

# Resonant Texts: Sounds of the American Public Library

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**ABSTRACT** Public libraries have long been associated with silence and order. Historians have argued that the architecture of library buildings has served in disciplining patrons into silent reading subjects. I argue that, in light of evolving, subjective definitions of and responses to noise, changing philosophies of librarianship and library design and the proliferation of media formats and the sounds they emit, we need to consider new ways of thinking about sound in the library, not as something to be eliminated or controlled, but as something to be orchestrated, and even *designed for*. In order to do so, I propose that we consider first what sounds people, buildings and media make, and then use architectural design to promote their cooperative interaction.

**KEYWORDS:** public libraries, acoustics, noise, media reception, habitus



In Salt Lake City, librarians wear buttons displaying the house rule: “No shhh!”

Libraries and noise seem to have made their peace. The new Salt Lake City Public Library, like many recently opened American public library buildings, is designed to accommodate newer, noisier kinds of work – work that involves spirited discussion between collaborators, work with media formats that make once-mute pages speak, work underscored by the clicking of laptop keys. These are the sounds of a public library that has proven its continued relevance and *resonance* in an age when new technologies and privatized services were to have spelled the institution’s demise.

But not everyone is happy about the sounds emanating from the stacks. In one of the many focus groups the Seattle Public Library hosted while planning their new building in the late 1990s, some patrons requested private study carrels, cell-phone-free zones and a “laptop-free” area where they could study without sonic distraction. Sam Demas at Carleton College has logged similar requests from students. “Daydreaming, contemplation, thinking, reading, and, yes, sleeping are cherished private, even intimate, aspects of the student experience supported by the library,” he writes. “Where does one go for peace and quiet?” (Demas 2005, n.p.). Not the *public* library, apparently, lamented author Sally Tisdale in a *Harper’s* article. Tisdale marvels that “today’s library is trendy, up-to-date, plugged in . . . It’s a hip, fun place, the library” (1997: 66). Yet all of this excitement has compromised what she regards as one of the unique, core functions of the institution:

The boundaries that have kept the library a refuge from the street and the marketplace are being deliberately torn down in the name of access and popularity. No one seems to believe that there is a public need for refuge; no one seems to understand that people who can’t afford computers and video games can hardly afford silence (Tisdale 1997: 74).

The public library – at one time represented, fairly or not, by the bespectacled librarian perched behind a fortress-like desk, finger pressed to her lips (see Figure 1) – has, in some places, chosen a new ambassador: the roving librarian equipped with handheld device and cell phone, combing the stacks for patrons in need of assistance. And in many cities’ new downtown libraries, the scene that greets people as they walk through the main entrance is not rows of patrons hunched silently over books, but, rather, a bustling cafe, high school students chatting over a magazine, or a local author giving a reading.

When these buildings are designed thoughtfully, tranquility need not give way to clamor. There is room for both acoustic conditions, and plenty in-between. Elsewhere, I discuss the designs of several new urban public library buildings, and particularly how their mix



**Figure 1**

Nancy Pearl, Seattle public librarian and author of *Book Lust*, has had an action figure – with an amazing “shushing action” – made in her likeness. Image Copyright Archie McPhee.

of media and non-media functions necessitates programmatic areas with disparate characters – visual, haptic and sonic (Mattern 2007). The sound environments in these buildings range from the surveilled silence of the special collections rooms to the vibrant cacophony of the teens’ libraries to the contained commotion in private listening booths. Each of the activities that takes place in a library – including reading, viewing, media-making, even dating – has its own appropriate sound conditions. And the designers of many of these new library buildings have taken these sonic demands into consideration at various stages of the design process – from siting to choosing finishing materials. In the following pages, I will discuss the varied sound environments in American library buildings – and how these sound spaces shape relationships between people, media and architecture. My primary interest is the contemporary library, but we will examine some nineteenth and early twentieth century buildings along the way. I argue that in light of evolving, subjective definitions of and responses to noise, changing philosophies of librarianship and library design and the proliferation of media formats and the sounds they emit, we need to consider new ways of thinking about sound in the library. We need to think of it not as something to be eliminated or controlled, but as something to be orchestrated, and even *designed*

for. In order to do so, In order to do so, I propose that we consider first what sounds people, buildings, and media make, and then use architectural design to promote their cooperative interaction.

### Sound Studies

This paper fits into the growing field of “sound studies,” which, according to broadcasting historian Michelle Hilmes, has become, through the work of scholars and practitioners in various disciplines, less “the study of sound itself, or as practices of aurality within a particular industry or field, than of the cultural contexts out of which sound media emerged and which they in turn work to create: *sound culture*” (2005: 249). Of particular note – and the focus of Hilmes’ 2005 book review in *American Quarterly* – are Jonathan Sterne’s (2003) *The Audible Past: Cultural Origins of Sound Reproduction* and Emily Thompson’s (2002) *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900 to 1930*. Sterne examines the development of a set of practices of listening – an “audile technique” – that was specifically modern, “articulated to science, reason, [and] instrumentality” (2003: 23). While Sterne focuses on such modern instruments and machines as the phonograph, the stethoscope and the telegraph, Thompson addresses other realms of modern technique: architectural design and the nascent field of acoustic engineering. She links modern listening practices to modern techniques for producing space. Sterne does not ignore the spatial qualities of sound – he does address the privatization and cellularization of listening spaces – but Hilmes singles out Thompson’s book for “its attention to the physical environment in which listening takes place” (Hilmes 2005: 255). Thompson joins others – including a host of philosophers, musicians and architects – who have examined the relationships between architecture and hearing – or, more generally, between space and sound.

Thompson’s survey encompasses architectural types ranging from concert halls to churches to office buildings, but does not extend to libraries. Historian Ari Kelman fills this gap with “The Sound of the Civic: Reading Noise at the New York Public Library”(2001). Kelman examines how the library – the 42nd Street Humanities and Social Sciences Library, specifically – functions as a “social space” that produces the disciplined, *silent* reading subjects essential for social order and civil society. “By staging, scripting, and silencing encounters between people and people, and between people and texts, the . . . Library becomes powerful and deeply productive of a civic, if eternally noisy city,” he writes (25). Kelman places “noise” – the urban noise outside the library, the internal noise inimical to concentrated study, the noise of the Foucauldian “disciplinary machine” – at the center of his inquiry, yet he sometimes conflates environmental and incidental noises with “noise” as it is defined in the “transmission model” of communication theory – that is, interference

between sender and receiver. He even occasionally equates “noise” with “disagreement,” which may result from, but need not always be the consequence of, interference in communication. We are unsure of how the noise of the institution-as-“disciplinary machine” either drowns out or harmonizes with the noises of library media and human presence. In regard to the latter, conversation is clearly discouraged in this space, yet other sonic traces of human presence – “people walking, writing, typing” – he says, “are all involved in the performance and the production of the civic . . . These audial eruptions are not considered noise in the library because they are expected and even necessary for the machine to function” (38).

Composer R. Murray Schafer acknowledges that noise can mean either (1) unwanted sound, (2) unmusical sound, (3) any loud sound or (4) disturbance in any signaling system (1977: 183). Kelman uses “noise” in accordance with both Schafer’s first and fourth definitions, while most librarians and acoustical designers use noise to refer to “unwanted sound,” which may *include* loud sounds (3) and those that interrupt any interpersonal or mediated communication (4). Drawing on anthropologist Mary Douglas’s definition of dirt as “matter out of place,” historian Peter Bailey proposes that noise refers to “sound out of place” (1996: 50). Fellow historian Karin Bijsterveld identifies qualities of sounds that characterize them as negative or positive, as “noise” or not:

“unwanted sound” . . . has often been associated with a terrifying disruption of a specific social order, whereas rhythmic and/or loud, positively evaluated sounds have been associated with strength, power, significance, masculinity, progress, prosperity and, last but not least, *control* (2001: 42).

Philosopher Theodor Lessing agrees, according to Lawrence Baron (1982), that making noise is a “sublimated manifestation of the ‘will to power’” (167). Noise, by blaring in opposition to sometimes faceless social forces, can be an “expressive and communicative resource that registers collective and individual identities, including those of [gender, class] nation, race, and ethnicity,” Bailey explains (1996:64).

But if noise renders power, expresses identity and exerts control, its opposite – *silence* – can often do the same. Again, Bailey: “Silence, we might say, is the sound of authority – generational, patriarchal and formidably inscribed in the regimes of church and state” (1996: 53). Both *enforced silence* and *freedom from noise* represent forms of power.

It is clear that neither the distinction between nor the meanings of noise and silence are fixed or universally understood. “Noise and silence refer to deeply-rooted cultural hierarchies,” Bijsterveld (2001) acknowledges. These historically and culturally determined distinctions also depend, as Bailey reminds us, on the position of

hearing and sound “in the sense ratio of any particular era or culture” (1996: 55). Cultural historian Hillel Schwartz concludes that noise is less an issue “of tone or decibel than of social temperament, class background, and cultural desire, all historically conditioned” (2004: 52).

The overdetermined and subjective characterization of “noise” has been made abundantly clear by the campaigns designed to define and control it – particularly the noise abatement campaigns of the early twentieth century. Because these campaigns are addressed elsewhere, I will not discuss them here.<sup>1</sup> However, it is worth noting the similarities between noise abatement and public library supporters in their motivation and tactics. Raymond Smilor, a pioneer in the study of noise politics, argues that noise “gave people the opportunity to express their anxiety over machine technology, [and] to test their ability to control their physical surroundings”; noise provided a seemingly concrete enemy in their fight against industrialization’s “disruption of a [preexisting] social order,” to borrow Bijsterveld’s phrase (Smilor 1977: 36). Debates over library policies and designs provided a similarly concrete, seemingly “manageable” means for dealing with large, abstract social shifts, like urbanization and immigration – and both the anti-noise and library movements advocated for similar strategies, like effective space planning. Although “noise,” specifically, was not central to the library supporters’ agendas, what it represented – disorder, inefficiency, incivility – was precisely what the library was designed to combat, say many library historians. And as we turn now to examine the history of sound in the library, we should keep in mind what the “din” reformers learned about their enemy: that “noise” often resists a totalizing definition and finds a way to leak through physical and regulatory barriers.

### **Progressivism, Noise and the Public Library**

Has library propriety always called for silence? Remembering St. Augustine and Ambrose, Alberto Manguel, in *A History of Reading* (1996), wonders,

Was it different then, in the days of Athens or Pergamum, trying to concentrate with dozens of readers laying out tables or unfurling scrolls, mumbling away to themselves an infinity of different scores? Perhaps they didn’t hear the din; perhaps they didn’t know that it was possible to read in any other way. In any case, we have no recorded instances of readers complaining of the noise in Greek or Roman libraries (44).

If the sounds of reading were not bothersome, perhaps we cannot call them *noise*. We receive a different account from Claude Héméré, Librarian of the Sorbonne (1638–43), who describes appropriate behavior in his library:

A reader who sat down in the space between two desks, as they rose to a height of five feet ... neither saw nor disturbed any one else who might be reading or writing in another place by talking or by any other interruption, unless the other student wished it, or paid attention to any question that might be put to him. It was required, by the ancient rules of the library, that reading, writing, and handling of books should go forward in complete silence (quoted in Clark 1894: 40).

Historian Donald Oehlerts describes the Library Company in Philadelphia, which moved in 1790 into a new building, as the “earliest example in the United States of the use of the second floor for reading rooms to obtain better lighting, more space, and less noise and dust from the street” (1991: 4).

Héméré and Oehlerts touch on a theme that is central to Thompson’s argument: that the organization of space can be used for sound (and social) control. The placement of the library within the town or city not only reflected the place of culture in the community, but also suggested what type of a sonic environment the library was to be. Late-nineteenth- and early twentieth-century library trustees, inspired by City Beautiful planning principles, often placed their large central libraries in not-so-central locations, clustered with other cultural institutions in a park-like setting and removed from the downtown business district and its potentially “sully” – and noisy – influences (Van Slyck 1995: 82).

The siting of these late-nineteenth- and early twentieth-century libraries, their rarified style and interior organization worked together to elicit genteel – read: “silent” – behavior from patrons. The New York Public Library was organized with each successive floor containing more public functions, with the top floor devoted entirely to the public. The reading room was placed at the back of the top floor, away from the bustle of Fifth Avenue and near the closed book stacks. The use of open or closed book stacks touches on a long debate over the relationship between patrons and media – what kinds of media should be available, and to whom? – questions that have implications for how the collection should be organized, and what the relationships between patrons, library material and library buildings should *sound* like. Middle-class users, assumed to be the serious “scholars,” were protected as much as possible from the “messy realities” and the noise of the staff, less serious working-class patrons and children (Van Slyck 1995: 98–9).

In his study of the Rose Reading Room, Kelman has little opportunity to discuss how the *physical space* itself enforces appropriate behavior – how it functions in the library’s disciplinary machine. He wonders how “to best ensure that [the library] – and the people found there – will properly perform?” (Kelman 2001: 30). How, concretely, does this reading room “stage and script” appropriate patron behavior, which here means silent, private

reading? Kelman notes the “awesome and imposing structure” and the “large white marble halls [that] amplify even the smallest sound and betray one’s ‘uncivil’ behavior,” and describes patrons who are particularly conscious of their noise-making behaviors: pushing in a chair, closing a book, flipping pages (2001: 29, 34–5, 38). We can infer that this sensitivity is a consequence of the room’s “live” acoustics, which are themselves a product of the 51-foot ceilings, 78-foot by 297-foot dimensions, the quarry tile on the floors and the weighty wood chairs that stutter when they scrape across them. This room is a literal echo chamber for “uncivil behavior.”

At the turn of the twentieth century, library philosophy was changing, as was the design of library buildings and the sounds made in them. “The traditional understanding of the library as a treasure house, protecting its books from untrustworthy readers, was falling out of currency,” Van Slyck writes (1995: 25). Open shelves, branch libraries and other forms of outreach, often undertaken in conjunction with other Progressive public services, were making noise. Roughly a third of all libraries included in a 1902 *Architectural Review* survey contained group study rooms, exhibition rooms, lecture halls, club rooms – programmatic areas that were certainly not silent (cited in Van Slyck 1995: 32–3).

Children’s libraries provide a striking example of just how “unquiet” the public library may have been. The aforementioned survey showed that by 1902 nearly 75 percent of all libraries had children’s rooms. Many of them had entrances separate from the library proper, so as “to ensure that the genteel library user enjoyed the illusion of ordered and serene opulence...” (ibid.: 100). Many Carnegie libraries’ children’s rooms did employ architectural features – including stylistic references to middle-class homes – to encourage appropriate “inside” behavior. Yet we also find more children’s rooms with reading alcoves for storytelling and spaces dedicated to film screenings, puppet programs and other activities that involved the production of sound (ibid.: 186–7). Even if the children’s room was sufficiently removed from the library proper to keep the giggles and shouts contained, the room itself was often a noisy place.

Some of that noise was unsanctioned. Children occasionally failed to see the library, as its board undoubtedly did, as a haven from the clamor of the city. Regarding it instead as an “extension of the street,” these children brought their outdoor voices indoors. Echoing Lessing and Bailey, Van Slyck suggests that “boisterousness was one of the methods that children used to stake their claim to public space” (ibid.: 213). The noise was a result of the architecture’s failure to communicate its message of “decorum” effectively:

Architecture’s transformative powers were limited by the fact that its signals are socially and culturally coded. If many working-class and immigrant children remained untouched by the library’s message, it was because the library attempted to



communicate in a language that these young readers did not understand (ibid.: 216).

Some patrons – perhaps those not familiar with the connotations of Beaux Arts and Richardsonian architectural styles, or rationally ordered interiors – failed to perceive the codes of silence supposedly built into the library building.

### **From Disciplinary Machine to Disciplined Choice**

“Previous knowledge of public institutions, attitudes about reading, access to other urban amenities – all of these factors influenced how readers understood their own rights and responsibilities at the public library,” Van Slyck writes (1995: 201). Psychologists Henk Aarts and Ap Dijksterhuis confirm her conclusion. They conducted a series of experiments designed to test situational norms – “generally accepted beliefs about how to behave in particular situations (and environments) ... [that] are learned by associating normative behavior to these situations” (Aarts and Dijksterhuis 2003: 18). The researchers wondered, “do we keep the level of noise down automatically on the mere activation of the symbolic representation of a library?” (ibid.: 19). They found that “strength of association” was a key independent variable. People with a weak “association” between normative behavior and libraries – those not familiar with the institution or its codes of behavior – were unlikely to know to lower their voices. Thus a patron who has never before set foot in a library – or even a regular patron unaccustomed to libraries built in unfamiliar architectural styles – might find that the building inadequately “stag[es] and script[s]” decorous patron behavior, and may even fail to denote the building type. For instance, will patrons, upon encountering the new glass anvil-shaped Visual and Performing Arts Library in Brooklyn, know how to “read” the building as a library and understand its behavioral script?

Foucauldian models have often been used to describe how libraries “discipline” their patrons, or how professional discourses construct the “administrative power” of librarianship. Library historian Alistair Black notices that it is libraries’ “‘darker’ side that has often attracted critical historical scholarship, the side that is disciplinary, distant, and controlling. The negative dimension ... interfaces easily with the work of Michel Foucault” (Black 2005: 418). Yet Foucault has been widely criticized for allowing little room for human agency or resistance – for inadequately accounting for those who fail to read, or intentionally ignore, the institution’s “script.” Edward Said argues that Foucault confuses “the power of institutions to subjugate individuals” with “the fact that individual behavior in society is frequently a matter of following rules or conventions” – conventions like architecture’s culturally coded behavioral cues (1986: 151).<sup>2</sup> Although his later theories of governmentality addressed some of the critiques of his earlier works, Foucault’s theories still may not be the

best suited to addressing a modern-day institution that has largely abandoned a Progressive agenda of discipline and assimilation. As Harris (1973) argues, the modern-day American public library is no longer an “authoritarian and elitist” institution; the modern institution is a guardian of the “people’s right to know” – a role that, he says, requires trusting patrons to know what is best for themselves – and, we can assume, how to behave themselves.<sup>3</sup>

Van Slyck argues that during the Carnegie era, libraries’ focus on efficiency and solitary reading led the institution to squander its “potential to serve as a site – literally and figuratively – for public discussion and debate,” but the library has since reclaimed that potential (1995: 219). Libraries can be, and often are, sites for debate and resistance – to privatization, social atomization, segregation, commercialization etc. – and it is this potential for resistance, I think, that should compel us to seek more appropriate theoretical models to think about how today’s library functions in its civic context, as an institution and for its inhabitants. We need to find new ways to think about the resonance, both figurative and literal, of these buildings. Today, “great public libraries provide a place for not only gathering or storing ideas, but engaging with them,” says Nancy Tessman (personal communication, July 20, 2006), Director of the Salt Lake City Public Library, which opened a new central library in 2003. “That process may create some noise. Our objective is to enable and encourage the engagement while still providing places of relative quiet for reading and musing. Good design will allow a reasonable mixture of both.” It seems that today’s libraries are not as hostile toward noise as their recent ancestors were – not because noise has ceased to be a problem, but because librarians and architects realize that silence, although beneficial or necessary for some of the activities that take place in the library, is not the ideal condition for *all* programmatic elements. “We didn’t set out to be an ‘Unquiet Library,’” Tessman says. “We just recognized that learning and communicating have changed over the decades, and ‘quiet’ is not the main objective.”

Schafer advocates for the “recovery of positive silence.” Most contemporary public libraries offer this: silence as a *choice*. The more we acknowledge the ability of patrons to choose how to use the library, the better prepared we are to think about the library as providing a field of possibilities, behavioral and acoustic, for its users. And the more likely we are to realize that Foucault’s models may not be the best suited for thinking critically and constructively about today’s library. Bourdieu’s notion of *habitus* was central to Sterne’s work, and I believe it will serve us well here. Bourdieu defines *habitus* ([1972] 1990: 72) as the system of “durable, transposable dispositions, structured structures predisposed to function as structuring structures,”

that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends of an express mastery of the operations necessary in order to attain them. Objectively “regulated” and “regular” without being in any way the product of obedience to rules, they can be collectively orchestrated without being the product of the organizing action of a conductor ([1972] 1990: 72).

The concept of *habitus* allows us to address the *orchestration* of sound in space, not its control. It does not presuppose mastery of, or even conscious familiarity with, normative behaviors or the spatial codes assumed to elicit them. Further, *habitus* deals with predispositions rather than reflexes; it allows us to address the fact that our responses to architecture and media are not automatic, instinctual. It acknowledges a structure, but allows for choice and variation, without supposing that that choice is limitless; the library is not anarchic. If a patron behaves, or “sounds out,” in a way that is outside the “structuring structures” of a particular space in the library, he may be directed to an area that is more appropriate for his behavior.

Finally, as Sterne notes, the concept of the *habitus* enables us to explore a “mix of custom, bodily technique, social outlook, style, and orientation” – a mix similar to the variables that, as we have seen, shape people’s perceptions of and reactions to noise and architecture (2003: 92). The customs, techniques, postures and styles through which people interact with one another and with media are shaped by the social spaces, or *fields*, in which those interactions take place – and are the proper concern of architectural design. As Jean Hillier and Emma Rooksby write in their introduction to *Habitus: A Sense of Place*,

Comprehension of agents’ habituses, influencing their tendencies to act in particular manners, their motivations, preferences, worldviews, aspirations and expectations, will . . . enable better improvisation and navigation around the complexities of the social practices which constitute planning processes (2005: 12–13).

The dispositions and practices that constitute the *habitus* do not, unlike Sterne’s “audile techniques,” imply conscious, rational choice. “The *habitus* is not cognitively understood but rather internalized and embodied,” architect Kim Dovey writes (2005: 283–97 at 284). Designing in light of the *habitus* of listening and looking, of what we will call the conditions of attendance – visual, haptic and sonic – to particular media, does not mean prescribing certain patron behaviors. It does not mean promoting the “one best” practice of listening or the “one best sound.” Rather, it means creating a field of

what Bourdieu calls “possibles,” or potentials of interaction between people, media and architecture. Examining the library as an acoustic space requires that we adjoin Sterne and Thompson – that we think about the various technologies of listening and the audile techniques they promote, as we also consider how those technologies function within, and interact with, the architecture that houses them.

### **Sonic Spatial Organization through Site and Program**

At the most macroscopic level of analysis, we see that even the placement of libraries within their urban contexts has acoustic implications. Today’s downtown libraries, unlike those sited in accordance with City Beautiful principles, are often positioned to serve as anchors of vibrant areas of mixed-use development, and they usually have their own stops on metropolitan bus lines or light rail systems. This new civic position brings the noise of commerce and transportation right to the library’s doors. Many of these “destination” libraries, designed by high-profile architects, draw thousands of patrons whose primary purpose is to gawk and snap photos; their presence – their footsteps, voices and camera clicks – must be planned for, as well.

It seems that acoustics has only recently become a separate, explicit concern in library design. In the past, “sound” issues were often folded into broader interests, like traffic control and surveillance. In a 1941 library planning book the index entry for “Acoustics” reads, “see Noise Reduction,” suggesting that the primary concern was keeping unwanted sound *out* – not designing for those sounds that were desirable or germane to the activity taking place inside the building (Wheeler and Githens 1941). This is what Schafer refers to as a shift from “positive to negative acoustic design” – a shift toward designing *against*, rather than designing *for* – in early- to mid-twentieth-century modern architecture. Today’s architects practice a mix of both kinds of acoustic design: some use masking, or soundproofing, to cover up noises – while others use materials that can freely resonate, or create spaces that facilitate or flatter the sounds produced by the space’s activity.<sup>4</sup>

Today’s designers often integrate sounds that were once designed *out* (although not necessarily *kept out*) of the library. Sounds of human activity, and speech in particular, are regarded as germane to the central functions of the library and are thus planned for.<sup>5</sup> The library has also taken on new functions, some commercial, that produce sounds that must be “orchestrated” into the library soundscape. Many consultants have recommended separating lobbies – which are where these multipurpose functions are sometimes housed – from the library proper. The Salt Lake City Public Library, designed by Moshe Safdie, heeded this advice. In Figure 2 we see the library’s Urban Room, a vibrant multifunctional space that is separate from the library proper and that serves as its oversized foyer. A vertical “reading room,” offering alcoves with spaces for both individual and



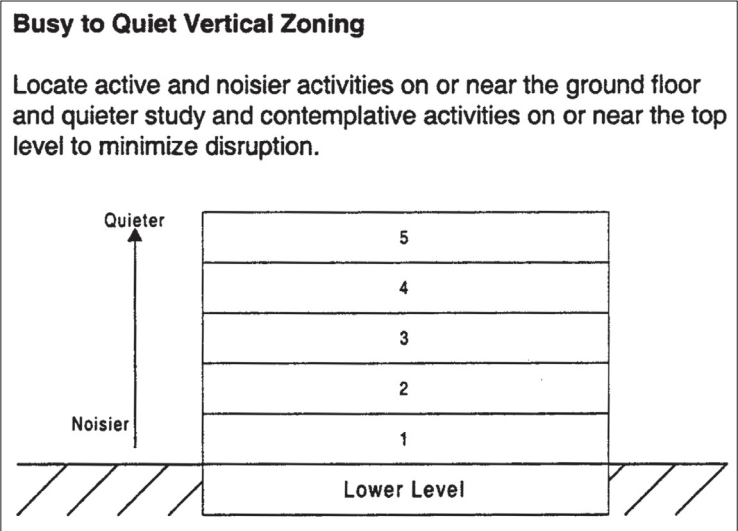
**Figure 2**  
Salt Lake City's Urban Room. Photograph by S. Mattern.

group work, is accessible via bridges that traverse the Urban Room. The room succeeds as a vibrant public space – but, in orchestrating a habitus for study, this arrangement seems disconcerting: in order to gain entry to a space for quiet, silent reading, one must cross a cavern of commerce with footsteps echoing from the stone floor below.

One technique that many designers employ during programming, and that helps to ensure the most effective organization of the library's acoustic environments, is an “acoustical grouping” or hierarchizing of sonic spaces. Salt Lake City's program (see Figure 3) recommended that the building's spaces fall on a gradient of privacy and publicity, including fully enclosed, secure spaces, semitransparent spaces and fully open spaces (RPG Partnership 1999: i). The New York Public Library, you will recall, adopted a similar strategy: each successive floor contained more public areas, with the top floor devoted almost entirely to public functions. Today, many library planners combine functionally- and acoustically-“like” functions (see Figure 4), hierarchizing private and public, hushed and vibrant, closed and open spaces. They often specify that the high-activity, high-noise public activities be placed off major circulation corridors or close to the building's main entrance on the ground floor, while “serious” research areas are placed farther away.

Yet, some designers have failed to effectively program patrons' listening experiences. When it first opened in 2001, the renovated New York Public Library for the Performing Arts at Lincoln Center featured a central reading room that opened onto a bank of elevators and a photocopy room, and was adjacent to service desks where patrons retrieved materials. As the *New York Times*' Joseph Horowitz wrote,

**Figure 3**  
Salt Lake City's building program called for a gradient of sound throughout the building's floors, with louder, more public functions near the ground level and quieter, private functions in the upper levels. Photograph courtesy of Resource Planning Group (RPG) Inc.

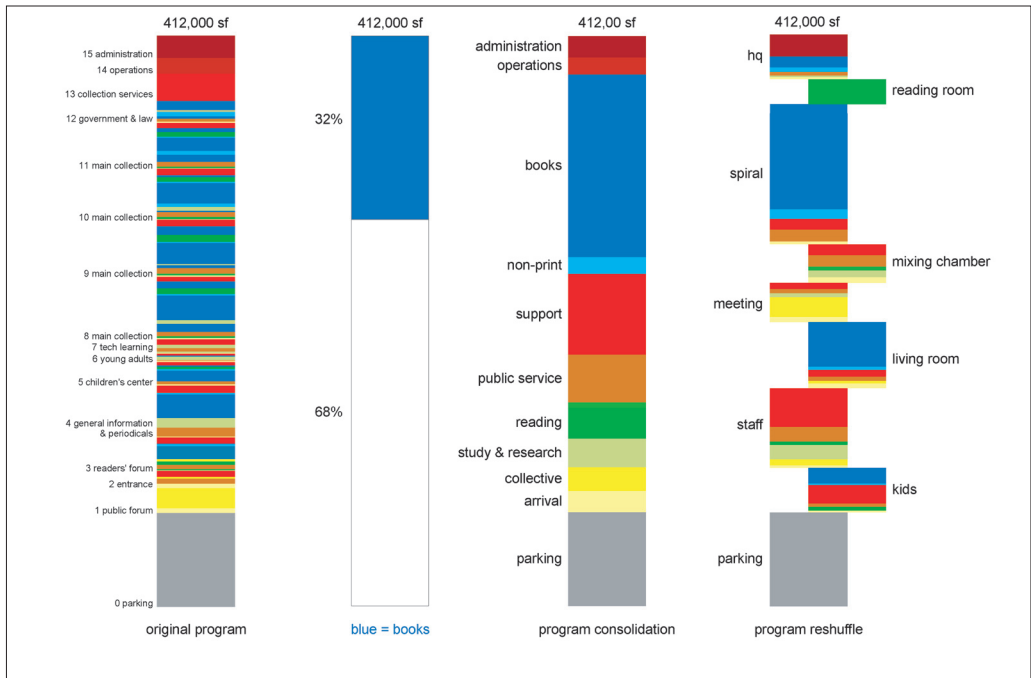


The array of undesired noise plays a practical joke on traditional sensitivities. The metallic clang of the doors to the stacks, the resonant footfall of elevator passengers, ... the reprimands at the security station ... – more than audible, all these sounds are italicized in the exposed low-ceilinged space with its 46 video playback stations, 12 audio stations and 30 computerized workstations. (2002: B31)

Far from offering spaces of sonic “closure,” this library was beset with acoustic leaks. And where the building itself failed to provide cues about its appropriate use, human monitors had to step in with verbal directives, which only further contributed to the clamor and confusion. The library has since undergone further renovation to correct these acoustical problems.

**Designing the Listening Experience**

Designing the sonic experience of a library is not just a matter of deciding what goes where. It involves a particular sensitivity to the *kind* and *quality* of media interactions and learning experiences that take place in a library. Because Kelman’s case is unique – the Rose Reading Room is devoted primarily to *books* and their *silent*, private consumption – he has no opportunity to address encounters with a diversity of media or diverse practices of reading. Yet observation in many modern-day library buildings reveals myriad practices of reading: solitary, partnered or collective; silent, aloud or accompanied by a musical soundtrack; upright, seated or prone; indoors or outdoors. So, while private, contemplative reading does benefit from



silence, this is only one of many reading practices – some of which either produce sound or thrive in its presence. Plus, patrons can read – and *listen to* and *screen* and *navigate* – media in many formats. So when Kelman writes that “[at] the library it does not matter quite what one reads, but how,” that “what” necessarily refers in his case to books. Elsewhere we cannot make such assumptions – and it is the *what* that determines the *how*. Specific media forms require specific practices of consumption – specific visual or “audile” techniques.

Sterne’s concept of “audile technique” can shed light on these interactions and experiences – but his terminology may not be ideal for informing design decisions. The term “technique” implies intention and rationality, as Sterne acknowledges. But not all listening is intentional and rational; it is occasionally accidental, irrational, nonlinear – and these varied practices of listening all have a place in the library. A concept perhaps more readily and effectively translated into responsive design – designing in light of the habitus of media reception – is what Joshua Meyrowitz refers to as “conditions of attendance” (1985: 84–91).<sup>6</sup> “Conditions of attendance” refer to the conditions – environmental, situational, emotional, sensory etc. – under which one “attends to” a particular medium. The assumption is that different media forms necessitate or benefit from particular conditions in which they can be accessed and attended to. Reading a book, for instance, calls for adequate lighting, while viewing a

**Figure 4**

In Seattle, the architects itemized all the types of activities, or programmatic functions, that take place in a library, then combined the “like” functions – and allowed this grouping to inform the shape of the building. Photograph courtesy of the Office for Metropolitan Architecture (OMA).

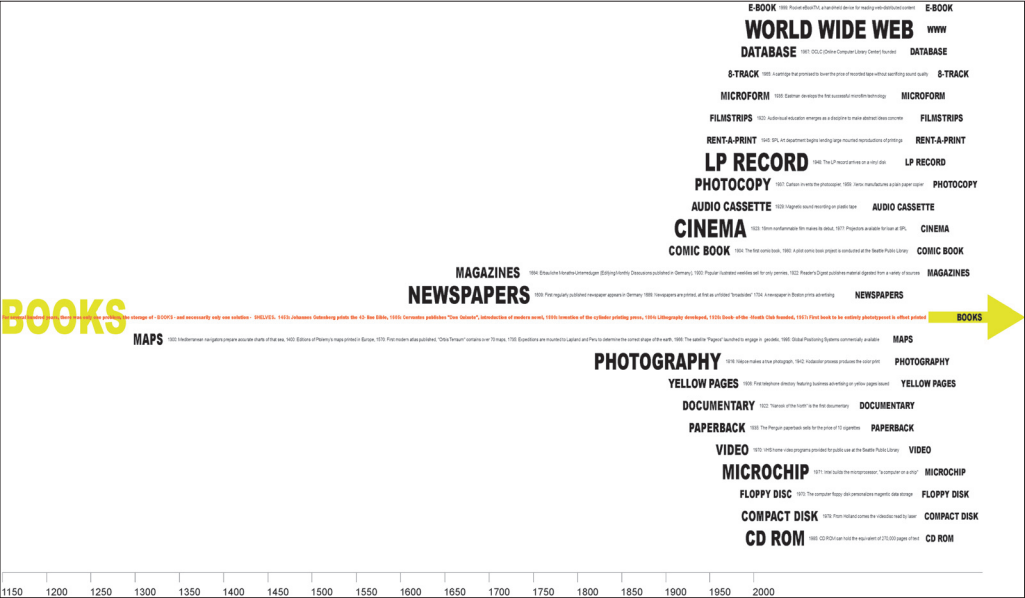


projected film calls for darkness. Solitary reading requires relative silence, although some collaborative reading – like a mother reading to her child, or an ESL teacher and student working together – introduces sound into the environment. Even the physical posture and the degree of mental engagement one must assume vary by medium, and these qualities, too, are influenced by the space in which a medium is accessed.

But according to Geoffrey Freeman (personal communication, May 15, 2003) of Shepley Bulfinch Richardson and Abbott, a firm with an impressive library design resumé, many of today’s library users engage with texts without noting the format in which they appear. As the Office for Metropolitan Architecture (OMA), designers of the Seattle library, acknowledged, library planners need to create spaces that facilitate the use of multiple media, perhaps simultaneously (see Figure 5). “In an age where (sic) information can be accessed anywhere,” the architects write, “it is the simultaneity of all media and the professionalism of their presentation and interaction, that will make the Library new” (1999: 7). The library, if it is to remain relevant, has to fashion itself into a “one stop” media center. But the library is not a warehouse; these media, as OMA acknowledges, must be thoughtfully, “professionally” presented in a way that takes into account their format-specific needs and facilitates patrons’ interactions with them and their interaction with one another.

Still, many libraries continue to use – and in fact many have recently instituted – format-defined departments. Many have an audiovisual (A/V) department (see Figure 6), and most have placed

**Figure 5 Media Types**  
The Office for Metropolitan Architecture, designers of the Seattle Public Library, map the proliferation of media types that the library is obligated to accommodate. Photograph courtesy of the Office for Metropolitan Architecture (OMA)





those collections near their buildings' front entrances because, as the Toledo library's administration has realized, A/V people are not always book people, and they should not have to traverse a building full of books to pick up a video or CD. Several libraries have adopted similar strategies. But, by exiling the compact discs and DVDs to the first floor – often many floors away from the books whose content they share – libraries are physically as well as intellectually, pedagogically and ideologically separating these media, defining A/V materials as *popular* materials and books as *research* materials.

Varying conditions of attendance have also foiled these attempts to integrate media formats. Libraries continue to face the challenge of finding appropriate listening and viewing spaces (see Figure 7). As Salt Lake City planned its new building, librarians hoped that new listening and viewing technologies – something more efficient and secure than the existing technology – would come along. But when that failed to happen, the library settled for individual preview rooms where patrons can listen to audio or watch video recordings. Most buildings, likewise, promote solitary listening and viewing – but Phoenix's Burton Barr Central Library, in its teen room, has inserted a group exhibition area, where films are shown after school to teenagers lounging in bean bags. The space – designed by the teenagers themselves, in cooperation with architect Will Bruder – reflects an impressive sensitivity to the teenage habitus of viewing – one that is more informal, communal and perhaps a bit more distracted. Teen Central occupies a corner of the library's fourth floor,

**Figure 6**

San Antonio, like many libraries, has separated its audiovisual collection from the print collection, and placed it in a separately secured area easily accessible from the front entrance to the library. Photograph by S. Mattern.





**Figure 7**

In Chicago, as in other libraries, listening and viewing activities are given dedicated spaces, which usually offer little in the way of aesthetics or comfort. Photograph by S. Mattern.

which it shares with rather unlikely partners: the rare book room and the Arizona Room for special collections. Only on rare occasions, “when we have the music up really loud,” does sound permeate the sound-resistant wall between it and the Arizona Room next door – transforming the *music* into *noise* – a teen librarian said.

The necessity for different access technologies and different conditions for media reception – such as viewing and listening stations, which are difficult, if not impossible, to integrate throughout the building – means that certain kinds of media are necessarily concentrated in media-specific departments. Until new technology allows for the integration of listening (and viewing) stations throughout the stacks – until HyperSonic™ Sound, or focused speakers, keep the movie soundtrack from leaking into the stacks and distracting nearby readers, or until A/V planners can find a way to provide secure, sanitary earphones for patrons to listen to the audio books shelved among the traditional tomes – library planners may have to shelve their plans for a “format-blind” organization.<sup>7</sup> In the meantime, planners might focus on thinking *experientially* about patrons’ interactions with media and appropriate sonic “conditions of attendance.” Brian Lang of the British Library writes about these conditions in terms of “relationships”:

An obvious one is the relationship between the library building and the readers. Other key relationships are those between readers and the library's collections, between readers and librarians, between librarians and the collection, and between the collection and the building (1999: 11–24 at 12).

What might these relationships *sound* like? How do both people and media make the architecture *resonate*? How is the ear engaged when a book falls from a high shelf onto a metal floor, or when the hum emanating from a pod of copy machines invades an otherwise peaceful reading room? What are the poetics of these breaches of spatial closure?

In Seattle, the architects and librarians realized that patrons have a dynamic relationship with print materials – and that there is no single sound of reading. The designers placed atop the building a huge, vaulting, reading room (see Figure 8). It is important to note that even in designs that pride themselves on their technological progressiveness, such as Seattle's, reading is usually hosted in the building's most majestic spaces. And perhaps rightly so. These spaces, with their chandeliers and ample sunlight, are well suited for a medium whose surface is reflective rather than transmitted, and whose presentation of content, more so than that of time-based media, allows for *reflection*, an act deserving a dignified space.

Within the room are different conditions, from the intimate and informal to the rigorous and organized, from linearly ordered carrels to grouped side chairs, for all kinds of reading moods, methods and materials. Even if different arrangements and postures of reading are permitted, this is still to be a *quiet* space. Architecturally, the space



**Figure 8**  
The Seattle Public Library's Reading Gallery offers an amphitheatrical space, with myriad seating arrangements, for quiet media use. Photograph by Mark Anunson.



is “driven by glass,” acoustical designer Basel Jurdy noted, and the only sound-absorptive materials are the white “pillows” (see Figure 9) along the sides and on the underside of the tenth-floor ceiling. But, even with the pillows in place, the reading room is still “lively” – not an ideal condition for a quiet reading space. Yet, Jurdy (personal communication, January 13, 2006) explains, the reading room “can still be okay acoustically if people aren’t carrying on conversations to excite the acoustical anomalies” of the space. In other words, if patrons somehow pick up design cues or “situational norms” indicating that this is a *quiet* reading space and behave accordingly – if the space itself sets the appropriate habitus, if they observe that other patrons are working quietly – then the room’s potential brightness need not be an issue. But, as I have witnessed in a few buildings, if a patron is clicking away on his laptop in an area that the patrons themselves have defined, through practice, as a quiet study zone, he is likely to be asked politely by one of those silent studiers to move to an area where his clicking will not be perceived as “noise.”

That more sonically tolerant space is Seattle’s ground-floor “living room” – an informal alternative to the reading room (see Figure 10). The space’s proximity to the fiction collection, the cafe and the library store, and its provision of a variety of work areas and

### Figure 9

White “pillows” help to absorb sound in the quiet reading room of the Seattle Public Library, where the building materials would otherwise make for a highly reverberant space. Photograph courtesy of Emily Lin





seating arrangements, orients patrons toward a more collaborative, “sounded” style of reading and working. Its purpose, Jurdy says, “is to attract people to sit and read or converse”; in order to do this, the space has to be “warm acoustically, but not too reverberant.” The area’s walls are all glass, a highly reverberant material – but here the glass is canted, which allows the area’s “acoustical energy” to bounce to the other floors that open onto the living room, and thus dampen the sound a bit – just enough to allow for reading, while not being so oppressively silent as to deter conversation. Thus, once again, as in the living room, this space creates particular conditions of attendance, which, in turn, affect visitors’ perceptions of, and interactions with, media and architecture. Finishes, furnishings and a host of other design cues work together to structure the range of possible behaviors, to establish a *habitus* appropriate for the function of the space.<sup>8</sup>

Freeman, discussing his experience in designing academic libraries, notes that “it is important to accommodate the sound of learning – lively group discussions or intense conversations over coffee – while controlling the impact of acoustics on surrounding space.” At the same time, “we must never lose sight of the dedicated, contemplative spaces that will remain an important aspect of any

**Figure 10**  
Seattle’s “living room” provides space for louder, more social kinds of work with media. This space also features a café and the library shop. Photograph by Mark Anunson.

place of scholarship” (2005: n.p.) There is room – there is *need* – for both acoustic conditions . . . and plenty in between.

Accommodating this variety is not a matter of *controlling* acoustics or *disciplining* listeners. In designing a library, one cannot expect to use architecture to regulate people and the sounds that they and their media make. Rather, accommodating acoustics are developed from the ground up, by looking at how people, media and architecture relate, and then using architectural design to facilitate their meaningful interaction. Considering the sounds of human presence, the sounds of media, the sounds of building materials, and how these various sounds interact; considering how various acoustic zones should be positioned in relation to one another; considering the visual, haptic and *sonic* environments – the conditions of attendance – most appropriate for various activities; considering what practices and postures of listening and learning the library intends to promote – all of these are issues that, if considered early during the programming and schematic design phases and not forgotten during design development, can inform the design of libraries that *sound* like the dynamic, responsive, culturally resonant institutions that today’s libraries strive to be.

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### Notes

1. See Bijsterveld, 2001, 2003; Schafer, 1977: 181–202; Smilor, 1977; Thompson, 2002: 115–68.
2. See Eco, Umberto. 1986. “Functionalism and Sign: The Semiotics of Architecture.” In Mark Gottdiener and A. Lagopoulos [ed.] *The City and the Sign*. New York: Columbia University Press: 56–85.
3. Critics might argue that in light of the contemporary “War on Terror” and the Patriot Act, *laissez-faire* librarianship is now only a memory of a more innocent past. I do not mean to trivialize the serious and deleterious consequences, both for individuals and for libraries, of these political developments. Still, I disagree with those who regard the contemporary library as a (remodeled) disciplinary machine – a government-controlled surveillance mechanism, although one now more Deleuzian than Foucauldian. The federal government may intend to use library borrowing records and Internet search histories to identify would-be terrorists, but the American Library Association (2003) publicly “opposes any use of governmental power to suppress the free and open exchange of knowledge and information or to intimidate individuals exercising

free inquiry" (n.p.). What is more, the library building itself it still designed primarily through a partnership between librarians and architects, both of whom are generally committed to upholding the institution's core contemporary values of access and empowerment.

4. See Salter, C.M. n.d.; Scherer J. 2001; Wrightson D. and Wrightson, J.M. 1999.
5. Given and Leckie (2003), in a study mapping the social activity of two Canadian public libraries, noted that, although talking has traditionally been discouraged in the library, "talking as a behavior was often part of the patrons' generally studious activities." "Given the popularity of talking among the users observed in this study, the need for areas conducive to talk need (sic) to be factored into library-design" (382).
6. Meyrowitz, who studied in the doctoral program in Media Ecology at New York University, was undoubtedly inspired by the unpublished works of Christine Nystrom.
7. The teen library at the new Minneapolis Public Library, opened in the spring of 2006, includes directed speakers that allow groups to listen to music without bothering nearby patrons. Its effectiveness has yet to be seen.
8. Architectural critic Lawrence Cheek (2007) complains that the Living Room "harvests and energizes routine noise," rendering it "not conducive to intimacy with a book" (Lawrence Cheek, (2007). "On Architecture: How the New Central Library Really Stacks Up" *Seattle Post-Intelligencer* (March 27): [http://seattlepi.nwsourc.com/ae/309029\\_architecture27.html?source=myspi](http://seattlepi.nwsourc.com/ae/309029_architecture27.html?source=myspi)).

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