1 Thinking with Space and Sense

1.1 When and Why?

How did early moderns experience sense and space? How did the expanding cultural, political, and social horizons of the period emerge out of those experiences and further shape them? The period 1400–1750 was when ideas about the world and experiences of it were changing rapidly. Intellectual and religious movements challenged traditional ideas about the universe, humanity, and God. Artists and writers experimented with more naturalistic ways of conveying their own experiences and visions. Global networks were realigning as merchants and explorers began moving in larger circuits on land and water, sometimes spending months or even years on voyages whose direction and outcome were often uncertain. Europeans in particular were searching out engagements with cultures distant from them in time and space – ancient Greece and Rome were prominent on their aspirational horizons while Asia, Africa, and the Americas came to define their physical horizons. Europeans initially came with curiosity and sometimes a sense of awe, particularly when encountering the courts in Istanbul, Beijing, Delhi, and Tenochtitlan. Awe would turn to opportunity, and they would soon be seeking ways to possess, control, and profit from a world that they increasingly came to think of as *theirs*.

This early modern shift from awe to opportunity generated modern Europe's most profound global impacts: nation-states, capitalism, colonialism, racism, and environmental change. Yet it would take the length of those centuries for Europeans to realize their dominance. Many of those whom Europeans encountered were more bemused than threatened by their ambitions. The Ottomans, Mughals, and Ming Chinese were all wealthier, militarily stronger, and culturally more advanced than Europeans and would remain so till the end of the period. In Asia, Europeans were kept on a short leash by the Chinese and Japanese, restricted to small numbers in controlled settlements and subject to expulsion. Beyond the coastal forts from which they traded in enslaved peoples, Europeans made little impact on Africa. In much of the Americas, they depended on Indigenous nations and survived largely through alliances with them. It was in the Americas that they would have the largest impact, due as much to diseases like smallpox that they brought with them as to their efforts to dominate Indigenous groups. None of this is meant to deny that Europeans of the early modern period could be ruthless, exclusionary, and convinced of their own superiority. We just shouldn't be too quick to take their word for it. The early modern period is when these ambitions moved in fits and starts from rhetoric to reality and when Europeans' movement from dependence to domination generated ever more profound effects on people and the environment across the globe.

This is not a study of the economics and politics of early modern globalization. I'm aiming instead to explore how that process shaped the ways that people in different parts of the world inhabited spaces, and how their senses may have picked up these and other changes. Can we recreate how early moderns saw? What they smelled and, more to the point, what smells meant to them? Were they anxious about touch? Did they measure with sound or with smell? Can we understand how they registered or responded to any of these emotionally? Some historians think that early modern senses and emotion are largely inaccessible to us (Boddick and Smith 2020). Their skepticism is understandable. Senses are historical, and we shouldn't underestimate how distant and foreign they are (Smith 2021). We rely heavily on what people in the past wrote, but we'd be fooling ourselves to imagine that a handful of texts by the few people who could and did write could allow us to recreate how people in the past – any past – *really* saw, experienced, tasted, or felt. But skepticism needn't stop there. If we read their philosophical or religious texts, we're no more certain that we *really* understand the thoughts and beliefs that early moderns were writing about. The same is true of diplomatic correspondence, diaries, or parliamentary debates used to understand political history. If our goal is to understand the past as it actually happened, we'll inevitably be frustrated by the limits of our sources and the disconnections in time. And that's *before* considering the paradoxes, contradictions, uncertainties, and deceptions of those we're studying. History is a conversation between past and present. Whether we're creating a Renaissance video game, writing a historical novel, or researching a scholarly monograph, the history we produce is always in part about ourselves. It requires us to be conscious and self-aware, aiming as much as possible to keep from turning our historical subjects into personal objects. We can't presume to know completely what Shakespeare felt, any more than we really know what Machiavelli thought. Yet to imagine that they are completely foreign to us, or that feelings are inherently less accessible than thoughts, is to adopt an abstract standard of historical knowledge that's ultimately self-defeating.

One way to work all this out is to approach senses in relation to each other and to other experiences. A wealth of recent work allows us to guess how sense and space intersected in ways we're no longer familiar with. Early moderns were alert to the biological impact of noises. They thought that some forms of sight involved eyes and objects touching each other. They measured time by not only hands on clocks but also tastes and sounds. Smells that were strange or familiar were recalibrating their sense of order. Sometimes it's more important to read their silences than their words. I'll aim to foreground experiences and will only occasionally detour to give a quick idea of some theories that early moderns relied on to explain how senses *worked*. I hope this takes us some way to

moving beyond the pages of manuscripts and books and into what's been described as the *sensorium*, the often unwritten and unspoken context for the documents we're more accustomed to dealing with.

1.2 Sites

I'll take an approach that is both globally expansive and locally rooted by returning periodically to four cities for some key examples: Florence, Amsterdam, Boston, and Manila. Without attempting a comprehensive treatment, I'll use these places to convey something of the *range* of distinct experiences of space and sense, showing as much as possible how these varied by age, gender, race, and class.

Why these four cities? They allow us to take a sounding of early modern experiences of sense and space that is comparative and interdisciplinary. We have an older south European city, Florence, with a stable population that reconstructs traditional and classical forms to meet new political realities. A north European commercial city, Amsterdam, was rapidly erecting new neighborhoods and buildings that reflected global capitalist and colonialist links while accommodating a large influx of migrants from distinct religious and racial communities across Europe. Both cities demonstrate the emerging phenomenon of the capital city – Florence the literal capital of a newly expanded territorial state and Amsterdam the virtual capital of a fast-expanding commercial empire. These European cities will be compared to two port cities founded as European colonial entrepôts. Manila was built by the Spanish on the site of an ancient conquered settlement, Maynilad, that had long been a hub for regional trade. Boston was founded by English settlers where Indigenous peoples had gathered over centuries for meetings and trade. Both were the colonial outposts of quite distinct national political regimes and religious cultures. Yet both also had a sometimes distant and conflicted relationship with those regimes and cultures. Both gained their structure and character from immediate and intense interactions with local Indigenous peoples and through land and seaborne trading networks that extended out into their broader regions.

Each of these four cities possesses rich historiographical mines of material on both spatial and sensory experience. Florence and Amsterdam pivot between classical and modern traditions – both used the classical inheritance that the Renaissance period valued in order to legitimate social, political, and cultural innovations. Manila and Boston emerged in quite different colonial contexts but demonstrated strong parallels in Europeans' relations to both Indigenous and enslaved peoples and the natural environment. Looking at all four cities also allows us to engage with different sides of the early modern capitalist and colonial experience. They relate to distinct parts of the European cultural

tradition from north to south, from republican to monarchical, from Catholic to Protestant. Other cities and towns will certainly come into the narrative, as will rural areas both in themselves and in relation to urban life. Yet I'll return to these four regularly in order to plot parallels and demonstrate continuities as we move through the experiences of space and sense. In this way we'll be able to explore how sensory and spatial experiences emerged through cultures and exchanges that were themselves shaped by temporal rhythms. We'll see how sight, sound, smell, taste, and touch may help us understand some impacts of economic and political forces.

1.3 Approaches and Intersections

Different authors have written about space and the sensorium, and the most revealing approaches look at space and the senses in relation to each other rather than separately. Two French authors have been particularly critical for helping us think of how space is something that we don't simply receive, encounter, or occupy. It is produced by our actions and use of it. Henri Lefevre's *The Production of Space* and Michel de Certeau's *The Practice of Everyday Life* launched the field by probing how space and sense intersect and how our experience of them lies in that very interaction, and not simply in perception of something objectively "there." Lefevre described this as *lived space* and de Certeau termed it *space as a practiced place* (de Certeau 1984; Lefevre 1991). How did early moderns' social and political relations create space, and how did that creation and experience evolve from childhood into old age? How did gender and race raise new social and cultural barriers to channel experience at different ages? Beyond this lens of intersectionality, historians have more recently grappled with how to capture exchange and conflict within spaces. Mobility inevitably becomes critical to how space is practiced. De Certeau aimed to break the hold of two-dimensional maps and recover the city of well-traveled streets and empty squares, periodic markets, and fixed taverns, frequently visited churches and shrines, and frequently avoided courts and prisons. Locals and visitors would create a city by foot that was more personal and sensory than the map they might hold in their hand. These spaces were relational and defined even in official documents by who lived here and who worked there; this was what Nicholas Eckstein described as the "prepositional city" where we locate a house by its neighbors on either side and the nearby corner rather than by a number (Eckstein 2018). But more than a building, we locate the house as a group of residents known by their relations with neighbors and the moving life of the street. Mobility can bring conflict, particularly in colonial settings where colonizers and colonized, enslaved and indentured, settled and

new arrivals all face off and compete. Mary Louise Pratt described these asymmetrical places where cultures clash as "contact zones" marked by conflict (Pratt 2008), while Cécile Fromont has expanded the discussion beyond conflicts by addressing the movement of many people into and through "spaces of correlation" like Nkumba a Ngudi (also known as São Salvadore) in the Kingdom of Kongo. These spaces are characterized by various forms of reciprocity, engagement, and sharing, and are best expressed with the French word *éspaces*. They are where individuals and groups take up "ideas and forms belonging to radically different realms, confront them, and eventually turn them into interrelated parts of a new system of thought and expression" (Fromont 2014, 15).

These distinct approaches share a common desire to bring mobility, migration, and lived experience into our understanding of early modern spaces. Returning to de Certeau, sight, sound, smell, taste, and touch are vital to the practice that turns place into space. The senses invest physical places with emotion and become the referents that define our memories of spaces and turn them into what Pierre Nora described as resonant "sites of memory" (*lieux de memoire* – Nora 1989, 1998). Some authors have used artistic, cultural, and sensory expression to push thinking about space beyond physical extension alone. Musicologist R. Murray Schafer developed the idea of the "soundscape" as a means of capturing the merging of sound and memory, as both an environment in particular places and an individual experience (Schafer 1977). J. Douglas Porteus adapted this in his idea of the "smellscape," where again the olfactory environment incorporated not only the smells registered immediately in a particular place but also the memories and past experiences associated with it (Porteous 1985; Xiao, Tate, and Kang 2018; Lindborg and Liew 2021). With this the game was on, and more recent adaptations have been a bit opportunistic: the idea of "tastescapes" hasn't been widely developed outside of culinary contexts and tour guides, while "touchscape" has been used to describe both touch-sensitive software and the methods of maintaining inner balance and mindfulness (Kabat-Zinn 2013). In some cases, the connections are more to cultural fields than to physical spaces. After "soundscapes" and "smellscapes" worked their way into the language, anthropologist Arjun Appadurai began writing of "ethnoscapes," "mediascapes," "technoscapes," "financescapes," and "ideoscapes" as the cultural dimensions of modern globalization. Medievalist Guy Geltner anatomized "healthscaping." All reflected both political and social positions and the "constructed landscape of collective aspirations" (Appadurai 1996, 31–3; Klaver 2014; Geltner 2019).

Appadurai was bringing together both the social reality that situates people and the imaginative process that make their position a reflection of aspirations

about space rather than just a sensing of stimuli. We're back to the skepticism noted earlier – one reason we can't fully understand the senses of the past is because we have difficulty capturing what early moderns were imagining and hoping for when they saw, heard, smelled, tasted, or touched (Smith 2007). And yet. Schafer began the process by building on the idea of landscape painting, and returning there may help us move forward. In the booming art market of seventeenth-century Netherlands, landscapes made up perhaps half of all paintings sold. They were the most popular genre by far in a culture where artisans, recently arrived migrants, refugees, and even relatively poor people were all buying canvases (Chong 1987). The Netherlands was among the most intensely urbanized regions of Europe, and Irene Klaver highlights why city dwellers hung these idealized rural spaces on their wall. "More than depicting the 'real' situation of the region or landscape around them, the early painters reflected what people were expecting or wanting to see: the painted landscape documents form an indication of early Dutch social imaginary, its identity in its cultural perception and reception of the changes in their landscape" (Klaver 2014, 4). Simon Schama suggests that imagined landscapes were "a way of looking; of rediscovering what we already have, but which somehow eludes our recognition and our appreciation. Instead of being yet another explanation of what we have lost, it is an exploration of what we may yet find" (Schama 1995, 14). The shoemaker who put up a landscape wasn't just seeking the outdoors; the landscape he hung was often of imagined dunes and wild spaces that he longed to inhabit, and not familiar farm fields crisscrossed with grids of canals and roads.

R. Murray Schafer had in mind precisely this intersection of urban and rural, manufactured and natural, real and aspirational sounds when developing the idea of the "soundscape." He aimed to capture environmental sound in critique of the erasure of natural sounds like bird calls through the layering of urban noise pollution (Schafer 1977). Theatre historian Bruce R. Smith compared urban and rural soundscapes and speculated on the relative decibel levels each experienced in daily life. He defined the "acoustic horizon" of how far voices, bells, and bird calls might travel in open city streets, enclosed theatres, or across country fields. Like Schama and Klaver, Smith extended this to the early modern imaginary by noting how Baroque composers sought to echo these bird calls and other natural sounds in their music as a means of expressing the ideal and potentially purifying power of nature (Smith 1999). Niall Atkinson further connects perception, regulation, and aspiration in sound. He describes how Florentines used bells to regulate and pace urban life as their "sonic armature" before moving on to show how a broadly distributed and acute sense of the officially regulated sequence of bells turned any disruption of that routine into a siren call. This was precisely

how laborers summoned each other when launching a social revolt in 1378 (Atkinson 2016). Sound constitutes groups and shapes their practice of place: Tess Knighton has developed Barry Truax' concept of "acoustic communities," which she describes as "any soundscape in which acoustic information plays a pervasive role in the lives of the inhabitants." Gangs, confraternities, the enslaved, refugees, and performers all used shared sounds to organize themselves, communicate, and distinguish themselves from those around them. For Knighton, the significant role of sound lies in the perception that "acoustic cues and signals constantly keep the community in touch with what is going on from day-to-day within it" (Truax 2016, 253; Champion 2017; Knighton 2018).

Understanding *land*scapes, *sound*scapes, and *smell*scapes as all in part constructed, imagined, and aspirational helps us to see that sensescapes were *e*scapes as much as anything else. Early moderns weren't only receiving stimuli but were also using them to construct their understandings, hopes, and anxieties about the world. They were doing this at a time when intellectual and geographical horizons were rapidly expanding. How they braided sense, place, and emotion gives us a better idea of their experience of the world and their mentality in it. In order to convey this, I'll connect different senses and spaces, opening with how spaces looked and operated, moving then to sound as a force, exploring how smells were located in sites both physical and personal, noting how taste might be used to set or mark time, and then closing with ideas of when and how people were to use touch. I'm not aiming to offer a systematic survey or a detailed review of those senses that were most typical or significant, but will highlight intersections of senses and space that were indicative, new, and compelling. I'll focus on some that may seem marginal in the hope of using the unexpected or unfamiliar to remind us how differently the people in this period sensed the world and occupied it. While it's common to think that early moderns were moving to a stronger sense of themselves as individuals, in many cases they were far more preoccupied with each other. Producing space as a sensorium was something you did in community, and so much of what we'll look at will be collective, communal, and shared.

2 The Sight of Space

Early modern cities unfolded around a series of open and closed spaces. Roads and squares set the basic pattern of the urban fabric and directed people around markets, shops, churches, and homes. People animated these spaces as they used and moved through them, and since most were walking, these public spaces were where life happened. Artisans carried work out into the streets for light, sales, and sociability. Squares were jammed with stalls on some days

and empty on others. Thoroughfares first laid down by the ancient Romans continued to carry the bulk of traffic through some towns. They drew straight lines between gates laid out like compass points, though often with unexpected detours – a curve marked where the road exited a wall demolished centuries before or bent around a church that commemorated a miracle. Water, hills, and marsh set the basic landscape that shaped the layout of every urban fabric. Port cities might bend and curve over hills rising from the seashore like Boston's compact Shawmut Peninsula, or be built around river deltas like Manila, or build their own topography of canals channeling water through blocks firmed up by sunken piles and bounded by stone walls like Amsterdam. The Roman soldiers who had laid out Florence set it apart from and at an angle to the Arno River – a grid pattern still clear in modern maps – but Florentines embraced and bridged the temperamental river. In Manila the intersections of different cultures were written on the landscape itself: one settlement laid out in a grid and set behind walls like a Roman camp, others clustered more organically on either side of the Pasig River, and yet others stretched out along the arc of Manila Bay. Any settlement built on a river or shore repeatedly fell victim to floods or storms, but that water shaped city spaces and life. Water was the first elemental horizon setting the sight of space.

2.1 Open and Closed

City life pushed inland from ports and wharves, and most of those doing the pushing were men: soldiers, sailors, packers, and shippers navigated the space with mixed languages that spoke to long travels and lives of constant negotiation. These "spaces of arrival" defined ports like Amsterdam, Manila, and Venice and fed a capillary network of warehouses, shops, and dormitories diffusing inland (Salzburg 2018). Arrivals to smaller ports and riverine cities might be through gates rather than on wharves, but buildings on adjoining streets and squares served the same purpose. Women were more evident in the taverns and hostels offering rest, food, and entertainment as proprietors, servants, and sex workers. These were contact zones where residents and migrants met. Most were warrens of warehouses and wharves that effectively walled off the port, with impressive customs houses and a few trading shops providing liminal access points where power, authority, and money were exchanged. Some of those arriving by boat never passed into the city, and some in the city seldom went to the port. It wasn't just geography: gender, age, class, race, and status determined who could cross over the invisible boundary and how.

Each of these cities that opened to a port on one side also sheltered behind a wall on the other. Wall and water defined the urban space. All the cities we're

focusing on here had walls, though among them Boston's were the least impressive. The wooden stockade that crossed the narrow neck joining its peninsula to the mainland was little more than a suggestion and better for keeping out animals than anything or anyone else. But Bostonians held to it for a century and a half – it had a gate, customs collectors, moat, guards, and cannons. Together with batteries on outlying islands it made the city a fortress (see Figure 1). The wall would be rebuilt in stone and brick and wasn't completely demolished until 1822 (Peterson 2019). More than defense, it marked where Bostonians thought that urban space began. Florentines had been in the business of building walls far longer with major concentric circuits of 1078, 1173–5, and 1284. The steady growth of their economy and ambitions through expanding trade to the Levant, northern Europe, and Italy itself led them to erect a final set by 1333, but the Black Death collapsed Florence's population little more than a dozen years later. As in cities around Europe, a plague that swept a third, a half, or more of the urban population into the

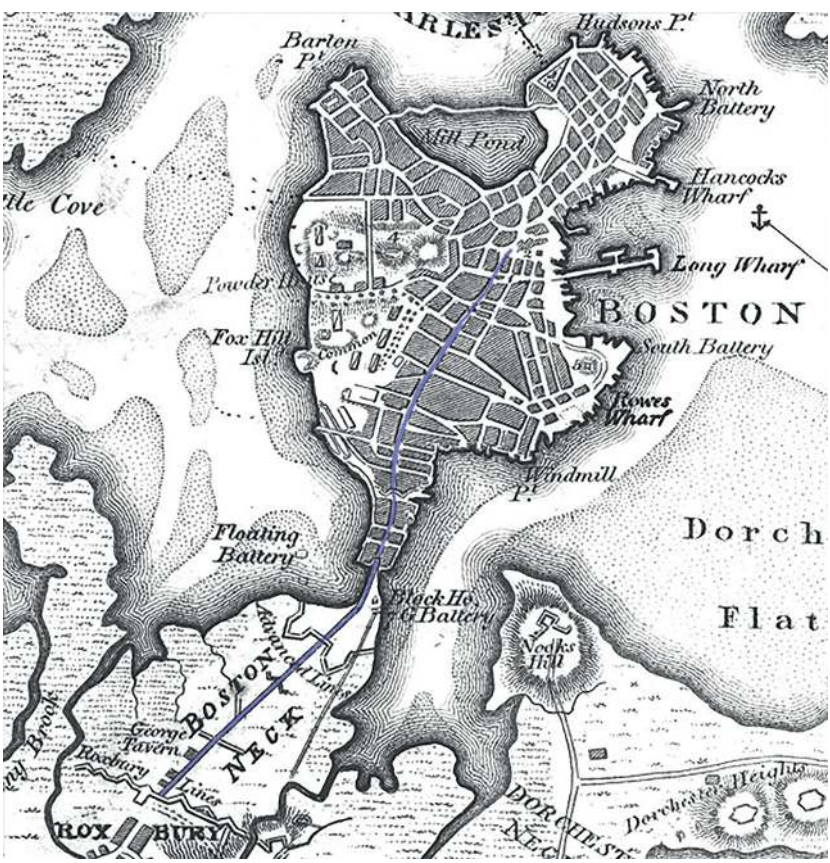

Figure 1 Boston (Wikimedia Commons)