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“Shewing the difference betwenee their conjuration, and our invocation on the name of God for rayne”: Weather, Prayer, and Magic in Early American Encounters

Sam White

A growing body of scientific evidence details falling temperatures and unusually variable precipitation during the first European exploration and settlement of North America. Historians have just begun to seriously examine how adverse climate and weather affected early encounters with Native Americans. This article reconsiders this topic through a peculiar pattern of events found in nearly two dozen narratives from roughly the first century (1530s–1630s) of contacts, which was also one of the most difficult periods of the Little Ice Age: that is, the struggle of Christians and their native hosts for supernatural influence over the weather. From Spanish Florida and New Mexico, to English Virginia and New England, to French Canada, presumptive conquistadors, colonists, and missionaries described weather divination, weather magic, and weather prayer in the face of untimely rain or drought. Although varied in their details, many of the narratives include Indians supposedly entreating Europeans to pray for better weather, which delivered a miraculous intervention.

Taken in isolation, any one or two of these episodes could be dismissed as a coincidence, a literary flourish, or a distorted rendering based on a European sense of moral and religious superiority. Considered all together, in the context of climatological and archaeological evidence, as well as European and Native American beliefs about weather and the supernatural, these encounters take on a much greater significance. The range and consistency of sources largely rule out the idea that the episodes were mere invention, and physical evidence provides specific support for their descriptions of adverse weather and food

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shortages. Yet even though the narratives were based on real events, the meaning of those events was not the same for all participants. On closer examination of the most detailed accounts, the encounters rarely turned out well for the Europeans who related them. Far from revealing the superiority of Christian worship, supernatural intervention in the weather generated mutual suspicions of witchcraft and exposed Europeans to charges of weakness and hypocrisy in their appeals to the divine for aid. These episodes demonstrate the interplay of ecological and psychological pressures, and of environmental challenges and cultural conflicts, in North American colonies during the Little Ice Age.

**Besides practical considerations of space and available evidence, there are several reasons to focus on this type of encounter from the 1530s to the 1630s in North America (here referring to the northern frontier of New Spain and the present-day United States and Canada). The region and period offer a range of contemporaneous accounts—French, English, and Spanish, Protestant and Catholic, secular and ecclesiastical—providing grounds for cross-cultural comparison. Many first contacts and early encounters were recorded firsthand, and many of these episodes would prove to have important consequences for the outcome of the first colonies in North America. In most cases, neither Native Americans nor Europeans yet knew what to expect of one another. Cooling temperatures and drought are especially evident in this period, and for the most part the epidemic diseases of the Columbian Exchange had not yet taken their toll on populations in North America, leaving those populations more sensitive to the ecological pressures of extreme weather or climate change.**

Even within this geographic and chronological window, there is no shortage of narratives of supernatural intervention in the weather. In the past, several authors have considered them one at a time, while a brief article by Karen Ordahl Kupperman has examined a half-dozen cases together.¹ A close search indicates that these cases were far from exceptional. A considerable share of European expeditions that spent significant time in North America during this period left similar accounts. Examples occur in the wanderings of Álvar Núñez Cabeza de Vaca, in the Hernando de Soto expedition, in the first Spanish occupation and early missionization of Florida, and in Juan de Oñate’s conquest of New Mexico.² Jacques Cartier recorded an instance in his 1535 expedition

² For Cabeza de Vaca, see Baltasar de Obregón, Obregón’s History of 16th Century Explorations in Western America, ed. George P. Hammond and Agapito Rey (Los Angeles, 1928), 202. For Hernando de Soto, see the original accounts in Lawrence A. Clayton, Vernon James Knight Jr., and Edward C. Moore, eds., The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539–1543 (Tuscaloosa, Ala., 1993), 1: 114–20, 239–40, 299–305, 2: 389–406. For the first Spanish occupation, see the original accounts in Juan Carlos Mercado, ed., Menéndez de Avilés y la Florida: Crónicas de sus expedi-
up the Saint Lawrence River; later French missionaries left detailed and dramatic accounts of their competition with Huron shamans for control over rain during the 1630s. English colonists recorded examples of Indians calling on them to pray for rain at the Roanoke colony and during the first years at Jamestown, while English Puritans supposedly impressed the Indians with the power of their weather prayers during their first years at Plymouth and then Massachusetts Bay.

Although highly varied in their descriptions, the accounts contain several patterns significant for their interpretation. In about half of the narratives Europeans claimed Indians asked them to pray for better weather, while in most of the rest the colonists or missionaries initiated some contest between rituals to predict or control the weather. Some Catholic authors told of Native Americans showing particular regard for religious items, especially the cross. In English Protestant examples, Indians were reportedly impressed with the power of the English god to deliver rain, regardless of whether or not the Indians’ own weather magic had failed.

Such narratives are naturally apt to raise suspicions among scholars of early Atlantic history who are accustomed to critical analysis of early modern travel writing. As Stuart B. Schwartz has warned, these sorts of European encounter stories can carry “implicit understandings” of non-European peoples, which could play out in genres and patterns of events “important for what they tell us about the observer rather than the observed.” These encounters would have suffered from difficulties of communication—including communication about

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3 For Jacques Cartier’s expedition, see Cartier, Brief recit, & succinte narration, de la navigation faicte es yses de Canada. . . . (Paris, 1545), 19. Gabriel Sagard appears to reference this episode, or his description may indicate similar practices continuing in the seventeenth century; see Sagard, The Long journey to the Country of the Hurons, ed. George M. Wrong, trans. H. H. Langton (Toronto, 1939), 167. For French missionary accounts, see for example ibid., 78, 178–81, 313; Reuben G. Thwaites, ed., The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France, 1610–1791. . . . (Cleveland, 1897), 10: 43–49.


The narratives under study could also reflect two contemporary narrative tropes: prayers that delivered miraculous weather and providential weather as a warning to sinners and unbelievers. Indians asking Europeans to deliver a change in weather could fall into the discredited “white god” motif of many early encounter narratives—a pattern of events casting Europeans as the inevitable conquerors of simple, credulous native people so taken with the invaders and their technologies that they believed them to be divine.\footnote{See Camilla Townsend, “Burying the White Gods: New Perspectives on the Conquest of Mexico,” *American Historical Review* 108, no. 3 (June 2003): 659–87; Evan Haefeli, “On First Contact and Apotheosis: Manitou and Men in North America,” *Ethnohistory* 54, no. 3 (Summer 2007): 407–43.}

Despite these caveats, there are good reasons to take seriously these episodes from early colonial North America. First, the texts themselves reveal a great deal more consistency and internal evidence than would be expected from mere inventions. Several narratives find corroboration in multiple independent accounts. The Soto episode of 1541, which involved Spanish soldiers and Casqui Indians joining together in a successful rainmaking ceremony, appears in all four major records of the expedition (those of Rodrigo Rangel, Hernández de Biedma, Fidalgo de Elvas, and Garcilaso de la Vega). The versions differ enough in wording while offering sufficient matching details to indicate confirmation rather than copying. Pedro Menéndez de Avilés's encounter during the Spanish conquest of Florida—a seemingly improbable tale of a devastating drought that ended as soon as the *adelantado* (Spanish governor) convinced local caciques (chiefs) to pray to God for rain—appears in both of his original biographies, and the same pattern of events was reported in a contemporary letter from Florida. A claim that the *weroance* (chief) of the Quiyoughcohannock asked the first Jamestown colonists to pray for rain turns up in different versions in three separate accounts. Both Edward Winslow and William Bradford left similar descriptions of the providential drought and rains in Plymouth in the summer of 1623, as did an anonymous 1643 pamphlet. Jesuit relations from early French Canada also proved remarkably consistent in their descriptions of how the Huron expected them to control rain. Moreover, the writings in question span three languages, various literary styles, and both Protestant and Catholic authors. To dismiss most or all of them as inventions requires not so much a narrative genre as an improbable conspiracy of narrators.\footnote{For the four major records of the Soto expedition, see Clayton, Knight, and Moore, *De Soto Chronicles*, 1: 114–20, 239–40, 299–305, 2: 389–406. For Florida, see “Juan Rogel to Patri Didaco Avellaneda,” Jan. 30, 1567, in Félix Zubillaga, ed., *Monumenta Antiquae Floridae* (1566–1572) (Rome, 1946), 101–39. The anonymous pamphlet
A comparison of these early North American episodes of weather prayer and magic with the tropes of weather miracle accounts and “white god” narratives only emphasizes their peculiarities. Miraculous weather prayer stories, particularly Jesuit relations from Asia and the Americas, tend to follow a common pattern. They are succinct and straightforward, reported secondhand and in little detail. They involve pagan priests trying and failing to control the weather and then Christian priests stepping in and instantly delivering relief, followed by the sudden conversion of the unbelievers. They are clearly intended more as object lessons than factual reports, and they do little to hide their embellishments. Likewise, the “white god” motif tends to involve stereotyped accounts of simple natives in awe of Europeans—accounts usually exaggerated by time and distance. As Camilla Townsend puts it, “the farther removed the English were from the events they described, the more likely they were to report that the Indians had been virtually blown away in wonderment.”

Among the narratives of weather prayer and magic from early North America considered in this article, few follow these tropes. Most are contemporary, first-person accounts, not secondhand travelers’ tales. The majority of them report specific occurrences, not stereotyped sequences of events, and some of the best-corroborated and most detailed narratives took place in the presence of an interpreter with years of immersion in a native language. Often the pattern of events turned out to be very different from that of conventional weather miracle stories. Indian weather magic did supposedly work. Rather than being “blown away” by European rituals, Native Americans sometimes greeted the apparent success of Christian weather prayers with a wary respect or suspicion. Even episodes of weather prayer and magic that seemed to work to the colonists’ advantage can appear very different when reconsidered in their narrative and climatic context.

Moreover, a reflexive skepticism about these narratives may say more about modern historiography than early modern history. Perhaps out of an excess

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9 For a prayer miraculously bringing rain in Paraguay, see Annua Littera Societatis Iesu Anni 1606. . . . (Mainz, 1618), 221–22; for a prayer miraculously bringing rain in Oaxaca, see Annua Littera Societatis Iesu Anni 1608 (Mainz, 1618), 101. For a similar example from China, see Pierre du Jarric, *L’histoire des choses plus memorables advenues tant ez Indes Orientales. . . .* (Bordeaux, 1614), 3: 1017. See also the account of Fray Andrés Pérez de Ribas from colonial Tehuaco in Kupperman, *ReVista: Harvard Review of Latin America*. The Canadian Jesuit relations also include such weather miracle accounts—see for example Thwaites, *Jesuit Relations*, 23: 173–77—but these are stories told secondhand and separate from the personal narratives involving weather prayer and magic considered in this article.


11 This was the case in the Soto expedition, Pedro Menéndez de Avilés’s entrada in Florida, Oñate’s conquest of New Mexico, and the Jesuit missions among the Huron.
of caution over past “climate determinism,” scholars of the twentieth century tended to dismiss weather and climate as important historical forces. Some interpreted their appearance in the source material as literary or symbolic rather than factual, even where scientific evidence confirmed the presence of real climatic anomalies. Such a tendency overlooked the crucial role that climate played in preindustrial societies and the ways in which a pervasive preoccupation with weather shaped their beliefs and customs. Weather control ceremonies of some sort appear all throughout the early modern world, with detailed historical examples ranging from the Ottoman Empire to Qing China. With so much on the line, it also made sense to call on outsiders for help in times of need. Parts of the Muslim Middle East and North Africa traditionally sought the aid of Jewish prayers or Christian saints during droughts, and accounts of local populations requesting European assistance in rainmaking came from the Sahel and Sudan even in the late nineteenth century. It is not altogether remarkable, much less incredible, to find apparently factual reports of Europeans brought into the struggle for supernatural influence over the weather in early colonial North America. What is remarkable is that we find so many and such significant episodes among the limited body of narratives covering only the first century of encounters there. This is the sort of narrative pattern that calls out for explanation, not dismissal.

To argue that these narratives of weather prayer and magic relate to actual events is far from claiming that these events happened just as they were reported or that they carried the same meaning for all participants. As is so often the case in the investigation of early contacts, historical facts must

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be recovered from what might appear to be formulaic fantasies of European authors, and their reporting of events must be distinguished from their interpretations. Current historiography has tended to approach these problems through close readings of individual case studies. However, on the question of early encounters and the struggle for control of weather, the widespread pattern of events and their environmental—particularly climatological—context makes them meaningful and compelling. Examining the physical evidence and environmental situation of the episodes and placing events within what we know of contemporary European and Native American beliefs regarding weather and the supernatural highlights the combination of ecological pressures and cultural misunderstandings behind these encounters and their troubled outcomes in early colonial America.

The period from roughly 1300 to 1850 has been widely recognized as a time of falling average temperatures known as the Little Ice Age. Although this era witnessed important spatial and temporal variations in climatic trends, the label accurately identifies a significant global event with important human consequences. Over the past three decades, the seminal work of Karen Ordahl Kupperman has drawn historians’ attention to the impact of Little Ice Age weather on the early settlements of Roanoke, Jamestown, and to a lesser extent New England. Further research has considered how acute drought and freezing winters experienced by these colonies hurt local food supplies, made water more brackish and unhealthy, and aggravated outbreaks of disease.

14 Andrew Newman, On Records: Delaware Indians, Colonists, and the Media of History and Memory (Lincoln, Neb., 2012). See also the many and varied interpretations of John Smith’s supposed rescue from execution and adoption by the Powhatan in late 1607: J. A. Leo Lemay, Did Pocahontas Save Captain John Smith? (Athens, Ga., 1992); Frederic W. Gleach, Powhatan’s World and Colonial Virginia: A Conflict of Cultures (Lincoln, Neb., 1997), 115–20; Townsend, Pocahontas and the Powhatan Dilemma, 44–65; Helen C. Rountree, Pocahontas, Powhatan, Opechancanough: Three Indian Lives Changed by Jamestown (Charlottesville, Va., 2005), 76–82.

Jamestown and Roanoke were not the exceptions. For a century nearly every significant venture north of Mexico met adverse weather, with important consequences for the colonization of the continent. In 1521, Juan Ponce de León apparently found the climate in Florida “very different and disagreeable to what he had imagined.” The Lucas Vázquez de Ayllón expedition of 1526 found Georgia “tierra muy fría,” with men supposedly dying in freezing weather on the voyage back to Hispaniola. In 1535, Jacques Cartier and his men disregarded a warning of freezing weather from the Stadacona’s god “Cudragny” and claimed that the Christian god would deliver them a safe passage. But the Stadacona were right: the French would nearly all have died from scurvy in a long winter had Native Americans not presented them with a cure. Álvar Núñez Cabeza de Vaca left numerous descriptions of harsh winter weather during the 1530s on the Gulf Coast, where it is rarely experienced today. Narratives of the Francisco Vásquez de Coronado and Hernando de Soto entradas both suggest an exceptionally cold winter in 1540–41. Letters from the Tristan de Luna y Arellano expedition (1559–61) complained of a harsh winter at Mobile Bay. The Spanish settlers at the Santa Elena (present-day Parris Island, South Carolina) colony (1566–87) frequently lamented the weather as they endured a succession of droughts and storms, and missionaries around Saint Augustine, Florida, recounted freezing winters and snow. When Spanish


16 Gonzalo Fernández de Oviedo [y Valdés], Historia general y natural de las Indias, ed. Juan Pérez de Tudela Bueso (Madrid, 1992), 4: 321. (“Pero el temple de la región era muy diferente e desconveniente a lo que él llevaba imaginado.”) Unless otherwise noted, all translations are my own.


Jesuits attempted to settle in Virginia (Ajacán) in 1570, they found it “punished with six years of sterility and death.”20 When more than half of New Mexico’s first settlers deserted in 1601, their testimonies overwhelmingly emphasized the colony’s unusually harsh winters and prevailing drought.21 The attempted colony at Sagadahoc, Maine, saw its “hopes . . . frozen to death” in the infamous winter of 1607–8.22

As Kupperman has argued, profound misconceptions about the American climate played an important role in these experiences. Expecting to find similar environments at similar latitudes across the ocean, not only English but Spanish and French adventurers came woefully unprepared for America’s stronger continental seasons. Nevertheless, some remarkable narrative details, such as the Rio Grande freezing solid or the lower James River almost freezing over, indicate extreme weather even by American standards.23

Thanks to ongoing research on climate proxies, such as tree rings and sediment cores, we can confirm both the overall cooling trend and particular weather abnormalities in early colonial America. The latest studies indicate that global temperatures fell roughly 0.4 degrees Celsius during the Little Ice Age, with a pronounced cooling of about 0.7 degrees Celsius in the late sixteenth through mid-seventeenth centuries, a trend broadly followed in temperate North America.24


21 For a critical edition of the original accounts, see A. Roberta Carlin et al., The Desertion of the Colonists of New Mexico 1601 (Berkeley, Calif., 2009).


the Arctic demonstrate an especially sharp cooling from the 1590s to the first decade of the 1600s, probably in response to major volcanic eruptions in South America.\textsuperscript{25}

Moreover, tree rings provide specific confirmation for multiple episodes of drought described in the narratives. Hernando de Soto’s encounter with the Casqui probably coincided with the start of a very dry year in present-day Arkansas. For the region near Santa Elena, the National Oceanic and Atmospheric Administration (NOAA) North American Drought Atlas indicates that 1565 brought a mild drought and that 1566 (when Pedro Menéndez de Avilés miraculously brought rains to the Guale) turned into one of the driest years of the past millennium. The late 1500s brought anomalous precipitation across the southwestern and southeastern regions of what became the United States. Tree rings confirm that New Mexico was entering a serious five-year drought in 1598, the year of the supposed rain prayers in Gaspar Pérez de Villagrá’s account. As climatologist David Stahle and collaborators have demonstrated, 1587–89 brought the most extreme drought to Roanoke in the last eight centuries, and 1606–12 was the driest seven-year period at Jamestown for the past 770 years.\textsuperscript{26}

American tree rings probably reflect the contemporary southwestern “megadrought” rather than continent-wide departures from the hemispheric trend.


Do the narratives of Indians asking Europeans to pray for rains therefore represent real desperation in the face of climate change and adverse weather? Taking a wider perspective, recent reviews of archaeological evidence indicate that climatic change throughout the Holocene left discernible impacts on Native American ecologies and cultures. It would be remarkable if the Little Ice Age proved an exception. On the other hand, case studies of some Indian nations have demonstrated an ability to adapt or even thrive in the cooling climate of early colonial times.27

What appears to unite the groups described in the narratives here is a growing dependence on horticulture, which generated real climate vulnerabilities. Both historical descriptions and bioarchaeology indicate that Guale, Pueblo, Powhatan, and Huron Indians, among others encountered, were all adopting a maize-based diet. Indian maize depended on a long frost-free period, summer warmth, and moderate rainfall. Small climatic changes of the Little Ice Age would have brought more frequent floods, droughts, and especially killing frosts. The incidence of devastating multiyear crop failures would have increased exponentially.28 Populations living in an area on the edge of the range of viable rainfall for agriculture (such as Pueblos in dry-farming regions of New Mexico) or with a low average growing-season temperature (such as Iroquoian or Algonquian horticulturalists in Canada and New England) were more at risk. Yet even natives of the Southeast could face hunger in certain

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seasons, especially during multiyear droughts. It is surely no coincidence that most of the narratives here specifically concerned crops threatened by too much or not enough rain.

Many historians formerly assumed that pandemic diseases released by the Columbian Exchange had already swept ahead of North American colonists, leaving the land relatively depopulated. However, recent studies have called that view into question, demonstrating that the worst Indian mortality only occurred through the societal disruption and prolonged interaction with settlers that came with commerce, slaving, and missionization.29 The archaeology of the Native Americans discussed in this article indicates that none had fallen victim to major European pandemics until an introduced disease depopulated parts of southern New England in the 1610s. There had been no widespread depopulation yet to free up land for the survivors of introduced diseases to farm, hunt, and forage. On the contrary, analysis of skeletal remains suggests many Native American populations faced rising problems of malnutrition, parasites, and anemia as they moved into larger, more sedentary villages. Total average food production may have remained high, but these signs of pathology indicate lean years and/or seasonal stress.30


In theory, Native Americans had various options to adapt to climate change. They might have migrated to warmer regions or focused on more favorable microclimates, including low south-facing slopes or ridged fields with well-drained soil. They could have specialized and practiced more exchange and food storage, or else spread out, diversified, and practiced more foraging and hunting. Yet evidence for these practices remains selective, and early observations described crop systems still vulnerable to Little Ice Age weather.31

These adaptations clearly faced cultural and practical obstacles, particularly conflict within and among groups. Food storage raised thorny questions of who would control the stores and how. Choice of foodstuffs was not simply a matter of nutrition but also of social value and gender relations. For instance, Virginia natives could have made more use of wild tubers. Yet John Smith quotes Powhatan disparaging a diet of “roots, and such trash”: only maize was appropriate for a chief’s tribute and feasting. Besides, digging out tuckahoe was a task for women and one likely to be deeply resented during freezing winters.32 Most importantly, the nations in question had to consider defense. The most productive sites might be open to attack, and the most defensible would not always be the most fertile. Specialization and trade meant relying on trade partners, while widely spaced fields and extensive foraging could prove serious vulnerabilities in war.33

In fact, archaeology of settlements across the Southwest and eastern woodlands indicates greater population concentrations and more fortified villages. As Stephen R. Potter has argued, these finds point to reinforcing trends of rising political hierarchies and more intense warfare, likely aggravated by the stress of climate change.34 It may be no coincidence that two narratives specifically concerned wars between chiefdoms in times of drought (Casqui and Pacaha in the Soto narratives, Guale and Orista in the biographies of Pedro Menéndez


32 Barbour, Complete Works of John Smith, 1: 247 (quotation); Rountree, Pocahontas, Powhatan, Opechancanough, 64, 116. The question of food, prestige, and authority was equally important to the Jamestown colonists themselves; see Michael A. LaCombe, “A continuall and dayly Table for Gentlemen of Fashion: Humanism, Food, and Authority at Jamestown, 1607–1609,” American Historical Review 115, no. 3 (June 2010): 669–87.

33 O’Shea, “The Role of Wild Resources.”

And in both cases, the Indians’ sudden interest in Christian prayers appears to have had as much to do with securing European military allies as with the rain.

Climate-driven migration could itself set off conflicts over territory and resources. Several authors have proposed just such a theory for Iroquoian migration in the sixteenth century, which had repercussions as far afield as Canada and Virginia. In this scenario, killing frosts in a colder climate put pressure on Iroquois farming at higher latitudes and elevations, pushing migration southward. This move resulted in the consolidation of Iroquoian chiefdoms in upstate New York, where they posed a formidable threat to surrounding nations. Perhaps in response, the Susquehannock migrated from the upper reaches to the lower end of the eponymous river, putting pressure on Indians of the Potomac region, which accelerated the rise of larger chiefdoms and congregation in fortified settlements.35

These factors lend weight to reports of Indian famine in early encounter narratives and the role of food shortages in early conflicts with settlers. In some cases, Indians may have feigned want to avoid trading with Europeans, but more likely their complaints had a real foundation. New Mexico Pueblos almost certainly starved during the 1598–1603 drought, especially after Spanish invaders seized their stores of corn. Natives of Virginia may well have been perishing from drought in 1570 as the first Jesuits reported, and the Powhatan probably did suffer seasonal shortages during the dry years of 1607–9, as John Smith described.36 Therefore Native


36 For Pueblos, see Sam White, “Cold, Drought, and Disaster: The Little Ice Age and the Spanish Conquest of New Mexico,” New Mexico Historical Review 89, no. 4 (Fall 2014): 425–58. For Jesuit reports, see Lewis and Loomie, Spanish Jesuit Mission, 85. For the Pow-
Americans could certainly have asked European newcomers to pray for rain out of real desperation.

Nevertheless, these factors draw attention to the political and cultural dimensions of climate change, which also affected the struggle for supernatural influence over the weather. Global cooling and adverse weather were issues not only of food production but also of social and religious organization, legitimacy, and beliefs. Unseasonable weather implied that the shamans’ powers had failed, and poor harvests meant less surplus and tribute for redistribution, undermining support for chiefly authority. In the stress of the Little Ice Age, the arrival of Europeans represented both opportunities and threats. In times of conflict they might prove military allies or foes. They might provide new prestige goods to shore up chiefly status or else undermine it by trading those goods too widely. They might lend their powers to help bring back better weather or set themselves up as rival shamans or sorcerers bringing more drought, famine, and disease.

**Besides the unfortunate timing of Little Ice Age extremes, early colonial encounters came during a crucial period of transition in European ideas of the supernatural.** As Keith Thomas has demonstrated, the sixteenth century witnessed an emerging distinction between conceptions of religion and magic, without the one yet supplanting the other. Religion came to be identified with approved practices of prayer or supplication to God, who could intervene or not according to his judgment of the supplicant. Magic, although no less real, came to be identified with the compulsion of some devil or spirit, and came increasingly to be feared and despised as witchcraft. Though Thomas’s seminal study has undergone many criticisms and revisions, particularly on the subject of witchcraft, his conceptual distinction between religion and magic appears well founded. As Stuart Clark has subsequently argued, intellectual trends of the sixteenth and early seventeenth centuries reinforced the distinction in two

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ways. First, rationalism and naturalism among the educated precluded acceptance of more benign forms of magical causation, leaving only God or the devil—prayer or witchcraft—as the sources of apparent supernatural effects. Second, in the late sixteenth and seventeenth centuries both Reformation and Counter-Reformation religious authorities framed natural disasters as challenges from God to be met with faith and prayer, and condemned a resort to magical remedies as a turn to the devil.  

The distinction between prayer and magic was particularly significant when it came to dealing with weather. Purely naturalistic understandings of weather were rare before the late seventeenth century. Early modern Catholics appealed to divine aid in adverse seasons so often that records of church processions for rain now provide climatologists with a statistically reliable proxy for the past five centuries of drought episodes in Spain. While doing away with “superfluous” ritual, the English Reformation church still kept the annual perambulation of the parish on Rogation week to secure good weather for the harvest. As late as 1649, an anonymous pamphlet informed the English of “The Way to get Rain” in times of drought: “the first thing we must doe, is to humble our selves [before God]” and “the next thing we must doe is to pray.”

38 Keith Thomas, Religion and the Decline of Magic (New York, 1971). (“The belief that earthly events could be influenced by supernatural intervention was not in itself a magical one. For the essential difference between the prayers of a churchman and the spells of a magician was that only the latter claimed to work automatically; a prayer had no certainty of success and would not be granted if God chose not to concede it. A spell, on the other hand, need never go wrong, unless some detail of ritual observance had been omitted or a rival magician had been practising stronger counter-magic. A prayer, in other words, was a form of supplication: a spell was a mechanical means of manipulation. Magic postulated occult forces of nature which the magician learned to control, whereas religion assumed the direction of the world by a conscious agent who could only be deflected from his purpose by prayer and supplication. This distinction was popular with nineteenth-century anthropologists, but has been rejected by their modern successors, on the ground that it fails to consider the role which the appeal to spirits can play in a magician’s ritual and which magic has occupied in some forms of primitive religion. But it is useful in so far as it emphasizes the non-coercive character of Christian prayers.” Ibid., 41.) On the post-Thomas historiography and witchcraft, see Jonathan Barry, “Introduction: Keith Thomas and the Problem of Witchcraft,” in Witchcraft in Early Modern Europe: Studies in Culture and Belief, ed. Barry, Marianne Hester, and Gareth Roberts (Cambridge, 1996), 1–45. Stuart Clark, Thinking with Demons: The Idea of Witchcraft in Early Modern Europe (Oxford, 1997), 161–78, 457–71; Clark, “Witchcraft and Magic in Early Modern Culture,” in Witchcraft and Magic in Europe: The Period of the Witch Trials, ed. Bengt Ankarloo and Clark (Philadelphia, 2002), 97–170, esp. 109–18.


41 The Way to get Rain: By way of Question and Answer. Shewing the true Cause both of too much want, and too much abundance of Raine. . . . (London, 1649), 10 (“humble”), 11[v] (“prayer”).
The deteriorating climate of the late sixteenth to early seventeenth centuries heightened the sense of supernatural dread regarding extreme weather. As previous authors have examined, meteorological marvels never failed to inspire religious admonitions, particularly among European Puritans and their colonial American descendants. On the Continent, as the number of witchcraft trials rose over the late sixteenth century, their frequency reveals a significant correlation with severe winter weather. Even in England, where these prosecutions were less common, there was no shortage of accusations of weather magic, a subject clearly emphasized in contemporary witchcraft manuals. As late as 1654, English passengers bound for Maryland executed an old woman accused of bewitching their ship with storms.

When Europeans met adverse weather in the New World, it was only natural to seek supernatural intervention. Most would have believed sincerely in their power to influence the heavens and must have wanted to impress Indians with that power. Nevertheless, the situation certainly left them deeply concerned about what kind of supernatural intervention they sought. Weather prayers only worked when God found them worthy. And claims to compel good weather implied a sort of witchcraft.

We have, in most cases, only indirect evidence of the beliefs about weather and magic held by the Native American groups in question. Nevertheless, there are indications that most attributed to shamans certain powers to foresee or

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control the weather. Indians very likely viewed Christian prayers and especially the actions of Jesuit priests in terms of rituals like their own. There is no reason to imagine that Native Americans would have shared the same conceptual distinctions between religion and magic, or even between the natural and supernatural. What colonial accounts described as requests for prayer were not necessarily any concession to European superiority but more likely were invitations to the newcomers to make their own contributions to established weather rites.

At the same time, given the close association of weather magic and demonism in Europe, colonists immediately associated shamanic activity with witchcraft. As Jorge Cañizares-Esguerra has argued, Catholics and Protestants alike were only too ready to see the work of the devil in the unfamiliar wilderness of North America. Jusepe Brondat, an officer returning from New Mexico in 1601, testified that the Pueblos “have sorcerers who speak with the Devil, and they ask them whether or not it will rain.” Pierre Biard claimed that Huron religion was “nothing else than the tricks and charms of the Autoinos [shamans] . . . . They have many other similar sacrifices . . . to the Devil, so they will have good luck in the chase, victory, favorable winds, etc.” In 1611, Alexander Whitaker at Jamestown gave a lurid description of Indian rainmaking ceremonies, observing that “their priests . . . are no other but such as our English Witches are.” “If they would have raine, or have lost any thing, they have their recourse to him, who conjureth for them, and many times pre-


46 “Investigation carried out by order of the viceroy,” leg. 26, 48–E, fols. 40r–54v, Archivo General de Indias, Seville, Audiencia de México, fol. 41r, 5 (quotation), repr. in A. Roberta Carlin et al., Deseretion of the Colonists of New Mexico 1601: 3d part (Berkeley, Calif., 2009), http://escholarship.org/uc/item/452289m6, p. 51 of PDF.

47 For Pierre Biard, see Thwaites, Jesuit Relations, 3: 131 (quotation). Sagard described an Algonquin shaman’s healing ritual as “a witches’ Sabbath, a regular hubbub and concert of demons”; see Sagard, Long journey, 65. For French belief in the power of Huron magic, see ibid., 141.
Virginians continued to express belief in Indian witchcraft as late as the 1680s. Therefore, in 1623 when Edward Winslow exulted in the power of Christian prayer to end a drought in Plymouth, he did not deny the power of Indian rainmaking. He only contrasted the “soft, sweet, and moderate showers” of the former with the “stormes and tempests” that came from the latter, “shewing the difference betweene their conjuration, and our invocation on the name of God for rayne.” Other early colonial writers echoed the conviction that America’s harsh climate was somehow linked to its paganism or witchcraft and that the coming of Christianity would make it more temperate.

Europeans could react with scorn or incredulity when Indians failed to recognize the supposedly self-evident distinction between Christian prayer and devilish magic. In the narratives above, both Soto and Menéndez de Avilés lectured Indians on the need to render themselves worthy of God’s intervention before God would end their droughts. Yet once the rains came, the sources are clear that the Native Americans in question focused on the perceived power of the Christian rituals and religious paraphernalia instead. The situation proved particularly difficult for missionaries anxious to stamp out traditional magical practices. For instance, a confessionary for Franciscans working among the Timucua of Florida in the early 1600s instructed them in the following line of questioning:

Have you made rain?

If God does not wish it, no matter what you do it will not rain, abandon that which is a grave sin. . . .

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49 Bond, *Virginia Magazine of History and Biography* 108: 122. See also Stanley Pargellis, “An Account of the Indians in Virginia,” *WMQ* 16, no. 2 (April 1959): 228–43, esp. 232–33. “The Indians esteem them the wisest men among them, whom they call conjurers. . . . Their conjurers do sometimes raise storms, or divert clouds from one place to another and make them fall where they will. This they do by drawing circles, and muttering words, by making a dreadful howling and using strange gestures and various rites, upon which the wind ariseth etc.” (ibid., 232).

Have you conjured a rain storm or a thunder storm with superstitions?

Thundering, have you blown toward the heavens in order to stop the clouds or water with your evil prayers?

Have you made the ceremony of rain?

Son, don’t make this ceremony any more, for do what you will, be aware that it will not rain unless God our Lord is served.  

Likewise, Canadian missionary accounts make clear that despite the priests’ emphasis on the power of faith, the Huron remained far more interested in Christian practices as alternative shamanistic rituals. As Gabriel Sagard recounted, “They often put our prayers into requisition either for the sick or for assaults of the weather, and they freely admitted that these were more efficacious than their own ceremonies and incantations and all the uproar of their medicine-men, and they delighted in hearing us chanting hymns and psalms for their benefit, during which, if they were present, they kept strict silence and paid attention at least to the tones of the voices.”

The incomprehension went beyond the peculiar European dichotomy between supplication and compulsion of the supernatural to fundamental Christian concepts of divine judgment and sin. The problem appears in comments on New England Native American life in Roger Williams’s 1643 *Key into the Language of America*. He recounted how “if the yeere proove drie, they have great and solemn meetings from all parts at one high place, to supplicate their gods, and to beg raine, and they will continue in this worship ten dayes, a fortnight; yea, three weekes, untill raine come.” Yet only a few pages later, he warned of “that Judgement which the Lord Jesus pronounced against the Weather-wise (but ignorant of the God of the weather) will fall most justly upon those Natives, and all men who are wise in Naturall things, but willingly blind in spiritual,” and composed a verse comparing their way of confronting the weather to Sodom’s situation before its divine destruction. 

Ironically, for many Algonquian peoples, the Christian god’s emphasis on sacrifice and retribution might only have identified him more closely with Okeus, whom Europeans often equated with Satan. As William Strachey recounted, “only the displeased Okeus looking into all mens accions and examyning the same according to the severe Scale of Justice, punisheth them with sicknesses, beats them, and strikes their ripe Corne with

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blastings, stormes, and thunderclappes." Canadian missionaries, keen to impress their native hosts with superior knowledge and technology, observed—perhaps with a little pride—how the Huron called them okis (spirits). New England settlers likewise noted how local Indians called them manitou, a term with wider suggestions of spiritual significance but which they translated as "God[s]." As Evan Haefeli has argued, this fundamentally misread their meaning: "Manitou could be scary and unpredictable. But so was life. Associating it with strangers, like Europeans, was not to displace them onto a higher theological plane but to integrate them into the known world of hope, fear, and possibility. After all, like Manitou, Europeans were scary and unpredictable." It appears that at first Europeans failed to see that their claims of supernatural influence over the weather could engender fear and suspicion rather than admiration or trust. When Huron villagers asked Father Sagard to pray for rain and save their crops, a chief argued, "You have always proclaimed to us that He is very kind and . . . that He can do what He wishes, then He can bring us out of our distress and give us good and fitting weather." Sagard replied that God, as Father, "was free to fulfill or to reject the prayers of his child, and . . . there being as much love in refusing as in granting." But the Huron would have none of it, seeing nothing childish about sober priests’ requests to end a drought: "Your Father in Heaven is careful not to put you off. But if He does not listen to you and our corn goes to rot, we shall think that you are not truthful and that Jesus is not so good nor so mighty as you say." In the end, the repeated success of the missionaries’ prayers inspired as much uneasiness as confidence. "After that the savages trusted us so implicitly and thought so much of us that it was an embarrassment." Sagard was right to fear that their reputation as conjurers could only go downhill.

54 William Strachey, *The Historie of Travell into Virginia Britania* (1612), ed. Louis B. Wright and Virginia Freund (London, 1953), 89. By way of comparison, see Jean de Brébeuf’s contribution in Thwaites, *Jesuit Relations*, 10: 163–65. "And furthermore, I may say it is really God whom they honor, though blindly, for they imagine in the Heavens an Oki, that is to say, a Demon or power which rules the seasons of the year, which holds in check the winds and the waves of the sea; which can render favorable the course of their voyages, and assist them in every time of need" (ibid., 10: 161). See also Kupperman, *Indians and English*, 124–35.


56 For example, see Williams, *Key into the Language*, 118: "Besides there is a generall Custome amongst them, at the apprehension of any Excellency in Men, Women, Birds Beasts, Fish, &c. to cry out Manittóo, that is, it is a God, as thus if they see one man excell others in Wisdome, Valour, strength, Activity &c. they cry out Manittóó A God: and therefore when they talke amongst themselves of the English ships, and great build-ings, of the plowing of their Fields, and especially of the Bookes and Letters, they will end thus: Manittówöck They are Gods: Cummanit ôo, you are a God, &c."

57 Haefeli, *Ethnohistory* 54: 422.

Menéndez de Avilés encountered a similar problem shortly after he brought miraculous rains to the Guale. When subsequently called upon to pray for the Hotina Indians, his power over the weather conjured more misgiving than friendship. Their cacique “said that he feared the adelantado, and that he shouldn’t come with more than 20 men, and that he should ask God for rain for his maize fields, which were dry, as he had done for the Guale cacique.” Menéndez de Avilés laughed at the request, but when he came to the village, “though it had not rained for 6 months, it began to rain very hard. When he came to the cacique’s house, he did not find but 6 Indians in it, because [the cacique] had fled: and sending an Indian to see him, [the cacique] responded that he had hidden in the forest out of the fear for a man who had such power with God.”

Given this suspicion and mutual incomprehension, Europeans realized too late that they had fallen into a trap of their own making. Just as they had taken credit for achieving supernatural intervention, so they would have to take the blame for failure. Sooner or later, the adverse weather typical of the Little Ice Age returned. And once it did, Native Americans reasonably drew one of two conclusions: the newcomers had grown weak or else they brought foul weather deliberately. As James Axtell has generalized, “the Indians believed that all spiritual power was double-edged.”

Meteorological accidents only compounded the problem. As revealed in tree rings, drought continued or followed closely upon several apparently miraculous episodes of prayer. The year after Soto supposedly brought rain to the Casqui, the region around present-day northeast Arkansas faced a serious drought. Menéndez de Avilés may have brought rain on one occasion to the Guale, but he evidently stopped using his powers for good. The drought continued for four more years, with 1569 nearly as dry as 1566. In the case of Jamestown, tree-ring evidence makes clear that serious drought continued all the while the weroance of Quiyoughcohannock appealed to the English to pray for rain. When the chief “would confess, our God as much exceeded his, as our guns did his bowe and arrowes,” this was evidently not because the Christian god had delivered rain but more likely for just the opposite reason: the mysterious Englishmen’s deity was so powerful he had brought the worst drought in anyone’s memory. Similarly, following the miraculous rains reported by Edward Johnson in the new Massachusetts Bay colony, the weather in New England could not have been worse: in 1634, there was a serious drought, and 1635 saw a devastating hurricane and untimely frost.

60 Axtell, Natives and Newcomers, 32–33 (quotation, 33).
61 For the Arkansas drought, see Cook et al., “North American Drought Atlas,” grid-point 211 (1542 = -2.854 PDSI); for the 1566 and 1569 droughts, see ibid., gridpoint 249.
hunger that followed played a major role in the outbreak of the Pequot War. It is unknown whether the Pequots blamed the English god for the weather as well as the violence.

The Roanoke colony provides a more explicit example of what could happen once the Christians’ providential power over the weather disappeared. A closer look at Thomas Hariot’s narrative reveals the tension already present as Roanoke Indians asked for the newcomers’ assistance: “fearing that it had come to passe by reason that in some thing they had displeased us, many would come to us & desire us to pray.” The fear evaporated as the drought continued and the ill-supplied colonists faced famine. Ralph Lane described how, as the chief Wingina turned against the English, he grew confident he could merely starve them out: “that they grew not onely into contempt of us, but also (contrary to their former revered opinion in shew, of the almighty God of heaven, and Jesus Christ, whom wee serve and worship, whom before they woulde acknowledge and confesse the onely God;) nowe they began to blaspheme, and flatly to say, that our Lord god was not God, since hee suffered us to sustaine much hunger.”

The Jesuit reputation suffered an equally devastating reversal in the recurring crop failures and famines that struck Huronia (in present-day Ontario) in the 1630s. Jean de Brébeuf’s narrative of yet another drought and divine salvation in 1636 included even more conflict with local shamans and accusations of sorcery, leading the Jesuits at one point to offer their own lives in sacrifice if their prayers failed. Later passages in his relation of that year indicate how dangerous the situation had become for them (even allowing for some dramatic exaggeration): “And then you are responsible for the sterility or fecundity of the earth, under penalty of your life; you are the cause of droughts; if you cannot make rain, they speak of nothing less than making away with you.” “We must live in daily expectation of dying by their hand . . . should we fail to open or close the Heavens to them at discretion, giving them rain or fine weather at command. Do they not make us responsible for the state of the weather?”

In their own eyes, the Europeans’ distinction between prayer and magic gave them credit when their rituals succeeded but no blame when they failed. If God granted them timely rains, then it proved their own worthiness; if not, perhaps it proved the Indians’ unworthiness, or perhaps God was only testing them. The most horrific conditions, such as Jamestown’s Starving Time of 1609–10, could only deepen colonists’ need to find signs of God’s sanction. Adverse weather could even signal divine approval of colonists’ abuses, as when

65 Thwaites, Jesuit Relations, 10: 37.
a drought aided Spanish scorched-earth tactics during the suppression of a Guale uprising in 1597–99. It may have been a comforting double standard for the Christians, but not one their Indian hosts would easily accept.

As previous authors have argued, the epidemics of the Columbian Exchange played an important role in Indian suspicions of early colonists and their religion. The adverse weather characteristic of the Little Ice Age posed parallel problems. Both phenomena invited supernatural interpretations and efforts at supernatural intervention. Both raised Indian fears that the Christian newcomers were using malevolent powers against them. Yet in the case of adverse weather, the Europeans enjoyed no biological immunities. They stood vulnerable to the same cold, floods, droughts, and hunger—and to the consequences of incautious claims that it was their god who controlled this weather and would listen to their prayers.

67 For Jamestown, see Bond, Virginia Magazine of History and Biography 108: 107. Kathleen Donegan has also linked the colonists’ physical suffering, psychological dread (including fear of Indians’ witchcraft), and need to search for a moral justification for their colonies; see Donegan, Seasons of Misery: Catastrophe and Colonial Settlement in Early America (Philadelphia, 2014), 1–5. For divine approval, see three separate sources that give this same interpretation: Oré, Relación histórica de la Florida, 1: 105; [Andrés González de Barcía Carballid y Zúñiga], Barcia’s Chronological History of the Continent of Florida, trans. Anthony Kerrigan (Gainesville, Fla., 1951), 184; Juan de Torquemada, Monarquía Indiana [1615] (Mexico City, 1986), 6: 79. The drought is confirmed in the tree-ring evidence; see Cook et al., “North American Drought Atlas,” gridpoint 249. See also the Florida governor’s correspondence: “Coming in the wake of this devastation, a drought helped to starve the Indians. In 1600 the governor apparently did not rue his drastic course, for he boasted that no harm, not even death, which he might have inflicted, could have brought the Indians to obedience so quickly as the mere act of depriving them of their means of subsistence.” On the other hand, Richard Hakluyt described the storm that met Drake’s ships at Roanoke as “the hande of God [that] came upon them for the crueltie, and outrages committed by some of them against the native inhabitants of that Countrie”; see “Canzo to the king,” Feb. 4, Feb. 28, June 28, 1600, Audiencia de Santo Domingo, sec. 5, leg. 224a, Archivo General de Indias, quoted in John Tate Lanning, The Spanish Missions of Georgia (Chapel Hill, N.C., 1935), 97 (“devastation”); Quinn, Roanoke Voyages, 1: 478 (“hande of God”).