state. Gendered male, *le mistral*—which became known in regional literature as the “king” or the “emperor” of Provence—appeared to safeguard the masculine energy of the Provençal people and protect them from pacification and conquest from the North. The mistral’s encounter with the modern French state is therefore not a straightforward story of a national government and its aligned capitalist economy overpowering the wind’s natural authority through landscape modifications, techno-fixes, and a network of weather observatories. It is also a story of a growing bottom-up movement, from within the Provençal population, to embrace the mistral’s wild power as a beloved form of natural patrimony.

### Embracing the Mistral: Nature and the Invention of Regional Identity in Modern France

A defunct territory from the age of monarchy, Provence disappeared from the map of France during the Revolution of 1789. Yet even after it officially ceased to exist, Provence continued to attract the affection and loyalty of many people who kept the ghost of the old province alive through civil associations that preserved its distinctive language, dress, food, traditions, and historical monuments. While scholars have examined the rise of French regionalism through the lens of cultural-preservation efforts, the role of environmental discourse in the formation of regional identities has gone largely unexplored.<sup>40</sup> This book centers nature in the rise of French regionalism, arguing that environmental claims were just as critical to region-building projects as they were to larger French nation-building efforts.<sup>41</sup> Thanks to the bottom-up initiatives of engaged regional citizens, the mistral—like *bouillabaisse* and bullfighting—transformed into an identity-giving feature of Provence and a wellspring of regional pride (see figure 0.6).

By uncovering the affective bonds that formed between the mistral and regional communities in nineteenth-century Provence, this book invites us to reconsider some of our basic assumptions about the development of territorial identity in post-Revolutionary France. Political



Figure 0.6. A late nineteenth-century postcard frames the mistral's disruptive gusts as an authentic Provençal experience. Archives de Marseille.

scientists have referred to France as a “contractual” nation, in which citizenship is defined by one’s willing participation in a democratic system of government.<sup>42</sup> Nineteenth-century historian Ernest Renan called this concept the *plébiscite de tous les jours*: the silent patriotic pledge that French people make each and every day to be loyal citizens of a universal republic headquartered in Paris.<sup>43</sup> Born of human aspirations, this dominant idea of French national identity—which was fundamentally anthropocentric—caused problems when French citizens considered what their “homeland” meant in actual physical terms. “France” was not just an ideal political community or a hexagon-shaped space with adjacent cutouts of its empire pictured on a classroom wall map. In the lived experience of its nineteenth-century citizens, France was also a living, moving, and palpable three-dimensional place: a varied physical territory inhabited by howling ancient winds and centuries-old layers of earth, salt, sand, and water.

In focusing on a *place* called France, and especially its southern reaches in Provence, this book argues that territorial identity, as it came to be understood by ordinary citizens in the nineteenth century, was less contractual, less cerebral, more physical, and more rooted in local and regional scales of living than previously thought. At first glance (or gust), being knocked over by a violent blast of the mistral on a regular basis seems separate from questions of individual or collective identity. It does not involve free will. It does not reinforce the idea of an



“imagined national community” of patriots, to use Benedict Anderson’s classic framework.<sup>44</sup> And yet, the Provençal population’s daily physical encounters with the mistral made them hyperaware of their immediate surroundings, their *environs*. When it swept down from the Massif Central, into the rocky plains of the Crau, and out to the Mediterranean Sea, the mistral forged a regional atmospheric commons that carried the same air from one part of Provence to another, facilitating an embodied regional experience of place for everyone, regardless of their station in life.

Regional environments, in other words, had the power to enter people’s bodies and shape their daily experience of life in ways that the *grande patrie*—or the “big country” of France—never could.<sup>45</sup> Sensory experiences of regional weather, I argue, were essential to the development of French citizens’ environmental knowledge as well as their environmentally rooted conceptions of home. The mistral’s powerful gusts reinforced the fact that Provence did not fit neatly within a national whole; the region’s visceral geography, absent on the airless paper map of the nation-state, was real to people through bodily experience.<sup>46</sup> An unofficial territorial consciousness arose in nineteenth-century France that privileged regions—particularly those held together by distinctive “weather worlds” like the mistral—over abstract political visions of a unified national space.<sup>47</sup>

It was not just avid Provençal regionalists who embraced this alternative vision of modern France rooted in regional difference. The spread of railway networks, the development of leisure tourism, and the growing popularity of plein air landscape painting all helped to transform nineteenth-century Provence into a popular travel destination for visitors who wanted to experience a unique part of France.<sup>48</sup> While most came for the sun, the food, and the sea, many visitors ended up face-to-face with the mistral, a far less tranquil but nonetheless exhilarating and authentic part of the Provençal regional experience. In the paintings, literature, and travel writing that they left behind, many of these outsiders documented their striking bodily encounters with southern France’s masterly wind. While they did not embrace the same homegrown regionalist agenda as Provençal heritage organizations like the *Félibrige*, these traveling artists, writers, and tourists contributed to a growing popular enthusiasm for exploring and consuming France’s distinctive regional environments.

## Chapter Organization

For all the noise and bluster that it generates, the mistral, like many environmental actors, left no voice of its own behind in the historical



record. There is no box labeled “mistral” anywhere in France’s vast archival system. Everything I learned about the wind’s entanglements with nineteenth-century French history was filtered through the variety of things that people from different trades and occupations left behind: their maps, charts, journals, medical reports, scientific observations, tools, paintings, poems, short stories, dwellings, urban plans, and landscape architecture. The visual images printed in this book showcase the multifaceted mistral archive that I built from scratch as I followed the trail of the wind wherever I could find it.

This book is therefore not a “biography” of the mistral, nor does it seek to put forward a scientifically precise climate record of the wind’s speeds or durations over a period of time. Rather, this book chronicles the social, political, economic, and environmental developments that transformed French Provence over the course of the nineteenth century through the lens of its powerful, pervasive, and distinctive wind. It explores Europeans’ changing relationships with nature in the modern era by focusing on their efforts to manage, alter, and preserve the places closest to them—their regional environments. In so doing, it exposes state efforts to combat the mistral and liberate Provençal society from its influence, but it also shows how local and nonlocal figures embraced the wind’s power and identity as an expression of regional authenticity and embodied attachment to place. Throughout the book, I emphasize how the mistral constrained and informed, but never determined, the range of choices available to institutions and individuals in modernizing Provence.<sup>49</sup>

The book begins by examining how the post-Revolutionary French state and its aligned capitalist economy challenged traditional wind-centered lifeways in Provence, both on land and at sea. Before the nineteenth century, most people in Provence labored outdoors, where they developed thoughtful forms of vernacular knowledge for working, moving, and dwelling in the mistral wind zone. In chapters 1 and 2, I delve into the close working relationships between people and wind in pre-modern Provence—focusing on farmers, shepherds, millers, sailors, and fishers, among others—before turning to the devastating impact that steam power, agricultural reforms, and expanding national economic markets brought to these traditional regional livelihoods. I demonstrate how the collapse of wind-centered industries contributed to an environmentally inflected sense of nostalgia among leading Provençal regionalists, who fixated on antiquated Mediterranean wind roses, crumbling windmills, and stories of windblown noble peasants to protect their provincial identity amid the pressures of nation-state consolidation.

Nothing exemplified the French nation-state’s top-down approach

to managing the mistral better than its construction of meteorological observatories designed to give Parisian administrators predictive knowledge about the mistral's behavior. In chapter 3, I explore the state's ambitious scheme to build a high-mountain weather observatory on Mont Ventoux, Provence's highest peak, in the late nineteenth century. The information gathered at this station fed directly into the bureaucratic channels of the French National Weather Service, which collated the data to create scientific weather maps offering synoptic views of the forces of nature moving across the national realm. But despite the Parisian bureau's successful dissemination of daily national-scale weather maps, it struggled to accurately represent the direction, speed, and frequency of the mistral's elusive gusts. At Mont Ventoux, the mistral routinely demolished anemometers and battered weather observers' bodies, offering a visceral reminder that provincial environments could challenge the control of the French capital.

The stubborn unruliness of provincial environments, I argue, bolstered an embodied form of subnational territorial identity in modern France that ran counter to the powerful idea of a seamless and unified French nation-state. Chapter 4 demonstrates how place- and climate-based research on bodily health elevated provincial nature in the French public imagination. During the nineteenth century, regional environments became the building blocks for a modern French public health system guided by the localized influence of airs and waters. Historical archives reveal that nineteenth-century French doctors and public health officials were preoccupied with the climatic features of local and regional milieux. For medical experts in Provence, the mistral became a topic of fascination and ultimately an object of praise for its perceived cleansing effects on miasmatic disease particles and pollutants hovering in the southern atmosphere. Theirs was a territorial discourse that anchored French bodies in small-scale weather worlds rather than in a homogeneous national space.

French doctors' interest in the intimate relationship between human bodies and regional environments also spilled over into the visual arts, which is the subject of chapter 5. In this final chapter of the book, I examine how nineteenth-century landscape painters became riveted by the mistral's sensory impacts on their bodies while spending time outdoors in Provence.<sup>50</sup> World-famous modern artists including Claude Monet, Paul Gauguin, and Vincent van Gogh—as well as lesser-known Provençal regional painters such as Émile Loubon—promoted an embodied way of knowing French territory. In contrast to the flattened and tightly controlled images of French geography present on national weather maps, their paintings emphasized the effects of France's lively, diverse, and energizing regional environments in people's everyday lives.



Hidden away in the archives for too long, historical accounts of the mistral and its powerful windscape became disconnected from the larger story of modern France, especially the tensions between national unification and regional particularity. Through a creative approach to historical geography that combines research from official state archives with unofficial archives such as literature, paintings, and architecture, this book revives the fierce blast of the mistral, bringing it back into contact with the past society that it touched. Together, the chapters in this book demonstrate how the mistral became the target of economic, administrative, and technological modernization projects in Provence. In their struggle to tame the mistral's power over human society, however, French government officials faced resistance from the wind itself—which relentlessly bent, overturned, and smashed the things in its path—and from people in Provence whose regional identity became bound up with a force of nature so powerful that it could knock them off their feet.

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When researching and writing this book in Provence, I received frequent visits from the lead actor in this story. While sifting through historical documents within the protected space of a library or an archive, I could often sense the wind's movements outside. It was unnerving to hear loose shutters banging continuously against exterior walls and window frames whistling and shrieking as a blast of air pushed its way through their unsealed crevices. But it was especially during my days outdoors, on the open road, when I was confronted with the full might of the master of Provence. At the summit of Mont Ventoux, the mistral nearly took my breath away when I tried to walk around the grounds of its high-altitude observatory. Near the seashore, I stood in amazement as the mistral swooped in and transformed the Bay of Cassis from a sailor's paradise into a threatening expanse of whitecaps. While biking around the countryside near Avignon, I had to shelter behind a row of hedges when the mistral pushed against me with such force that it felt like a wall of air. During these moments outdoors, humbled by the material power of the wind, I thought of the aspiring painters in nineteenth-century France who left the safety of their ateliers in search of a direct connection with the landscapes at the center of their studies. My own embodied experience of Provence's lively windscape may not be in the endnotes of this book, but the reader can be assured that the memories of my encounters with the mistral are ever present in this story.