

that European Americans not only could, but should slowly introduce them to civilization, or as it is now called, civil society. This ideology helped legitimate the colonization and domination of Native Americans and African Americans: it was for their own long-term good.<sup>75</sup>

The ideology was only complete from the standpoint of European Americans. On the one hand, Native Americans persisted with their own natural soundways, which show continuities from the seventeenth-century Jesuit accounts to the nineteenth-century Bureau of Ethnology accounts to modern folktales, ethnographies, and current practices. There was change over time, but there were also strong continuities that flew in the face of the civil/savage discourse. On the other hand, African Americans used the disjuncture between their attributed "primitive" nature and their own natural soundways to employ their own legitimizing rituals, unperceived by whites even as they recorded them. Both Native Americans and African Americans created and maintained natural soundways outside the domain of white colonizing discourses about natural sounds.

The distinction between civil and savage is relevant to another pair of binary opposites. It mirrors many of the traits of the literacy/orality distinction. Seen this way, the project of constructing ahistorical "oral" peoples with certain inherent traits can be understood as a modern legitimization of colonialism, whether internal, as in the case of Native Americans and African Americans by the United States, or external, as in the case of "western" cultures vis-à-vis today's "Other," often located in Africa or some part of the third world. While it is no longer proper to talk of them as primitive, or of westerners as especially civilized, it is still acceptable to speak of "oral" cultures and their failure or inability to embrace civil society.

Ultimately the task here is to historicize those categorized as "oral" and to show how that category holds better for a certain sector of literate seventeenth-century European Americans than for anyone else at that time. To do this, we must introduce the sounds that humans made: but how to do this when sounds are so evanescent? Natural sounds stayed more or less constant over time: thunder now sounds much as it did then. Perhaps some human sounds, then, are less ephemeral than scholars of orality can see as well. To begin to recover human-made sounds, we must postpone an engagement with the parts of the soundscape reducible to print and writing, and put off engaging with voice at all for the moment, as we turn to the instrumental sounds that people used to construct early American societies. There we will find soundscapes that can sometimes still be heard today.

Rath, William Cullen. Excerpt from the book "How Early America Sounded" (Cornell University Press, 2003)

## CHAPTER TWO

### *From the Sounds of Things*

"You'll think I'm loopy, but I tell you that bell was alive."

—Nobby Cranton, in Dorothy Sayers's *The Nine Tailors*

*Sunday morning was quiet in downtown Philadelphia's historic district, a silence punctuated lightly by the occasional car whooshing past. As I walked the quarter mile from my parking spot to Christchurch, the eighteenth-century city's renowned Anglican house of worship, I was surprised to hear its bells slowly emerge from the stillness — not surprised to hear them, but surprised they were so quiet as to be barely audible a few blocks away. This was a ring of ten bells, eight of which were cast in 1749 at Whitechapel, England's leading bell foundry. The largest of them weighed 2,040 pounds, roughly the same as its broken but more famous Whitechapel sibling, the Liberty Bell. For a time they were the largest and loudest bells in the Americas. They were heard by shipmasters halfway across the Delaware River, a mile away. Their relative silence vexed me. The street noise that morning was if anything quieter than the hustle and bustle of eighteenth-century Philadelphia, with its iron-shod horses pulling iron-wheeled buggies across cobblestone streets during a time when the neighborhood served as a vital open-air center of the city instead of as a somewhat mummified tourist destination for secularly reverent citizens.*

The carillonneur, Douglas Gefvert, who rings and takes care of the bells, provided the answer to the puzzle of the quiet bells after the first ringing died away. We had climbed rickety ladders up to the belfry. In a far corner hangs the small minister's bell, said to date from the 1690s, with a long rope dangling to the floor below. This is the only bell still rung the old way, by swinging the bell rather than just pulling the clapper. The other bells are played through a keyboard attached to ropes that swing the clappers into the sides of their respective bells. The bells themselves never move. The sound of the ringing is directed straight down



Fig. 2.1 Minister's bell, Christ Church, Philadelphia. Photograph by author.

into the floor of the belfry before it escapes through the belfry walls' sound openings, which begin a few feet above the floor, about halfway up the bells' sides. There are two reasons why the bells are quieter nowadays. . . . First, the belfry serves to muffle rather than amplify the ringing because the bells are no longer swung; thus the lips of the bells no longer point out the belfry openings when the bell sounds. Second, the swinging of the clapper rather than of the bell creates far fewer vibrations and thus much less volume. The trappings of the old way of ringing the bells remain, however, making it easier to explain not only why the bells are quieter now, but also why they were louder then.

Bells were usually hung from an axle affixed to a pulley having a radius a little more than the height of the bell. The ends of the axle rotated freely but were clamped down or set into a square heavy timber frame. Weighing hundreds of pounds, a bell was rung by pulling a rope attached to the pulley. The pulley used the bell's weight to help bring the bell nearly to an upside-down position, with the clapper held against the lowest part of the bell's sound bow (just above the lip) by inertia. A "stay" prevented the bell from turning all the way around in its frame. As the bell began its descent, the clapper was still ascending. When the highest part of the lip of the bell

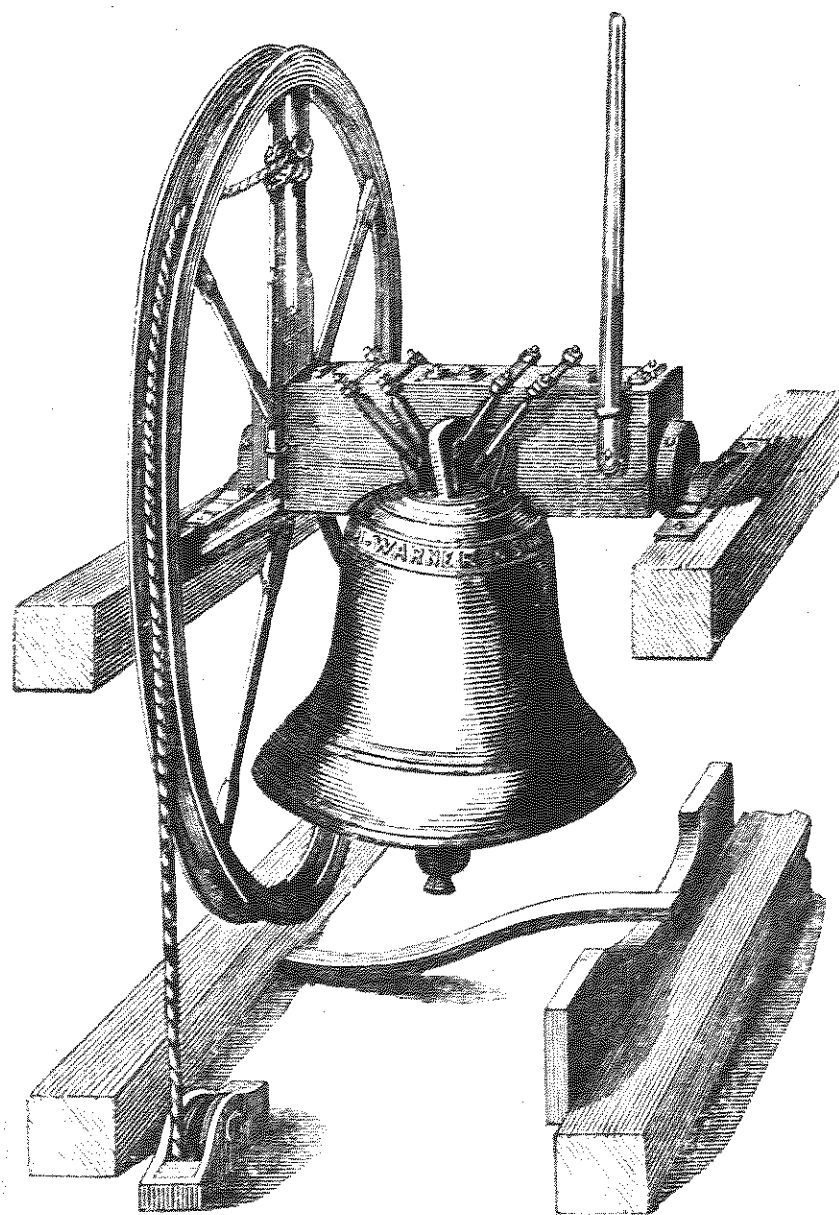


Fig. 2.2 A bell hung in its frame. Adapted by author from Henry Thomas Eilacombe, *Practical Remarks of Belfries and Ringers* (London, 1859), Plate 6.

had descended about a third of the way, the clapper would strike the sound bow on the high side and project a note downward and outward off the lip of the bell. That is why bells are said to "ring out" when rung properly. The force of the descent would carry the bell, with an assisting pull from the bell ringer, to its ascent on the opposite side, the clapper resting against the sound bow again, repeating the process. A heavy bell took time to be rung, for its own weight had to be used to get it swinging properly. Bells sounded best when set high in a belfry designed to reverberate and amplify the sound. This kind of bell ringing put a tremendous stress on the structure that housed it. The frame that held the bells would be set diagonally rather than squared with the belfry walls, displacing the stress onto the strongest parts of the structure.

In the previous chapter we questioned a seemingly natural division in soundscapes, between what we now understand as agentless natural sounds and those that are made with human intent. In doing so, we uncovered beliefs about "natural" sounds that differed from more modern beliefs in two important ways, namely that all sounds had agents and that sounds had a tangible power that we no longer grant them. It is now time to return to sounds made by human agents, still leaving aside voice. These instrumental soundways all have earthly agents at the source, so the first feature of seventeenth-century natural soundscapes becomes moot. The second still holds. Instrumental sounds were granted a tangible power.

What can we tell about early America from the sounds of things? In this chapter, early American soundways are situated within the study of material life, the culture of things.<sup>1</sup> Although the instruments are inanimate, human minds and hands always crafted and used them. Moving from "natural" to human sounds, this chapter and the next consider instrumental soundways. Socially important instruments such as bells and drums are the part of the instrumental soundscape considered here. These instrumental sounds acted as a powerfully cohesive force used to build social order and govern traffic with worlds both visible and invisible.

Early Americans of all ethnicities carefully considered, designed, and used sonic instruments to create, challenge, and negotiate social and cultural milieus. First, European Americans used instrumental sounds to extend the limits of community beyond the realm of face-to-face encounters, and to shape social structures within or against those limits. In cross-cultural negotiations, European Americans encountered Native American instrumental soundways in which sounds stood in an important relation to group identity. African Americans used drums and other instruments to reconnect, often in new ways, their disrupted social, religious, and (where possible) political lives.

Focusing on instrumental soundways situates this part of the inquiry in between the nonhuman soundscape and orality. Like the study of "natural" soundways, it keeps us disentangled for a moment more from the thicket of theoretical issues surrounding the consideration of oral culture, and the latter's tendency to reduce the soundscape to spoken language. Instrumental sounds involve human manipulations of a soundscape, allowing us to consider some issues of human intent excluded from the preceding exploration of nonhuman sounds. In short, we can find out what people did with sound.

Attention to instrumental soundways underscores how mistaken it is to mentally separate church from state, sound from vision, motherland from colony, and heaven from earth in the seventeenth-century world. Michel Foucault has argued that these (and other) divisions were a mark of the Enlightenment, which replaced an earlier discourse (prevalent during the sixteenth and early seventeenth centuries). The earlier discourse, according to Foucault, emphasized relations, connections, and similarities instead of the Enlightenment attention to elements, taxonomies, and differences. In such worlds, the sounds of things tell us much because of sound's quality of mixing together rather than separating out.<sup>2</sup>

Bells, drums, and other instruments were all used to mediate between smaller social structures and larger identities (based in religious beliefs, town, region, nation, and colonial relations). Reconstructing the instrumental aspects of early American soundscapes requires a sharp modification of the thesis that the "literate" world of vision and the "oral" world of soundways resided on opposite sides of the divide between the "primitive" and the "civilized." A standard claim about so-called oral cultures is that they were worlds governed by face-to-face encounters. This visible limit to governance—no one could be part of a society without being visible in it—is treated as a hard boundary. Pre-modern communities could not grow without introducing some form of visible language that could extend the realm of the face-to-face. This notion of extension is key to distinguishing "civil" from "savage"—or "civilized" from "primitive." Rendering language visible—first in writing, then in print—is posited as what allowed for the extension of encounters beyond face-to-face exchange. Writing and print supposedly removed the necessity for the physical *presence* of an author—or authority—as a criterion for representation to take place.<sup>3</sup> However, that presence had never necessarily been *visible*, in the sense denoted by "face-to-face." Teleologically peering into the past (and not listening), present-day scholars have often implied that the visible world exhausts the field of possibilities in structuring social life. Sound has only counted when subsumed under vision. The "oral" in "oral culture" is thus face-to-face; it is

generally that part of sounded language reducible to vision via writing and print. Subsumed in this way, it can seductively stand for the primitive past, a foil for civility, a non-extensive way of thinking.

The sonic means of extending civil society's reach that early Americans practiced, many of them not easily rendered visible, have been silenced in written and printed texts. While this has been the convention, there is no inherent reason that sonic evidence cannot be assessed as well as the visual. Soundways belong to a world set aside rather than lost. The material culture of soundways is much more permanent than scholars of orality would allow sound to be. Old rings of bells, for example, produce sound in the same ways now as then. Such things provide a record as useful as a text. Changes over time in their design, importance, and uses provide us with a means of better understanding early Americans' mental worlds.

### *Tintinnabulum Coelestis Benedictione Persunde*

Europeans brought to the Americas a rich repertoire of material responses to a nonhuman sound, thunder. The practice of ringing bells to counter thunder's damaging power is the simplest, yet in some ways most difficult, point of departure for listening in on material soundways. It is simple because the sounds of thunder are more or less the same now as they were then. It is difficult because the belief that invisible agents can be reached via bells has been marginalized, giving way to observability as the chief criterion of truth. The beliefs no longer seem believable. They seem like magic, not science.

Since the Middle Ages, and perhaps before, Europeans believed that the sounds of great bells warded off thunder and lightning. For a church's bells to be struck and melted in their steeple, as they were in the English hamlet of Blechingley in 1607, was considered an ominous event. Simon Harward wrote *Discourse of Lightnings* because a storm had struck a neighboring town's bell tower, "melting into infinite fragments a goodly ring of bells."<sup>4</sup> Harward's readers wanted to know why. Bells were supposed to dispel the thunder, not thunder the bells. The explanations of how they were supposed to do this fell out along much the same lines as the explanation of thunder, into mechanical and spiritual forces, neither of which was exclusive of the other.

Catholics—and sometimes Anglicans—baptized church bells. Priests and congregants had long believed that thunder and lightning would destroy church bells that had not been "christened and hallowed." The ceremony did more than protect the bells. Late medieval Christians thought

that a bell's baptism made it capable of dispelling thunderclouds. Once baptized, bells' inscriptions, saying things like "*fulgura flango*" (I subdue the thunderbolt), were thought to help as well. Ringing the bell carried the inscription to the heavens. Bell baptism had fallen into official disfavor during Elizabeth's reign, but was still widely believed to be effective when Harward wrote about Blechingley's ring of bells in 1607. Harward, whose beliefs leaned strongly toward the Reformation, pointed out that all but the newest of Blechingley's ancient church bells "had the blessing and baptizing at that time used and were halloed by that prayer in the Masse booke," which read:

*Almightie everlasting God, besprinkle this bell with thy heavenly blessing, that at the sound thereof, the fiery darts of the enemy, the stroke of thunderbolts, and hurts of tempests may farre be put to flight.*<sup>5</sup>

Upon first inquiry, particularly from the perspective of a modern literate person, Separatists and Dissenters appeared to consider bell baptisms as superstitious magic. It was under their pressure that the more conservative mainstream Anglican church officially stopped the practice. But the belief that all sounds had some willful being as their source, whether visible or invisible, was still quite alive at the outset of the seventeenth century. Bell baptisms even returned for a time during Archbishop Laud's conservative reform of the Church of England.<sup>6</sup>

Keith Thomas calls bell baptisms a form of "word magic," in which the bell was supposed to do its work by carrying the priest's invocation and the words inscribed in the bell itself to the heavens in its peals, there battling with the demons thought to be at the source of thunder, or else convincing God to take pity. But word magic only partially describes these English soundways. The Protestant rejection of word magic did not entail a disbelief in the efficacy of sound. English Protestants objected to the consecration of bells because word magic placed the priest or sorcerer above God, from whom they believed the thunder actually ensued. They even kept the idea of it as God's voice. Bell baptisms were frowned upon because they amounted to a contract that bound God. Attention to the full range of English soundways rather than just the orality allowed by the concept of word magic discloses a situation more complex than a simple decline in irrational superstitions.

In the early seventeenth century, the science that Thomas asserts killed word magic was more concerned with explaining the efficacy of willful sounds than with dismissing them as irrational. Scientific folk in early-seventeenth-century England believed "that by the stirring of the air" with the



sounds of bells, "the cloudes may soon be dispersed or driven away." Here, sounds were conceived as tangible particles, part of a pre-Cartesian mechanical universe, spreading out like the ripples in a pond or a shotgun blast until they met and countered the sounds of the thunderstorm. Like countered like, as the English hoped that the powerful sounds of bells would mix with and attenuate the powerfully harmful sound of the thunder. "To shoot up ordinance into the aire," claimed Harward, was as effective as ringing a bell. The actual bullets and cannonballs had no effect, however. Like "our sight," such projectiles traveled in a "right line," displacing little of the vaporous matter constituting storm clouds. It was the sound of the shot that did the work. This, thought Harward, was also the reason that lightning was seen before thunder was heard. The former traveled directly, while the latter spread out, covering more territory, but slower.<sup>7</sup>

Reformed bells could neither bend God's will nor talk, but their sounds were still thought to be powerful in a tangible way in the seventeenth century. This scientific belief gave way only slowly, and for reformers and traditionalists alike, thunder was the voice of God, and the bells were the tiny sonic plea of the faithful for mercy from the power of that sound.

#### The Politics of Joy

Bells and other devices—some seldom thought of as sonic instruments—did more than ring out to the heavens; they rang in the state. According to David Cressy, the pan-European "vocabulary of celebration" included "ringing bells, shooting guns, sounding instruments, or raising cheers." England, and later British North America, employed this vocabulary in a distinctive way that harnessed these powerful sounds "to the needs of the state," even ringing it into being. "Joyful noises were made for the health of the King or Queen, for deliverance from the papacy, for victory and even defeat in battles." Cressy notes that "public celebration entwined the drives of *communitas* with the needs of power."<sup>8</sup> Societally sanctioned gunshot, cannon fire, drumming, song, bells, and other instruments all marked the emergence and development of national culture in its local instantiations.

Bell ringing and public noisemaking in general connected folk to community and community to the imagined nation and the invisible realm of the spirit. It is ill-advised to take apart too quickly the realms of church and state, of public and private, of visible and invisible, or of science, religion, and superstition, in a place where the ears of heaven could be bent if only the right channels were used, where the voice of God could be heard in a storm, and where ringing bells realized the will of the queen.

Instrumental sounds served local communities as much as they did an incipient British nationalism. People rang in their own communities in calling curfews—a practice dating back to William the Conqueror. They rang out on Rogation Days, when a priest would walk the perimeter of his parish ringing bells. With the very social order at stake, governing access to a town's bells was critically important. Bells protected the community and brought it together in tolling alarms for fires and calls to arms. In 1381, English bells were commandeered to start a peasant revolt. Rumors of a repeat abounded in Essex in 1566. In 1569, the North of England used bells to call its inhabitants to rebel.<sup>9</sup>

By the end of the sixteenth century, national unity began to be expressed by ringing bells on "crownation day" throughout all of England simultaneously. Across the country, the sounds of local bells marked the full extension of the nation. When they sounded a national identity into being by giving it a public hearing, their reasons were local and their own as well as national. They rang in the nation much like they rang in the years and the seasons.<sup>10</sup> It was a way of belonging to something larger than the face-to-face community, whether that something was located in space, as was the nation, or in time, as was the calendar and the seasons.

What happened to these instrumental soundways when they were carried over to places with no English institutional structures in place? Among the first things they did, colonial settlers put their soundscapes in order to create new societies. Besides recreating the familiar, the settlers used instrumental sounds to cross cultural boundaries and communicate in new ways.

#### Patience and Delivery

The 1609 hurricane that wrecked the *Sea Venture* deposited its passengers into a political theorist's dream laboratory, the uninhabited islands of Bermuda. The would-be Virginians had to build what civil and social order they could from scratch. Their ship was destroyed, leaving no hope for an immediate escape. Survival was not the issue. There were plenty of life-sustaining plants, a sea full of cattle-sized tortoises, fish, and other edibles, European pigs left on the island to breed decades before, and myriad birds.<sup>11</sup> But how would they create and maintain a social order? Admiral Somers took charge of trying to fashion new vessels. The crew salvaged parts from the wrecked *Sea Venture*. They scrapped all the wood, battered and cracked as it was. There was plenty of that available on the islands. Every scrap of metal, however, was carefully pulled out in the hope that they could fit new vessels with the salvage.

They put one metal instrument right to use rather than saving it for the

new vessels. Gates, the presumed governor, used the *Sea Venture's* bell to create and maintain a social order recognizable to the castaways. Strachey reported that "every morning and evening at the ringing of a bell" the whole company was gathered together, public prayers were said, and the roll called. Anyone not brought in by the bell was "duly punished." On Sundays, they were called by the bell twice more than usual for sermons on the importance of "thankfulness and unity, etc."<sup>12</sup> The bell served civil and religious purposes together, showing how closely the earthly and invisible worlds were intertwined in the early seventeenth century. It notified the castaways that it was time for both roll call and worship. It apprised the invisible world—and not just God, for this was reputedly the Devil's Island—that the congregation was assembling. Here was the adhesive Gates needed, and it held together not just the visible, but the invisible bonds that made for a working social order in the seventeenth century. The sound of the bell was powerful because it allowed Europeans to traffic in the invisible world as well as the visible. Rather than understanding the colonists as constructing some sort of face-to-face social order, we might better think of them as fluent in a mode of invisible sonic representation that was to be largely set aside for the visible world over the next two centuries. Through this aural mode, colonists took a step toward disembodied communication. This process is usually thought of as beginning with the telegraph and with radio broadcasting.<sup>13</sup> It would be mistaken, however, to think of these older, extensive instrumental sounds only in terms of future developments. Societally sanctioned instrumental sounds on Bermuda and elsewhere in the colonial Atlantic world made real bodies into incorporeal—but very real—entities. Incorporation is literally the making of such an imagined body.

In a land with no churches or courts, the sound of the bell served as the base on which to build social order. People had to wander off, out of sight of one another, in order to obtain food and other materials needed for rebuilding the ship. The bell called all within earshot together, literally ringing them in. Those beyond the bell's range, either beyond earshot or beyond obeying its toll, were in the wild. The would-be leaders feared that prolonged contact with wildness would tear the community apart, draining resources and threatening its survival.

Maintaining unity was a problem. From the start, some castaways had questioned Admiral Somers's authority on land. And while Thomas Gates had papers to govern Virginia, he had none for the Bermudas. Loss of manpower to factions and bickering would have set a dangerous example in a situation where the escape of any from the island depended on everyone working together. But some of the *Sea Venture's* Company thought the

island held out better prospects than Virginia, and tried to secede. A minister's clerk named Stephen Hopkins made "substantial arguments both civil and divine (scripture falsely quoted)" that Gates's authority as governor ceased with the shipwreck, and that "they were all then freed from the government of any man." For Gates to govern at all, such wildness had to be quashed. Gates used the *Sea Venture's* bell to hold the provisional Bermudian society together. He had it rung to assemble the whole company, bringing Hopkins before them all in manacles. The chains bound the wildness and anarchy promised by Hopkins's words, but the sound of the bell was what bound the community, Hopkins, and Gates together in a public enactment of civil government. Hopkins was charged with mutiny and rebellion and sentenced to death, though he "made such a moan" that he was reprieved.<sup>14</sup>

During the nine months that they were stranded on the Bermudas, the sound of the wrecked ship's bell brought a sense of order and familiarity to what would otherwise have been a stateless chaos. Although Somers lost his life in the process, the castaways were able to build two new ships—the *Patience* and the *Delivery*—from local cedars and the salvaged rigging from the shipwreck. Gates maintained his government over the whole company for the duration of their stay on the island. On May 10, 1610, the survivors boarded the two new ships, no doubt ringing the bell once more to do so, and set sail for Virginia, weathering another tremendous thunderstorm off the coast of North America.<sup>15</sup>

### Sounding the Chesapeake

After miraculously surviving a destructive natural storm, Gates landed in a civil tempest at the struggling colony of Jamestown. "Much grieved" by the "misery and misgovernment" of the colony, he set about restoring order as soon as his feet hit land. "First visiting the church," according to Strachey, Gates "caused the bell to be rung, at which all such as were able to come forth of their houses repaired to church." Those thus rung in heard a prayer after which Gates's commission was published by reading it aloud, installing him as governor by doing so. Gates's first three actions used sound—bells, preaching, and proclamation—to ritually reconstruct and redefine Jamestown, setting the people in their proper relation to God, to England, to Virginia's wilderness, and to each other. While the content of that restructuring may have been spelled out in the documents he carried, the act of setting it into motion was done with the chapel bell.

Soon after his being sworn in as governor, Gates installed a second bell

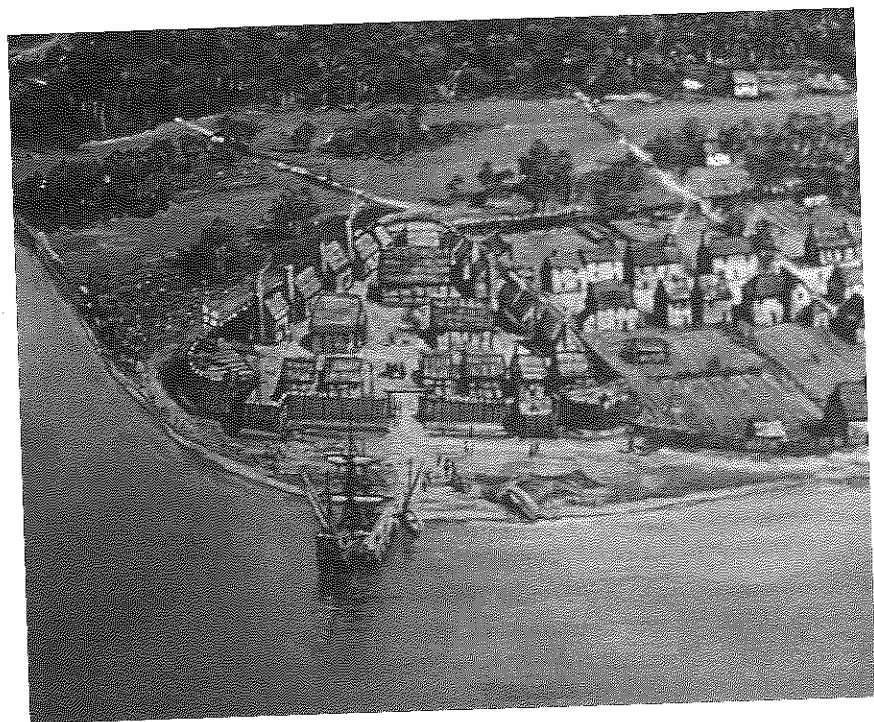


Fig. 2.3 Conjectural view of Jamestown, ca. 1614. Sometimes what is left out of a nontextual source can tell us as much as what has been included. The entire town was set up to be within earshot of the center, either to the sound of guns fired in warning from the periphery or from bells rung or guns shot from the center. The bells—there were two by 1614—were located at the traditional English location, the west end of the chapel (the left side in the drawing). The chapel is the largest building in the upper center of the enclosed fort compound. Perhaps the artist did not know the bells were there. Perhaps they were left out as unnecessary clutter and detail. They were important to the colony, though. Undated, unsigned drawing by Sidney E. King for the National Park Service, Colonial National Historic Park, Yorktown, Virginia.

at the west end of the chapel, perhaps to underscore the new order. The two bells mustered the troops as well as the faithful, and were used when colonists were punished for civil infractions as well as to serve notice to the heavens. Although no mention is made of using them to chase off thunderstorms or the plague, such practices were probably not too far removed from Gates's dispelling the bad air that hung over Jamestown with his bells.

Gates's peal sounded the limits of the colony's civil society. Those limits were influenced to a large degree by what was within earshot, a word that

first appears in print in 1607.<sup>16</sup> Earshot was an effective measure of the limits of a community for two reasons. First, it extended the community beyond the face-to-face, as discussed above. Second, sounds intrude on the ears involuntarily. The sound of the bell was itself a force, a shot, not a declaration or a command. It compulsorily drew in all "who were able."

While bells held a particularly rich network of cultural meaning for the Jamestown voyagers, they were by no means the only instruments of sound that played an important role in ordering the society. High-status deaths, whether of people or the colony itself, were marked by volleys of gunshot and ordnance as well as bells.

Rituals of capture and possession had important sonic dimensions. When the leaders of the first Jamestown expedition agreed to a site on which to plant the colony in 1607, they let loose a ritualized fanfare of trumpets as part of the process of legitimating their claim upon the land for colony and king. Along with drums their sound was used to hail enemy ships in battle as well as to signal their own ships in peace. When Jamestown was briefly abandoned in 1610, Gates "commanded every man at the beating of the drum to repair aboard" the departing ships. They left "about noon, giving a farewell with a peal of small shot" to an invisible audience. A few hours later they serendipitously ran into a new supply convoy carrying Lord De La Warre to Jamestown, so they turned around and went back. When De La Warre arrived, the settlers were assembled by the sound of the bell and he became governor with the public reading aloud of his commission.

Instrumental sounds were also valued at sea. Trumpeters and drummers were a regular component of ships' crews. Trumpeters were usually thought important enough to garner a quadruple share of pay, the same as a boatswain, or a surgeon, and almost double that of common sailors. To capture an enemy ship, one had to "sound drums and trumpets and St. George for England" (and of course, win the battle). Once possessed, "out goes the boat, they are launched from the ship side, entertaine them with a generall cry, God save the Captaine and all the company with the trumpets sounding." More mundane tasks also required trumpet blasts to be carried out properly. Smith advised would-be shipmasters:

The Trumpeter is always to attend the captains command, and to sound either at his going ashore or comming aboard, at the entertainment of strangers, also when you hale a ship, when you charge board or enter; and the poepe is his place to stand or sit upon, if there be a noise they are to attend to him, if there be not every one he doth teach to beare a part the Captaine is to encourage him, by increasing his shares, or pay and give the master Trumpeter a reward.<sup>17</sup>

Table 2.1. John Smith's Prescribed Rates of Pay for Shipboard Duties

	Accidence	Sea Grammar
	9 shares neg. w/ Capt.	9-10 shares 9 or neg. w/ Capt.
Captain		
Lieutenant		
Master	7	7-8
Mates	5	5-7
Chirurgion	3	3-6
Gunners	5	5-6
Botswain	4	5-6
Marshall	4	5-6 <sup>1</sup>
Carpenter	5	5-6
Trumpeter	4	5-6
Quartermasters	4	4-5
Cooper	—	4-5
Chir.'s mate	—	4-5
Gunner's Mate	—	4-5
Carp.'s Mate	—	4-5
Corporal	3	3-4
Quarter Gunners	—	3-4
Trump.'s Mate	—	3 1/2-4 <sup>2</sup>
Steward	3	3-4
Cook	3	3-4
Coxswaine	3	3-4
Swabber	—	3-4
Sailors <sup>3</sup>	1 1/2-2	1/2-3
Boys	1	1-1 1/2

Source: Smith, *Sea Grammar*, 2: 110-11, and Smith, *Accidence*, 2: 26-27.

<sup>1</sup> "On English ships they seldom use any Marshall, whose shares amongst the French are equall with the Botswaines," wrote Smith. The marshall was usually found on French ships and was responsible for carrying out punishments.

<sup>2</sup> "4" mistakenly printed as "3."

<sup>3</sup> Called "Younkers" in *Sea Grammar*.

Ship's captains were not above recreational uses of trumpeters' skills either. Father Andrew White recounted an exciting race in the 1630s between the ship he was on and another named the *Dragon* for about an hour on the high seas with a good wind. As the ships raced neck and neck, the passengers and crew were treated to "the pleasant sound of trumpets."<sup>18</sup>

Sounds were effective. The first generation of English Virginians were pragmatists about the sounds they chose to manipulate. When they could, they used all the sounds above for doing things. Sounds could be powerful, and powerful sounds were the ones that interested them. Loud sounds impressed them most. This makes sense when older theories of acoustics are considered: the louder the sound, the more force behind it, and the more that could be done with it. Bells, gunshot, trumpets, and drums: all

were ways of making sounds louder, thus amplifying or extending the range of earshot. One consequence of this soundway was the ability to push the limits of community and civil order beyond face-to-face contact. Print also extended these capabilities using the visible world, but in different ways, with different consequences.

Sounds with no visible sources, such as thunder, were considered portentous for precisely that reason. So too with human sounds. Obviously, the immediate source behind the ringing of bells was human—except in the case of earthquakes, where the ringing of bells was portentous indeed. There could be invisible human sources as well. Thus Gates could cause the bell to ring without ever touching it and its peal could assemble the community because it carried not only Gates' will, but the powers of state that descended through the Virginia company's royal charter, which in turn came from the king, whose power came from divine right. All sounds had agents, and the more human the sound, the more agents it was likely to have accrued in being issued, particularly when that sound was an integral part of defining the limits of a civil society where church and state functioned together.<sup>19</sup>

### Conversing with Powhatan

So far we have been considering the colonists as if they were conversing only with themselves and the heavens. Jamestown's earliest settlers were very attentive to First Nations soundways, and vice versa. At first, both Native Americans and the new settlers had the obstacle of language separating them, so the instrumental sounds they made often stood in for language, making them doubly significant. While for Europeans loud intercultural sounds were part of "rituals of possession," for Native Americans they were important markers of group identity. The sounds of gunshot were quickly associated with the comings and goings of the invaders, and became expected.

European Americans understood that Indians were impressed by loud sounds but often missed the association with group identity. Father White, a missionary to Maryland, reported in 1634 that the Chesapeake Americans "trembled to hear our ordinance, thinking them fearefuller than any thunder they had ever heard." John Smith maintained that Indians throughout the Chesapeake revered loud sounds such as thunder and the reports of the colonists' guns. The Powhatans had a concept similar to *manitou*, which Smith made the most of. At the Tockwough River, he gained Indian allies by "firing 2 or 3 rackets [rockets]" over the river. On account of



making such a racket, Smith claimed, they “supposed nothing impossible wee attempted.” When the colonists crowned Powhatan as a vassal of the king, the colony’s boats fired off such a huge “volley of shot that the king start[ed] up in horrible feare” for a moment before regaining his composure.<sup>20</sup>

On more than one occasion, the sound of guns was enough to repel an attack. While exploring the upper Chesapeake, Smith and his small company were ambushed by over a hundred Potomac warriors. The colonists responded with gunfire, but not to hit anyone. Smith reported that “the grazing of the bullets upon the river, with the ecco of the woods[,] so amazed them” that they threw down their bows and arrows and, exchanging hostages as a gesture of good faith and for collateral, they all went together to the Potomacs’ town, where the colonists were treated well. Other times, Smith announced his entrance to an Indian town by firing several shots in the air, claiming it ensured his safety.<sup>21</sup> Perhaps as much as scaring the Indians, he was reassuring himself, clearing the air.

When Smith went to barter with one group of Indians for food, they asked as part of the bargain to hear the party’s guns. Smith and company fired them off in a riverbed, “which in regard of the eccho seemed a peale of ordnance.” Smith knew it was the sound that impressed them as well as the bullets, so he used the acoustics of the riverbed to maximize the effect.<sup>22</sup>

Small sounds had their place, too. Many Chesapeake area natives trimmed their clothes with shells and snake rattles to “make a Certayne murmuring or whistling noyse by gathereing the wind, in which they seeme to take great jollety, and [they] hold that a kind of bravery.” They used the word bravery in its now obsolete sense of ostentatious finery or adornment, a thing of beauty or interest, something to exhibit, or that which is worthy of boasting. In the controversial passage of Smith’s *Generall Historie* in which the young daughter of Powhatan, Pocahontas, prevented Smith’s execution, Powhatan was supposedly “contented” that Smith should be spared to make hatchets for him and make “bells, beads, and copper” for Pocahontas. Smith mentions giving a few bells as payment to Indians whose labors would have cost him a horse in England.<sup>23</sup> Another time, the food obtained in exchange for bells may have kept the colony alive. The Powhatans’ desire for new and unfamiliar sounds drove these exchanges.

Chesapeake Indians listened carefully, constructing specialized physical spaces for the spoken word and for the sounds of the world around them. They built scaffolds specifically for holding conversations. Unlike the public acoustical spaces that Europeans made for church oratory, Chesapeakes made their speaking platforms to underscore the importance of one-to-

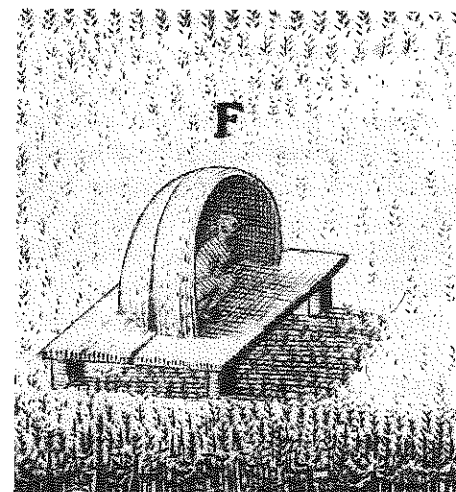


Fig. 2.4 A listening post on the edge of a ripe cornfield. This print was made by Theodore DeBry from watercolor paintings by John White. Courtesy of the Library of Congress.

one conversations that Anglo-Americans would have held more privately. This hints at public and private being constructed along different lines in native and white communities. Theodore DeBry’s engraving (based on eyewitness John White’s watercolor) of a Secotan village shows listening posts in the American fields that reflected and amplified sounds.<sup>24</sup> These could be used to scare off birds, but their parabolic shape also collected sounds, making this an audible sentry post—especially useful in the presence of English men willing to pilfer corn to stay alive.

The significance of instrumental sounds to First Nations people was not lost on the colonists. “Wee might to this daye,” argued Smith, “have wrought more amongst them by the Beating of a Drumme, that [than?] now wee can by the fieringe of a Canon.” Powhatan’s people were edgy about the coming of the English. Strachey wrote that “straunge whispers (indeed) and secrett[s] at this hower run among these people and possess them with amazement. . . . Every newes and blast of rumour strykes them. . . . The noyses of our drumms of our shrill Trumpets and great Ordinance terrefyes them so as they startle at the Report of them, how soever far from the reach of daunger.” Having gone out on another food-bartering expedition, Smith, Captain Newport, and Master Scrivener left their boat and marched toward the sachem Powhatan with one of them blasting a trumpet for effect. Smith impressed Powhatan with descriptions of European wars featuring trumpets and drums. At another juncture when things were tense between the two leaders, Smith told Powhatan that the Indians will know when the English are going to fight because they will sound their “drums and trumpets.”<sup>25</sup>

Bells, guns, and trumpets also alerted the colonists of impending danger. Once, while men were planting corn and cutting down trees outside the safety of the fort, they heard an alarm—either gunshot or bells—from the village. Thinking this warning from the center was an Indian attack, they were relieved to discover it was a long-overdue supply ship. Another time, Opechancanough captured Smith while he was split off from the other two members of his party. The two were supposed to fire their guns at the first sign of Indians to warn him. Hearing “a loud cry and a halloing of Indians, but no warning peece,” Smith knew he was in trouble and that his companions were captured or dead. When Opechancanough’s men surrounded Smith, he fired his gun a few times, the sound of which kept them back, but ultimately he slipped in some mud and had to surrender his guns.<sup>26</sup>

At the behest of the Indians as much as the colonists, political comings, goings, agreements, and wars were all publicly marked with great sounds. Upon departing from a particularly friendly diplomatic foray to the Indians on the eastern shore of the Chesapeake, the colonists—at the parting request of their hosts—fired off a loud volley of gunfire to which the Indians responded with a loud shout.<sup>27</sup> This exchange of sounds was a demonstration of political power and identity, mutually understood across barriers of language and culture. The terms of the exchange were set as much by the Indians as the colonists.

The colonists’ lives depended on properly understanding their new soundscapes. Strachey noted that alarms traveled up the James River faster than the colonists ever could. Their comings and goings were always known in advance by the Indians. Communication networks along the shoreline were well established and quick. Smith, not content to observe, tested the speed of the network by spreading false rumors to Indians near Jamestown and then traveling upriver, where he would hear the same rumor repeated.<sup>28</sup> The idea of a communication network would have been odd to the colonists in this time before the advent of media that could travel faster than human messengers. The Indians’ quick communication would have seemed impossible or even diabolical.

In the second decade of the seventeenth century, Powhatan and then Opechancanough lulled the colonists into a belief that all was well. They began to let down their guard, gradually drifting out of earshot from each other to start small plantations, further encroaching on Indian lands. On March 22, 1622, Opechancanough put the full force of the First Nations communication network into action. The Indians attacked the widely scattered settlements “at one instant,” hitting plantations “one hundred and fortie miles up on [the James] River on both sides.” Smith found it partic-

ularly remarkable that even though the Indian settlements were as small and scattered as the English ones, the Indians were able to act in concert. The Indians killed some 347 colonists that day, nearly a third of the English population. Although the argument is implicit rather than explicit, the Indians had communication networks that the colonists admired but did not understand. Smith was unable to explain how the widely scattered Indians had been in such good communication when they were not physically together. The colonists responded by once again ringing in their settlements. Twenty-five of the Virginia settlements were ordered abandoned, and the settlers moved into the remaining six. Lacking the Native Americans’ skills at communicating effectively over a scattered area, the colonists returned to within earshot of their fellows for safety. The era of intercultural communication was over, much too late by Smith’s estimate. The English cut off general communications with the Indians and sought to remove them from the Chesapeake altogether by any means necessary.<sup>29</sup>

Rung in by bells, never safely living beyond earshot—no matter how well extended by guns, trumpets, shouts, and bells—instrumental soundways and their consequent soundscapes bound the early Chesapeake colonists together, but not necessarily so close as a face-to-face community. The colonists pushed the Indians back in the 1620s and 1630s and began once again to spread out of earshot. They would suffer another attack in 1645, but by that time there were too many English invaders to wipe them out completely. The colonists were there to stay, and a new tobacco-based plantation economy began to take hold. Later seventeenth-century Chesapeake churches seldom had bells, because ringing them was a futile exercise in a plantation economy where everyone lived far apart from neighbors and town.<sup>30</sup> The plantation or farm became the locus of community rather than the town or village. It also became the new place for bells, used to order a different sonic regime than that negotiated between the Indians and the first generation of settlers. The first generation of colonists did not simply choose to believe in powerful sounds; they had no other set of beliefs by which to live.

### Bells, Drums, and Shells in New England

As in early Jamestown, New England towns used instrumental sounds to order their worlds. Bells were important from the very beginning of Puritan New England, and great effort went into obtaining the best possible instruments. They were usually crafted in England, although some were booty from captured buccaneers and others were imported from the