Life-changing moments often occur in surprising ways. Years ago, as a beginning graduate student, I took a wrong turn while trying to find the living history museum at Old Sturbridge Village, Massachusetts. I soon was hopelessly lost, and ended up parking on a winding, climbing road by a rusty old historical marker, south (I later found out) of my destination. The marker, barely readable, told me I was at the site where John Winthrop, Jr. had started a “black lead” mine in 1644.

1644? Mining? In the middle of the “wilderness”? Even at that early stage of my immersion in colonial American history, I knew venturing almost a hundred miles into the interior of an infant colony to launch a complex mining venture was, to say the least, audacious. I did not know what had motivated the younger Winthrop to undertake such a risky and challenging project, but I knew the reason had to be really significant. Perhaps it had something to do with this stuff called “black lead.” But what exactly was “black lead”?

Answering that question triggered years of research that radically changed my understanding of the settlement of early New England, and of the role played in that settlement by Connecticut Governor John Winthrop, Jr. (1606–1676), firstborn son and namesake of the Massachusetts governor. (The pursuit also transformed me from an advertising executive into a professor and historian.)

In Prospero’s America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture (1606–1676) [The University of North Carolina Press, 2010], I tell the story of how John Winthrop, Jr. used alchemy to shape many aspects of New England’s colonial settlement, and how that early modern science influenced an emerging Puritan culture. I also detail how the younger Winthrop — often seen by historians as a pale reflection of his more famous father — was in his own right one of the most important figures in all of colonial English America. Through his story — and the records of his interactions with so many of his fellow colonists — we encounter a new and quite revealing reinterpretation of early New England settlement.

We’re not used to thinking of science as an important factor in colonial settlement. Nor are we used to thinking of alchemy (if we think of it at all) as science. Yet in Winthrop’s seventeenth-century world many considered that early form of chemistry — which intertwined religion, science, and magic, and linked them to practical laboratory research — as the most important of the sciences. Alchemical research, as earlier advanced by men such as Paracelsus and John Dee, promised important insights into the workings of nature, as well as the possibility of achieving significant breakthroughs in industrial processes, mining, metal refining metals, medicine, and agriculture.

John Winthrop, Jr. took up the study of alchemy as a young law student in London, and he spent the rest of his life attempting to employ his alchemical abilities in the service of Puritan New England. His search for alchemical knowledge took him across Europe and to the Middle East. He built communication networks with alchemists wherever he went, and recruited European alchemists to come join him in America. Winthrop shared with many of these “natural philosophers” — the term then used for today’s
“scientist” — a belief that alchemy had a crucial role to play in preparing the world for the return of Christ. Alchemical discoveries by pious researchers like Winthrop would be disseminated as a Christian service to improve human living conditions, considered by many a necessary prerequisite for Christ’s much anticipated return.

From the moment he arrived in New England in 1631, Winthrop, Jr. used his specialized alchemical knowledge in the service of the new Puritan plantations. This effort led to such ventures as a salt works at present-day Salem; the iron furnaces at Braintree and later, Saugus and New Haven; a number of mining ventures (including the mysterious “black lead” mine in Sturbridge); and an array of other economic development schemes, all grounded in one way or another by Winthrop’s knowledge of alchemy. Along the way, he founded three towns (Ipswich, Massachusetts, and Saybrook and New London, Connecticut); served as Connecticut’s governor for eighteen years (1657, 1659–1676); secured Connecticut’s unusually generous Royal Charter from Charles II in 1662; and became a founding member of England’s Royal Society, one of the oldest and most prestigious scientific institutions in the world. While doing all this, he also found time to provide alchemically-based medical services to perhaps half the population of Connecticut.

Most New Englanders who directly experienced the benefits of alchemical research did so by taking medicines. These new chemicals — as opposed to traditional herbal medicines — were seen as one of the greatest alchemical advances. Alchemists considered them to be new, God-given remedies sent to overcome the ailments of a corrupt world. Winthrop had studied alchemical medicine in England and on the continent, and saw providing medical services to those in need as his Christian duty. In his alchemical laboratory he prepared a number of powerful chemical medicines — including one called rubila, for which he was internationally renowned — which he administered to those who came seeking medical attention. Demand for his medicines was so high that Winthrop distributed them — gratis — through a network of women healers, often the wives of leading men, in towns around New England.

Patients came from near and far — often enduring terribly long and painful journeys — to be treated by Winthrop at New London. Other healers would refer patients to him when their treatments had proven ineffective. For several years Winthrop also traveled from town to town holding clinics where colonists could come for diagnosis and treatment. One of the most interesting parts of my research was reading the many letters written to Winthrop from people far away, seeking advice on how to treat their own illnesses or those of a sick family member. These letters, part of the Winthrop Papers at the Massachusetts Historical Society, with their detailed descriptions of symptoms, suffering, and generally ineffective attempts at treatment, provide moving insight into the general state of colonial health, as well as the limited number of treatment options available to the seriously ill. Historians have long known that New England’s colonists lived longer than their English counterparts, and were generally healthier. What these letters show is how commonly these “healthy” colonists were affected with a host of debilitating medical conditions, from tooth decay to worms to gastrointestinal afflictions, injuries and, not infrequently, more serious diseases.

Perhaps Winthrop’s most ambitious venture centered around the town he founded and insisted on calling a “new” London, at the entrance to Long Island Sound. Winthrop had taken ore samples from the area to England on a 1641 journey. There, assays of the “black lead” — a term used for a number of minerals

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Forrest Morgan, ed., Connecticut as a Colony and as a State, vol. 1 (1904).
— showed that it contained high concentrations of silver. Believing that the black lead mine was actually a rich silver mine, Winthrop conceived of an elaborate regional plantation scheme in which ore taken from the mine would be transported down Connecticut’s Thames River watershed to New London. From there, the ore would be shipped to Europe for processing. Winthrop recruited alchemists from around Europe to join him at the “new” London, where they would pursue alchemical research for godly ends, funded by profits from the silver mine.

That grandiose vision lay behind Winthrop’s 1644 mining venture, and his subsequent founding of New London. Difficulties with mining the ore and Indian resistance to the new settlement quickly altered the original plan, but Winthrop continued to develop his alchemical research concept at New London. He made it a kind of hospital town for alchemical medical treatment, attracting a number of colonial students of alchemy who later employed their chemical knowledge throughout New England.

Because alchemists sought to chemically manipulate the unseen (literally, the occult) workings of nature, alchemy was closely associated with natural magic. Winthrop, because of his alchemical reputation and medical knowledge, was considered an expert in suspected witchcraft cases. First as a consultant, and later as the governor who presided over witchcraft trials, Winthrop used his authority over the interpretation of magic to radically change Connecticut’s pattern of witchcraft prosecution. Prior to Winthrop’s involvement in witchcraft cases, Connecticut was New England’s fiercest prosecutor of witches. It executed New England’s first witch, Alse Young of Windsor, in 1647. The same fate awaited each of the seven persons indicted for witchcraft in that colony between 1647 and 1655. (In Massachusetts during the same period, the rate of acquittal was 50%.) Once Winthrop became involved, things changed quickly.

As a consultant, Winthrop always found factors other than diabolical magic to be the cause of suspected witchcraft attacks. As governor (and therefore also presiding judge and chief interrogator), he stage-managed trials to engineer acquittals. In the one case where this failed, that of Elizabeth Seager of Hartford in 1655, Winthrop simply invoked his right as governor to refuse to enforce the verdict. This action seems to have provoked a bit of public backlash, for in his next and most important witchcraft trial, that of Katherine Harrison of Wethersfield in 1669, he asked a synod of ministers to clarify what kinds of magical knowledge were punishable as witchcraft. Importantly, another alchemist and Winthrop friend, the Rev. Gershom Bulkeley, led this ministerial synod. Bulkeley’s responses to Winthrop’s questions redefined the definition of diabolical witchcraft in such a way that executions for witchcraft in Connecticut ended permanently. Connecticut was transformed from New England’s fiercest witchcraft prosecutor to a colony that never hanged another person for that crime.

Why were alchemists such as Winthrop and Bulkeley, both authorities on magic, skeptical about charges of witchcraft? Although neither man ever
stated his specific beliefs, most likely they shared with many other alchemists the emerging belief that suspicion of witchcraft was a trick of the imagination, and that without the kind of diligent research they themselves engaged in, suspected witches simply could not have performed the magical acts attributed to them.

Not only did alchemists lean to greater skepticism than did many of their Puritan peers regarding witchcraft, they were also inclined to a much greater acceptance of religious diversity. Winthrop saw alchemical research as a pious practice open to members of all faiths, and recognized that God was ecumenical in his dispensation of scientific discoveries. Winthrop therefore was much more accepting of people of different sectarian beliefs than many other Puritans. This relative religious tolerance — markedly different from the restrictive Puritanism practiced in Massachusetts — stood Connecticut in good stead at the court of the newly restored monarch, Charles II, in 1662.

Charles could hardly be blamed for holding a bit of a grudge against his New England colonies. After all, Puritans had led the anti-monarchial forces who had rebelled against and later executed his father. Moreover, New Englanders were reported to be harboring some of the regicides who had signed Charles I's death warrant.

Connecticut felt particularly vulnerable to royal disapproval since, unlike Massachusetts, its government had no royal charter validating its existence. Connecticut had effectively been settled by squatters from Massachusetts. As matters stood at the Restoration in 1600, Connecticut's government could be set aside at the will or whim of the new king. To forestall that, Connecticut sent Winthrop on an emergency mission to charm the king and secure Connecticut a royal charter. Once in London, Winthrop's international scientific standing, his connections among the members of the Royal Society, and his well-known reputation for religious tolerance won him the king's approval — which in turn led to Connecticut receiving an extraordinarily generous Royal Charter.

One of the most interesting questions that surfaced during my research concerned the relationship between John Winthrop, Jr. and his more famous father. How did John Winthrop, Sr. (1587/88–1649), committed to protecting New England Puritanism from outside intervention, react to his son's more ecumenical approach to New England's settlement and development? How, in turn, did the son react to the more conservative approach of his father?

Although historians have often presented the two men in contrast — a comparison in which the younger Winthrop always fared worse — the two men were, in fact, remarkably similar. Both sought to make New England a "city on a hill" — an example to the rest of the world of how a truly godly society could be planted and nurtured. While the father hoped to realize this vision through godly governance, the son focused on the deployment of godly science.

In general, relations between father and son were always more than cordial; their correspondence reveals a mutual respect marked by an undercurrent of affection. John Winthrop, Jr. clearly loved his father and believed he owed him respect and deference. He also felt free to disagree with his father, although never in public. Winthrop, Jr.'s decision to establish his alchemical plantation in New London, far from Boston, may have in part been based on a desire to place it in a location removed from his father's critical scrutiny.

Governor John Winthrop, Sr. recognized the way alchemy could be deployed to support New England's economic development and improve the lives of its colonists, and he supported and valued his son's alchemical pursuits. But when the full dimensions of his son's proposed ecumenical alchemical research center became clear, Winthrop, Sr. wrote cautioning his son sharply about pursuing knowledge at the expense of godliness. To Winthrop, Jr., pursuing alchemical knowledge was the same as pursuing godliness, so he continued with his project. While it is clear the project and the issues surrounding it remained a source of tension between the two right up to Winthrop, Sr.'s death in 1649, it is also clear the father supported his son's efforts, even when he disapproved of elements of the scheme. In short, the relationship between this powerful father and his capable son was one of understated love, continuous respect, and mutual support, despite recognition of their differences.

My investigation of John Winthrop, Jr. brought to light an aspect of colonial New England that had always been there, but rarely seen. It showed science as an important part of New England's founding, and John Winthrop, Jr. as a remarkably influential force in shaping New England's distinctive culture.

And to think it all happened because I took a wrong turn trying to get to Old Sturbridge Village. ♦

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