

# Understanding Historical Thinking at Historic Sites

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This article describes the interpretive processes historians engage in when “reading” historic buildings and examines what qualifies as historical thinking about historic buildings and sites. To gather evidence of what historical thinking looks like as it pertains to buildings, 5 practicing historians were recorded as they toured the Old North Church in Boston, Massachusetts. From these protocols, 5 heuristics were identified: origination, intertextuality, stratification, supposition, and empathetic insight. The heuristics described here provide the means through which a wider range of historic materials can be brought into the discussion of what it means to think historically.

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Historical study contains a peculiar internal logic that draws upon, but is distinct from, other subject areas. That internal logic of history has been referred to, by turns, as “historic sense,” “historical reasoning,” and, the currently preferred term, “historical thinking.” Although no single definition holds sway, there is consensus that historical thinking does not entail merely accumulating prescribed historical facts (Spoehr & Spoehr, 1994), but involves developing reasoned judgments about the past based on the consideration and synthesis of multiple historical sources (Barr, Barth, & Shermis, 1977; Barton, 2009; Barton & Levstik, 2004; Booth, 1994; Fischer, 1971; Lowenthal, 2000; Nash, Crabtree, & Dunn, 1997; Spoehr & Spoehr, 1994). That “source work” is “the sine qua non of historical thinking” (VanSledright, 2010, p. 114).

In Wineburg’s (1991) landmark study of the cognitive processes used when considering historical sources, he observed historians working with primary and secondary source documents. On the basis of his observations, Wineburg identified three heuristics as intrinsic to developing or engaging in historical understanding: (a) *corroboration*, the act of comparing documents with one another; (b) *sourcing*, the act of looking first to the source of the document before reading the body of the text; and (c) *contextualization*, the act of situating a document in its temporal and spatial context. These heuristics have become the structure around which subsequent researchers have posed their further inquiries into understanding historical thinking and its application in educational settings.

Much of that subsequent study has centered on either teaching teachers to use these heuristics as a more authentic instructional methodology or teaching students to use these heuristics as the

intellectual framework within which to encourage intertextual analysis of historical accounts (De La Paz, 2005; Hynd-Shanahan, Holschuh, & Hubbard, 2004; Leinhardt & Young, 1996; Nokes, Dole, & Hacker, 2007; Perfetti, Britt, & Georgi, 1995; Tally & Goldenberg, 2005; VanSledright & Kelly, 1998; Wiley & Voss, 1999; Yang, 2003, 2007). The primary goal of both types of studies is, as Bruner (1960) exhorted, to allow students to learn history by acting and thinking like historians.

However, acting and thinking like a historian requires considering historical sources beyond traditional text: Artifacts such as clothing, tools, and buildings are also critical to the historical record. Yet, based on expert–novice and expert–expert studies of historians at work, expertise, beyond facility with the “deep structures” (Chi, Feltovich, & Glaser, 1981) of the discipline, has generally been narrowly construed as the “documentary expertise” of academic historians working exclusively with text and pictorial information (Leinhardt & Young, 1996; Rouet, Favart, Britt, & Perfetti, 1997; Wineburg, 1991, 1998).

But is this documentary expertise the most appropriate target for those attempting to expand the historical thinking abilities of teachers and their students? American adults cite historian-like deep documentary analysis as the history-related activity in which they are least likely to participate (Rosenzweig & Thelen, 1998). Thus, although it is important to understand what academic historians do at the furthest reaches of the discipline, it also bears considering how nonexperts—teachers, students, and lifelong learners—engage with history and whether, in those settings, we can model a kind of expertise in history more broadly relevant to them.

Rosenzweig and Thelen’s (1998) study of when and how Americans actually engage with history in everyday life revealed that they do so most frequently not in documents but in historic places. Historic sites<sup>1</sup> are increasingly called upon to help remedy the persistent reproach that many teachers lack both content knowl-

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<sup>1</sup> History museums and historic sites are part of the same professional community and work within the same professional standards. The distinction between places that are called “history museums” and “historic sites” is often merely a matter of tradition, or organizational preference, but for the most part is not substantive. Thus, the two terms are used interchangeably herein.

edge in history and enthusiasm for the subject (Fritzer & Kumar, 2002; Levstik, 2000; Ravitch, 2000). Several states, with Pennsylvania at the fore, are considering requiring preservice teachers to do part of their field work in museums and historic sites (Pennsylvania Department of Education, 2010). Every set of state curriculum frameworks includes recommendations that teachers should partner with historic sites and museums to help students learn about history. The most ambitious attempt to improve history education in a generation, the federally funded Teaching American History grants, includes a “statutory requirement” (Melendez, 2008) that grantees partner with museums, historic sites, or archives—an acknowledgment of the important role historic sites can have in improving history education.

Yet, Teaching American History program analysis reveals that there is a lack of clarity about how to best use historic sites (Humphrey, Chang-Ross, Donnelly, Hersh, & Skolnik, 2005). Within Teaching American History programs historic sites are most often used as passive “field trips” rather than opportunities for active analysis (Hall & Scott, 2007; Zeisler-Vralsted, 2003). Accordingly, project participants have shown improvement in historical content knowledge, but they continue to lag behind in evincing improved analytical skills or historical thinking (Humphrey et al., 2005). Clearly, missed opportunities abound.

This lack of improvement in analytical and historical thinking from mere exposure to historic sites derives in part from a lack of a clear sense of what it means to engage in historical thinking at these sites. There have been noteworthy anthropological, museological, and sociological studies of the intricate workings of historic sites and how they present their stories to the public (Handler & Gable, 1997; Lewis, 2005; Stanton, 2006), and of what the public ultimately learns from museums and historic sites (Hooper-Greenhill, 2007). However, there have been no studies offering insight into how historians attempt to analyze historic sites as historic artifacts or text.

Indeed, the previous research emphasis on studying historians’ documentary analysis has meant a dearth of research about the kinds of expertise necessary to “read” other kinds of historical text found at historic sites: buildings, landscapes, clothing, three-dimensional artifacts, and other aspects of material culture. Thus, an understanding of the essential methods of analysis and problem-solving historians employ at these sites is missing from educational and professional development programming. We must learn how to model these historical methodologies if we are to bring the materials and educational opportunities inherent in historic sites more successfully into the larger educational conversation.

The range of historic sites and the multiplicity of artifacts found within them require that we choose some near-universal element with which to begin such analysis. The present study focuses on an analysis of the historic buildings themselves, rather than their collections, as these structures are the central physical element of the historic site, and frequently the reason for its designation as such—the birthplace of, the home of, the site of, etc. Of primary interest is the building itself as an artifact, not necessarily in the explicit or implicit messages provided by curatorial choices or interpretations. So what type of “documentary expertise” is evident when historians read historic buildings?

Wineburg’s (1991) heuristics do not directly address the processes historians engage in when considering historic buildings or built environments. Even if one views historic buildings and their

contents as a type of document, they are, as architectural theorist Juhani Pallasmaa (2005) noted, documents that require multisensory engagement:

I confront the city with my body; my legs measure the length of the arcade and the width of the square; my gaze . . . roams over the mouldings and contours, sensing the size of recesses and projections; my body meets the mass of the cathedral door and my hand grasps it as I enter the dark void behind. I experience myself in the city and the city exists through my embodied experience. (p. 40)

This shift in perspective is so significant that it raises the question of whether the analytical and problem-solving processes involved are comparable to those Wineburg describes for document analysis. For example, corroboration is the process by which historians compare documents to check the plausibility of the accounts they give. If one document presents an account of a local battle, historians would bring another document to the table to corroborate this account. But how would one do a comparison of two buildings from the same era but in different cities or countries? Further, how might “plausibility” even be a standard for comparison of buildings? In what sense are buildings making claims that might be plausible or implausible?

Wineburg’s (1991) work led to fruitful research into improving the teaching of historical thinking. Thus, before we can determine the optimal uses of historic buildings for a similar purpose, it should be established whether Wineburg’s heuristics hold true for constructing meaning in the built environment of historic sites. If they do, it must also be determined whether these are the only appropriate heuristics for historical thinking at historic sites, or whether the many differences between historic sites and historic documents call for additional heuristics.

To determine what historical thinking looks like as it pertains to buildings, five practicing historians were recorded as they toured the Old North Church in Boston, Massachusetts. The purpose of these tours was to determine how experts in the field would construct historical meaning using a historic building.

## Method

### Participants

Each of the five participating historians holds a PhD in history, has considerable experience working with historic structures, and was at the time of the study working in his or her chosen specialty. The historians’ specialties are as follows:

- Historian 1 (H1): H1’s work centers on early New England history and historical archeology. Prior to his current academic post in public history, H1 served as a museum director and state historic preservation commissioner.
- Historian 2 (H2): H2 is an American Civil War historian with considerable experience in both academic and public history. Concurrent with his academic post, he has held interpretive posts at a nationally significant historic site.
- Historian 3 (H3): H3 is an architectural historian specializing in mid-20th-century architecture. Prior to her current academic position, H3 worked as an architectural historian in two internationally known historic sites and museums.

- Historian 4 (H4): H4 is an architectural historian whose work centers on the history of early-20th-century American homes. She currently works for a nationally recognized historic preservation organization.
- Historian 5 (H5): H5 is a former mainline Protestant seminarian and an academic historian of the French Catholic Church during the era of the French Revolution. Her work centers on sociopolitical life within church congregations of that era, rather than the physical environs of churches.

Three of the historians (H3, H4, and H5) had never visited the Old North Church, and two (H1 and H2) had not been inside in more than 15 years. All five historians expressed a general familiarity with the story of Paul Revere and the lanterns but had no specific knowledge of the larger history of the Old North.

### Procedure

There were three sections to the procedure: term identification, protocol introduction, and historic building analysis. The first two procedural elements, the term identification and protocol introduction, were administered in the administration building of the Old North Church campus, adjacent to the church. Subjects did not have to enter the church to get to this section of the Old North campus. The third element, the historic building analysis, took place in and around the Old North Church proper.

**Term identification.** In keeping with Wineburg (1991), subjects were asked to identify 12 terms related to the colonial period as a “rough measure of background knowledge” (Wineburg, 1991, p. 75). As Wineburg’s study and the current one investigate materials of the same period, pertaining to events at the opposite ends of the same day, the same terms were used.<sup>2</sup> These terms were (a) Olive Branch Petition, (b) George Grenville, (c) virtual representation, (d) salutary neglect, (e) Townshend Acts, (f) Quebec Act, (g) Proclamation of 1763, (h) Pontiac, (i) Battle of Saratoga, (j) “one by land, two by sea,” (k) internal taxation, and (l) Fort Ticonderoga.

**Think-aloud protocol introduction.** Subjects were then presented with a protocol for using a think-aloud procedure (Ericsson & Simon, 1984) and asked to apply the think-aloud procedure on a tour of the Old North Church.

**Historic building analysis: Old North Church.** The most significant modification of the Wineburg (1991) study is in replacing the set of historic documents and photographs with the Old North Church building. Viewing historic buildings tends to be a more holistic, nonsequential experience (Falk & Dierking, 2000) than viewing documents, which can easily be excerpted and selectively read. However, to allow them to take in the building in smaller sections, the subjects were first asked to assess the exterior, including both the building proper and its setting; the first floor of the interior, roaming wherever they wished; and finally the second-floor galleries of the church. Subjects were limited to the sections of the building that are only accessible to the public. Each used handheld audio recorders to record their thoughts as they moved through the building, but had no additional interpretive media (e.g., guided tour, reading materials, pamphlets) beyond the Old North Church itself.

**The task.** Although previous studies ask historians to use documentary evidence to solve a query related to a specific event,

buildings present multiple time periods simultaneously, often in the same artifact. Accordingly, the historians could have correctly interpreted the Old North to any era or event from 1723 to the present. One of the primary considerations when developing the task was to uncover the processes the historians employed related to the multiple time periods evident. Thus, the task was designed to elicit the broadest possible reading of the building, consistent with how the historians might encounter a new historic site. Accordingly, they were asked how they would “make meaning” out of the building. This phrase was chosen to avoid using value-laden terms such as *interpret* that might carry disciplinary or theoretical assumptions (e.g., feminist interpretations) about what they would do when presented with a building.

Following the think-aloud protocols, the participants sat for structured interviews, but that data is not considered here.

### Materials: The Old North Church

To convey a sense of the layers and contradictions within the building’s visual record, the major elements of the church’s interior are discussed here to establish some sense of the difficulty in reading the “text” it presents to the historians. As with most historic buildings, the current configuration of the Old North Church is an amalgam of original materials, a series of repairs, changing fashions, restorations, and modern intrusions necessary to maintain the building as both a working church and a historic site that welcomes more than 500,000 visitors annually.

Although the primary structure remains largely in its original configuration, the interior of the church currently reflects a 1912 Colonial Revival restoration (see Figure 1). In short, it is decorated the way people in 1912 believed or hoped it looked in 1775; however, paint analysis and subsequent historic structures reports confirm that it is not an accurate reflection of how it would have looked during the Revolutionary era (Batchelder, 1981). In the midst of a massive influx of Italian Catholic immigrants into the neighborhood at the turn of the last century, the 1912 restoration stripped the Old North of its high Victorian embellishments to more closely resemble a simple, white, Congregationalist meetinghouse that people think of in association with Patriot Boston. The purpose of this redesign, according to Bishop William Lawrence, who oversaw the 1912 restoration of the church, was “that we shall have a little oasis of old Americanism right in the midst of that Italian population” (Lawrence, 1912).

Restored in 1912 to its original 1723 floor plan, the interior of the Old North comprises box pews, which individual families during the colonial era purchased and maintained as semiprivate property (Lawrence, 1926). A family’s pew and its location was a symbol of that family’s wealth and social standing; thus, pews were frequently decorated with fine fabrics and furniture. At the front of the church sits one example of a decorated pew, the Bay Pew, which commemorates the donation from the Bay of Honduras shipping company, which donated the funds necessary to build the church’s first steeple (Babcock, 1947).

<sup>2</sup> Wineburg’s (1991) study involved asking people to evaluate documents pertaining to the Battle of Lexington, which took place on April 19, 1775, the morning after the lantern hanging in the Old North Church and Paul Revere’s ride.



Figure 1. Interior of the Old North Church, view from altar.

The religious affiliation of the Old North has always set it apart from the dominant religious movements in Boston and its North End neighborhood (see Figure 2). In the 18th century, the Old North was established as an Anglican parish in the middle of Congregationalist Boston (Babcock, 1947; Mayer, 1976). As members of the Church of England—the very church whose persecution Boston’s Puritan forbears left England to escape—the congregation at Old North had a large Loyalist population and was deeply involved in the commercial and governmental pursuits of the Crown within the colony. However, of all the Anglican parishes in Boston, it was considered the most sympathetic to the Patriot cause. Throughout the 19th and 20th centuries, the Old North stood as a Protestant church in what became a “ghetto” for, in turn, Jewish, Irish, and Italian Catholic immigrants. These incongruities are rife throughout the physical plant of the Old North.

Within the church, the altar area is distinctly Anglican in form and function. The organ, still in its original location, is also indicative of Anglican rather than Congregational services, where the use of instrumental music was frowned upon (Mayer, 1976). However, the Victorian wineglass pulpit and sounding board are most frequently found in New England churches, in which greater emphasis is placed upon preaching than on (or in the absence of) the Eucharist.

Inside the church, memorial plaques commemorating both Patriots and Loyalists who died during the Revolution line the walls.

Similarly, above the congregation fly flags of Great Britain, Saint George, and many of the early New England colonies. However, also honored is Reverend William Crosswell, believed to be instrumental in stoking the anti-Irish, anti-Catholic feelings that led to the 1834 burning of the Ursuline Convent in Charlestown (Schultz, 2000). Finally, the building now used as the gift shop is the deconsecrated chapel built in 1918 for Italian Waldensian Protestants.

These multiple themes, time periods, and philosophical and religious differences all coalesce into a historic site that opens its doors to visitors daily. Other than the guide staff, there are no interpretive media—no placards, no interpretive panels, no self-guiding materials—that explain the layers of the building’s history to visitors. Thus, it requires a certain expert knowledge to begin to untangle these disparate elements to make sense of them in the context of the physical space of the Old North.

### Protocols

After conducting the protocols, significant differences between the historians in terms of years of experience, familiarity with the time period, and facility in working with material culture became evident. The historians with more expert knowledge working with material culture and buildings simply read the building, but often struggled to describe the specific strategies they employed (Chi, 2006). Similarly, the historians with greater experience in the

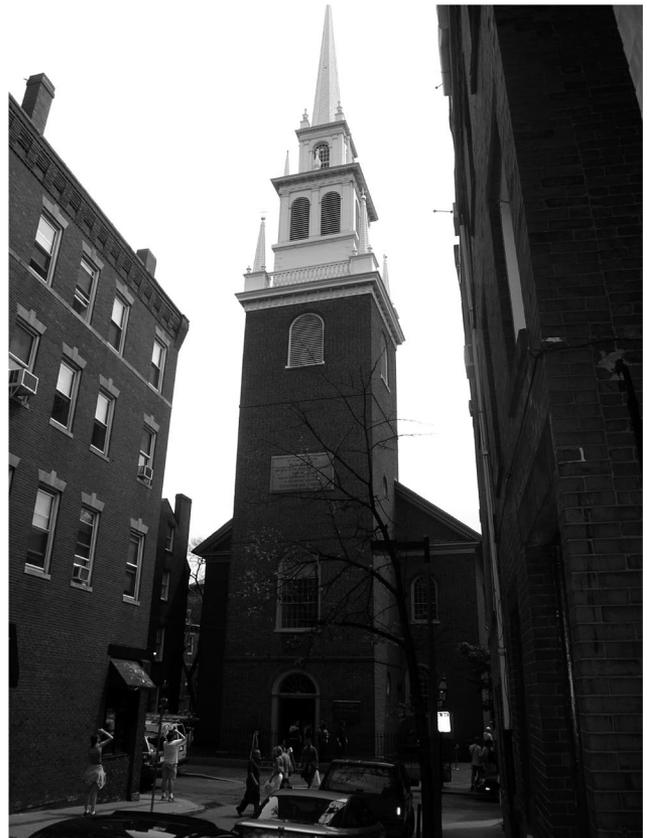


Figure 2. Exterior view of the Old North Church from Salem Street entrance.

period spoke almost entirely of the content connections they could make with their prior knowledge, using fragmentary cues to activate a schema that allowed them to pose a general reading of the site, followed by subordinate interpretations specific to their specialty (Chi et al., 1981; Voss, Greene, Post, & Penner, 1983). Conversely, those with less experience in the period or with material culture more openly employed “metastatements” (Simon & Simon, 1978) about the thinking strategies they were using to make meaning while trying to generate the general site reading (Voss et al. 1983).

Thus, to contextualize the commentary provided by the historians, prior to analyzing the transcripts of their tours, I ranked them according to their relative experience, based on the continuum of skills and domain knowledge that would be most helpful in interpreting the Old North Church as a historic site: area of specialization, primary evidentiary material used in their work, number of years as a professional historian, and number of correct responses to the term identifications (as listed in the Procedure section). Rankings were determined with the criteria and point values outlined in Tables 1 and 2.

**Researcher Interactions in Protocols**

Although every effort was made to keep participant–researcher interactions to a minimum, the logistics and social dynamics of moving the participants through the physical space of an active historic site required a level of participant–researcher interaction that was higher than standard think-aloud protocols would allow.

The total interaction differed with each historian (see Table 3), with H1 the least interaction (1.96% of transcript) to H5 (26% of transcript), who largely ignored the protocol instructions and asked the researcher direct, persistent questions throughout the protocol.

Accordingly, the protocols are punctuated with participant–researcher interactions that primarily consisted of three types of researcher interruptions: navigation/instruction, back channeling, and factual responses (see Table 4).

**Navigation/instruction.** Navigation/instruction statements consisted of instructions or directions necessary to move participants through the physical space or clarify the think-aloud procedures.

**Back channeling.** When the participants would take a long pause or offer a conversational turn to the researcher, the researcher employed back channeling to avoid taking a speaking turn and yield the floor back to the participant (Duncan, 1972). In addition to back channel signals such as “Mm-hmm,” “Yeah,” and

“I don’t know,” the protocols included brief requests for clarification, restatement in a few words of an immediately preceding thought expressed by the speaker (Duncan,1972).

**Factual response.** On several occasions, in response to direct questioning, the researcher offered factual information. This was most frequently (H2, H3, and H5) about the property limits or areas of the building (basement or crypt) that were beyond the areas to which the historians had access. As little information as possible was offered. Longer sequences with H2 and H5 ended with the researcher redirecting the historian back to the think-aloud.

**Other.** Utterances categorized as “other” indicate minor interactions that occurred but bore no relation to the task at hand. For example, the researcher responded to H3’s observation about a missing or broken architectural element indicating that those concerns would be brought to the attention of the facilities department.

**Coding for Historical Thinking**

The protocols were transcribed verbatim and then coded in a multistep process. To create manageable units for analysis, transcripts were divided into content–subject area units related to the different physical areas of the church (e.g., pews, windows, plaques) or related to the subject discussed (e.g., role of the congregation, mixture of history and religion) wherein the historians expressed complete or distinct units of thought about what they encountered. These units ranged in size from 27 to 244 words, averaging 108 words. A second rater reviewed the units to confirm that the units reflected distinct units of thought.

The first round of deductive coding attempted to annotate the units using Wineburg’s (1991) heuristics: (a) corroboration, (b) sourcing, and (c) contextualization. However, when it became clear that Wineburg’s heuristics did not fully reflect the historians’ processes, this scheme was abandoned.

Next, an inductive approach to develop codes was employed. Broad categories were developed based on the primary question the historians appeared to be posing or type of information they were attempting to gather in response to the historical site. These categories of historians’ questions were repeatedly refined, augmented, eliminated, and further refined until the final heuristics emerged. The decision rule for including a heuristic in the final framework required at least two instances of the specified heuristic in each of the historians’ protocols.

The protocols were fully coded according to the heuristics. When multiple codes were appropriate, judgments were made as to

Table 1  
*Criteria for Historian Rankings*

Criterion	Most expert knowledge (3 points)	Moderate expert knowledge (2 points)	Least expert knowledge (1 point)
Area of specialization	Early American history (pre-1789)	American history (post-1789)	Non-American history
Primary evidentiary material	Works primarily with artifacts/buildings	Works equally with artifacts and buildings/documents	Works primarily with documents
Number of years as a professional historian <sup>a</sup>	20+	10–19	1–9
Term identification (correct responses)	9–12	5–8	0–4

<sup>a</sup> Calculated from completion of PhD.

Table 2  
*Historian Rankings, Most to Least Expert Knowledge*

Historian (H)	Area of specialization	Primary evidentiary material	Years as practicing historian	Term identification	Raw score	Rank
H1	Early American	Buildings/documents	20+	9–12	12	1
H2	American	Documents	20+	9–12	9	2
H3	American	Buildings/documents	10–19	0–4	8	3
H4	American	Buildings/artifacts	1–9	0–4	7	4
H5	European	Documents	1–9	0–4	4	5

which code was most important and characteristic of that instance. These judgments were checked with the second rater.

### Results

Observed instances of historian utterances per category are presented in Table 5. Upon completion of the coding, three raters with no knowledge of the historians' identities or qualifications were used to assess the reliability of the coding scheme. Each rater assessed the full protocols with the coding scheme. Each separate statement was treated as a single unit, giving 174 points of comparison between the raters. Overall, Fleiss' kappa is .96, with a 95% confidence interval of 0.92–1.01.

### Analysis

The following is a discussion of the utterances in the historian transcripts as they relate to these heuristics.

**From sourcing to origination.** As described by Wineburg (1991), sourcing involves looking at the source of a document before reading the body of the text. He also indicated that searching for the source of a document is one of the first actions historians perform in their attempts to understand it.

In relation to historic buildings, sourcing is a problematic heuristic. Although historians may attempt to ascertain which individual or group of people built a building, very few buildings are the result of single authorship in the same way documents typically are. Most public buildings contain a great many stakeholders—financiers, bureaucrats, architects, artisans, laborers—who, over long stretches of time, work in harmony or at odds to present a building to a public that might use it differently than originally intended. Thus, authorship is essentially a collective activity, the understanding of which is best described as combining sourcing and contextualization: The where (geography and landscape) and when (changes over time) of Wineburg's (1991) contextualization combines with the "circumstances of document generation" (p. 83) determined in sourcing.

Table 3  
*Words per Protocol*

Historian (H)	Total	Historian	Researcher	% (Researcher)
H1	5,610	5,500	110	1.96
H2	3,757	3,403	354	9.42
H3	5,436	5,229	207	3.81
H4	3,230	3,049	181	5.60
H5	2,420	1,780	640	26.45

As with document sourcing, each of the historians in this study sought to establish the circumstances of the buildings' origins before moving on to subsequent questions in their investigation. H1, the early New England historian, articulated the first part of his process:

First thing I do is try to place it in its original context, to get some idea what it originally looked like when it was originally built. I am really concerned with what the original setting of that building would have been and how that may have changed over time, because it is really impossible to even begin to understand the intent of the builders and the occupants and the people who were involved in creating that building unless you get a sense as to what it looked like in its original landscape and not just its original appearance.

At the outset of the church tour, H3, the architectural historian, similarly attempted to identify the circumstances of generation of the building, starting with its siting, and the series of choices that any of the players involved with the origin of the building made:

I would start with its siting, its location, . . . how the architect, builder, or designer chose to place the building on the site they had, they would have had a parcel plan set aside, and then their next decision would have been where to locate the building on that site. How big to make the building on that site? Did they want to use the entire site for the building? Or did they need to save some of the site for, say, a cemetery, if it's a church, or some other activity that the function of the building might have needed?

It is clear that the historians are attempting to discern the origins of the building; not necessarily in the sense of who made it, but rather by asking "How did it come to be in this place?" And unlike determining the source or attribution of a document, in relation to a building there is no one simple statement that could answer that question. However, the questions the participants present offer an attempt at situating the building in a series of contexts—economic, social, religious, geographic—to determine why the building exists as it does.

Table 4  
*Subcategories of Researcher Words*

Historian (H)	Navigation/instruction	Back channeling	Factual response	Other
H1	10	89	11	0
H2	49	108	197	0
H3	77	95	5	30
H4	151	30	0	0
H5	171	219	240	10

Table 5  
*Observed Instances of Historian Utterances per Category*

Historian (H)	Origination	Intertextuality	Stratification	Supposition	Empathetic insight
H1	9	3	24	9	8
H2	2	6	15	2	8
H3	6	7	10	12	5
H4	3	12	5	4	4
H5	2	7	3	5	3

Thus, rather than using sourcing as the standard for historical thinking, it appears that what the historians are attempting to understand is the larger question of *origination*, rather than singular documentary authorship.

**From corroboration to intertextuality.** Wineburg (1991) defined *corroboration* as “the act of comparing documents with one another” for the purpose of checking “important details against each other before accepting them as plausible or likely” (p. 77). Within cityscapes, particularly one with as diverse a body of architectural forms as Boston, it is easy to imagine that historians could compare one building to another. And certainly, within the historian protocols, each of the historians referenced the buildings surrounding the Old North Church to derive some type of meaning from the available evidence. This referencing, however, is much more akin to contextualization—understanding the where and when of historical events—than it is to corroboration.

Unlike documents, which can be compared side by side, buildings are not portable; thus, it is impossible for the historians to complete a side-by-side comparison of the Old North Church to buildings other than the ones adjacent to it. Further, the historians cannot check “important details” of a building to see if they are “plausible” or “likely.” The concrete details of a building simply *are*—they *exist*. The concept of plausibility does not apply to the features from which the participants attempt to derive meaning.

Rather, the historians in the present study consistently refer to building elements as a set of choices and describe other buildings where similar sets of choices were made—in terms of both the physical structure of the building and the physical expressions of the religious and social workings of the church—to other, different churches and historic buildings from similar time periods. H4, the architectural and house historian, provides a case in point:

I’ve seen [the sounding board] in several of the churches [in New England] that I am not familiar with, coming from the Midwest. That would be the first question that I would ask: What can you tell me about why [the sounding board] hangs over the pulpit? I am also really interested in the pew boxes because that is something that I am not familiar with. I would imagine that looking at this church, what I draw from mainly is my own [Catholic] background. None of the churches I went to looked like this, they didn’t have pew boxes, or [the sounding board], but . . . I recognize some basic things, these are pews, the altar is up there, the pulpit, altar rail. . . .

Here H4 identifies the elements of church architecture and decoration with which she is already familiar (pews, altar, pulpit, altar rail); but as she surveys the interior of the church, she holds three specific forms in her mind’s eye: her sense of distinct geographic features (the Midwest), her sense of what a Catholic

church looks like, and her sense of the religious practice and rites of the Catholicism.

Thus, to understand what is presented to her in the form of a church, H4 does attempt to make comparisons between what she sees before her and what she knows about other churches, but the inability to make side-by-side comparisons with other churches leaves H4 to construct her information in relation to a mental model of a church, and thus establishes her childhood midwestern Catholic church as the canonical form of what a church looks like and how it functions. From this mental model, H4 attempts not only to geographically situate the church via distinct New England vernacular features (box pews, sounding board over the pulpit), but also to situate the conventions of the faith practiced within the church (inclusion of an altar rail).

Throughout the protocols, in addition to using their own personal houses of worship as a basis for comparison, each of the historians offered a range of historic churches that they cite in their attempts to discern meaning: Christ Church, Philadelphia; Presbyterian Church, New Castle, Delaware; Immanuel on the Green, New Castle, Delaware; Old South Meetinghouse, Boston; Trinity Church, Boston; the churches designed by English architect Christopher Wren; and collectively, the Catholic churches of France and Italy. Employing something of a “Goldilocks” strategy, the historians used these buildings to situate the Old North Church among a similar set of buildings that they declared either more or less ornate, of contemporaneous design, or of similar religious expression.

In terms of design and ornamentation, the historians typically indicated a cluster of buildings within which to situate the Old North and draw out comparisons. For example, throughout her tour, H5, the academic French historian, being less familiar with American churches, used the ornamentation as a framework within which to situate Old North:

The image I had was that [there were] these rugged colonists confronting the brutal king . . . because everything that old where I am from [West Virginia] is quite rugged. We do have some 18th-century stuff left, but it is logs. As I approached I thought, it’s very comparable to the buildings in Philadelphia. The same style. Also interesting is all the light that is in this place is so different from churches in Dijon [France], where they are big gray tombs. They have some windows, but they are mostly stained glass, they don’t have nearly as many windows. They look more like some form of strict Congregationalists with this austere setting.

Thus, it appears that the historians engage less in the act of corroborating plausible details of other churches with that of the Old North than in reading the buildings intertextually (Leinhardt &

Young, 1996). However, to distinguish this process from their work with traditional text, we can say that these historians work *intertextually*—between buildings.<sup>3</sup> Working *intertextually*, historians situate the Old North in a field of related buildings and attempt to check the architectural features and the procedural workings of the Old North as a historic church, with their prior understanding of the form, functions, duties, or rituals of other churches or historic buildings encountered. The *intertextual* analysis from H5's commentary above is set out in Table 6.

The ability to perform this check is dependent upon both the visual memory (specific to distinct architectural features) and the functional community elements (e.g., Anglican services vs. Congregationalist services, understanding relative community wealth, skill of builders) with which the historians are familiar. The primary question historians appear to be asking themselves is "How does what they did here compare with what has been done elsewhere?"

These questions of form and function of the building operate as distinct from questions regarding documentary accounts of events that may or may not have taken place within its walls.

**Contextualization to stratification.** Wineburg (1991) defined *contextualization* as the act of situating a document in concrete temporal and spatial context. With contextualization, historians, Wineburg asserted, seek to answer the questions of the when and where of a particular historical event. When encountering the Old North Church, the question of where is resolved without having to ask it. The where *is* the Old North Church, in the North End of Boston. Accordingly, the *when*, the multiple layers of time and social conditions during which various events took place, becomes the focus of the historians' inquiry. However, as distinct from situating a document in a single time or place, the historians in their discussion of the Old North sifted through the strata of time evident within a single building to situate individuals, events, or building elements within their proper strata. Rather than make a static attempt to date elements, the historians constantly moved between the time periods. Thus, *stratification* is about sorting through the layers of evidence available and placing the individuals, events, or building elements within the layer most appropriate to further the discussion, sifting and relegating anachronistic elements to their appropriate period or place.

To this point, few differences emerged between the historians based on their experience levels; however, the ability to stratify the buildings relies to a great extent on the specific prior knowledge that historians bring to the process. It is with stratification that the differences in experience level begin to emerge.

For example, H1, the early New England historian, who had the greatest prior knowledge of the time periods and the social and political movements most relevant to understanding the Old North, was able to establish contextual strata of time across a 300-year sweep of Boston history:

It says "Christ Church 1723," which tells you that this is not a Puritan Church but a Church of England church. This is interesting when you think of Copp's Hill, the cemetery right up the street, one of the leading Puritan cemeteries in Boston. So we have an image of Anglican royal authority in the middle of Puritan Patriot Boston . . . and an example of an 18th-century building that shows the increasing prosperity and rational order [and how] these citizens brought the Enlightenment to America. [Note] the large, impressive size of this church. To think of how well built the church must have been almost

300 years ago to be still standing today. [It] is an indication of the wealth and prominence of Boston in the early 18th century. When I was driving in, coming over Mystic/Tobin Bridge, there the church dominates the 18th-century township that really much of the North End still looks like.

When laid out against the time periods discussed, as in Figure 3, it is easy to see the fluidity with which H1 moves between the different eras presented. Beginning with the date of the church's founding (1723), H1 reaches back to ground the church in the 17th-century religious struggles in England (Puritans vs. Church of England) and the European intellectual movements (the Enlightenment) that influenced the appearance of the building. He then situates the church among the commercial rise and the political struggles of 18th-century Boston ("Puritan Patriot Boston" vs. "Anglican royal authority"). He then evaluates, in quick succession, the size and condition of the building, originally as a reflection of the wealth of the 18th-century builders, as well as the efforts of the 19th- and 20th-century caretakers. Finally, he juxtaposes the building in its contemporary context to its original 18th-century context ("the 18th-century township that really much of the North End still looks like").

Throughout the rest of their tours, H1, H2, and H3 made these stratifications with relative ease (24, 15, and 10 times, respectively). Conversely, the historians ranked as having the least prior knowledge relevant to understanding the Old North, H4 (five instances) and H5 (three instances), had considerably more difficulty sorting through the dissonance that the 1912 Colonial Revival restoration creates in the visual record. Not knowing enough about the Old North, they attempt to piece together the elements to build a consistent picture of a time period, but lack of specific prior knowledge inhibits their ability to infer further information (Chi, Glaser, & Rees, 1982; Falk & Dierking, 2000; Voss, Tyler, & Yengo, 1983) and leads them into dead ends. Further, the perceived trustworthiness of the evidence offered by the site both revealed and exacerbated their interpretive limitations (Rosenzweig & Thelen, 1998; Rouet, Britt, Mason, & Perfetti, 1996; Rouet et al., 1997).

In the example below, H4, the 20th-century architectural and house historian, clearly identified the discontinuity between the original High Church Anglican features of the Old North, with the more spare elements borne out of the Colonial Revival restoration. H4 clearly attempted to build the contextual layers of the church but was missing key elements necessary to do so. Of interest is H4's inability to properly stratify what she is seeing and beginning to shift into a series of questions and problem-solving techniques (indicated by \*\*):

The question I have about the organ would be when that came in? I don't know a date, but it doesn't seem to be part of the original equipment. It looks flashy compared to the rest of the building. It's beautiful, but a lot more ornate than everything else. I'm surprised by the gold and the angels; maybe it's the white New England church thing that says to me austerity—and then you come in and see this. \*\* I guess looking at the organ leads me to wonder what kind of hymns they sang and what the musical part of their service was like. If they used it for anything else. Who was the organist? What was their role in the church? If this was added later, how did they pay for it? Did

<sup>3</sup> From the Greek root *tektos*, meaning "building."

Table 6  
 Analysis of Historian 5's Intertextual Analysis

Less ornamentation	Most approximate	More ornamentation
Everything that old where I am from [West Virginia] is quite rugged. We do have some 18th-century stuff left, but it is logs.	It's very comparable to the buildings in Philadelphia . . . They look more like some form of strict Congregationalists with this austere setting.	Also interesting is all the light that is in this place is so different from churches in Dijon [France], where they are big gray tombs. They have some windows, but they are mostly stained glass, they don't have nearly as many windows.

they, you know, raise funds for it in the church? Was there a tithe? That would be one of my first questions: When did it get put in? Was this an original part of the building?

In the absence of additional information, once the visual record becomes too muddled to effectively delineate the strata of time presented, she begins to employ a problem-solving heuristic, the *supposition* (discussed below), in an attempt to reconcile the visual record with her prior knowledge.

**Wineburg and Beyond**

As indicated thus far, the actions historians engage in when interpreting historic buildings are initially very similar to the

three heuristic models proposed by Wineburg (1991), though they require modifications to be useful for understanding what historians do with historic buildings. However, beyond the heuristics Wineburg laid out, the historians frequently took a fourth step in interpreting the site. This step proceeds in one of two ways, as either a *supposition* or an *empathetic insight*. The historians did not always proceed to this step; rather they applied it when prompted by something they saw or noticed was missing in the historical record. However, these processes are clearly distinguished in both frequency and form and merit inclusion in any framework for historical thinking relating to historic buildings.

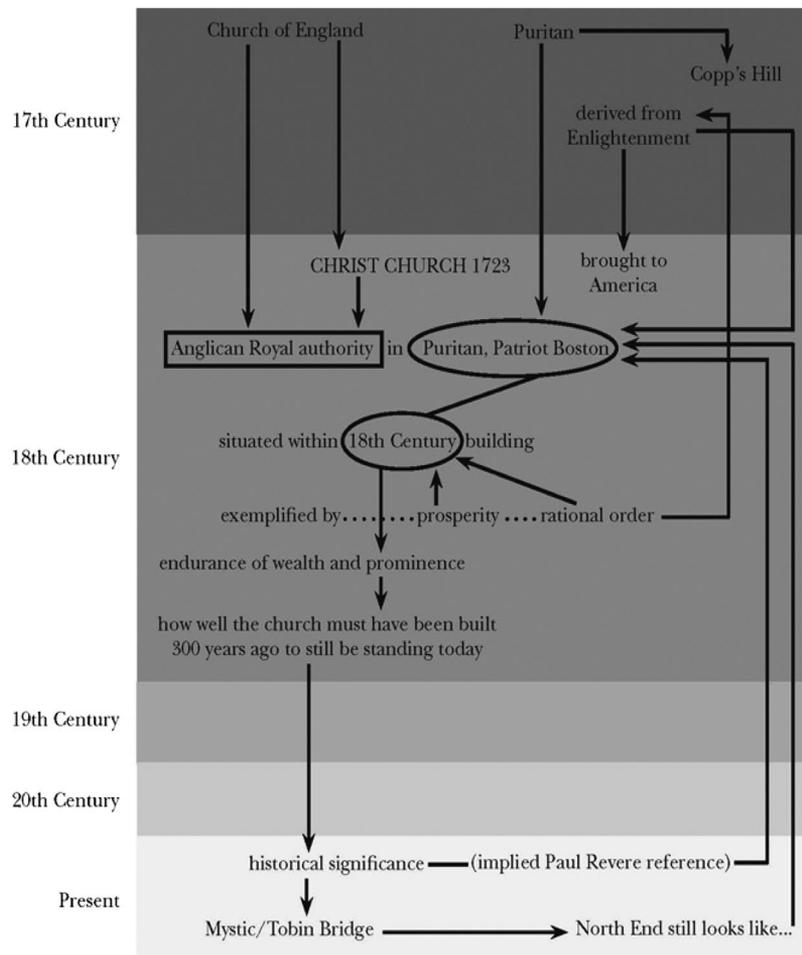


Figure 3. Analysis of Historian 1's stratification.

Inherent in this step is a shift away from information gathering and direct analysis of physical elements and to a synthesis of factors, both seen and unseen, that allow the historians to propose interpretations that include, but go beyond, available physical evidence (Bloom, 1956; see also Anderson & Krathwohl, 2001). The ability to perform this departure is deeply dependent upon the information gathered via the previous heuristics, but offers a sense of what they do with the information once they have gathered it. In that sense, there is a taxonomic division between these heuristics and those previously outlined.

**Supposition.** Although Wineburg (1991) dealt primarily with how historians use the evidence presented to them to construct a sense of what occurred in a given set of documents, he did not fully explore what historians did in the absence of certain information. Though he did observe that two of his historians made note of the absence of information and indicated that this might provide a “clue to how historians ‘find’ new research questions” (Wineburg, 1991, p. 82), he did not fully explore this in his study. However, though buildings are text, they tend to be nonlinear in their presentation. Thus, the historians, in addition to engaging prior knowledge to interpret the building, inferred a good deal of information from what they saw.

What historians do in circumstances in which evidence is missing or when they must go beyond their prior knowledge is consistent with the aspect of historical thinking described as “historical imagination.” Use of the word *imagination* on its own is enormously problematic because, given its use in common parlance, when applied to historical thought it is likely to be so misunderstood as to be rendered useless. To say, then, that the historians were engaged in imaginative thought is not to say that they engaged in creative flights of fancy. Instead, they employed a particular type of imaginative thought, the supposition (Lee, 1978, 1984), as a problem-solving strategy with which they could both depart from the evidence presented and root this departure in that which is known.

Throughout their tours of the Old North, the historians used suppositions in two very consistent ways, in the form of either a tentative hypothesis or an if-then proposal.

As in the example of H4 above, the historians would occasionally encounter elements that could not be easily reconciled with prior knowledge, outside sources, or the rest of the physical record (e.g., “The question I have about the organ would be when that came in? . . . It looks flashy compared to the rest of the building”). In these instances, the historians began to gather evidence, usually in the form of a series of questions (“Who was the organist? What was their role in the church? If this was added later, how did they pay for it? Did they raise funds for it in the church? Was there a tithe?”), and propose hypotheses—tentative assumptions—about what might have happened and why (“I don’t know a date, but it doesn’t seem to be part of the original equipment”).

Frequently, while developing these hypotheses, historians suggested documentary evidence or alternative sources to answer their questions, but in the absence of the materials necessary to resolve the question, they seemed to file away the information as an intriguing tidbit, mention it as a starting point for future research, or return to it to try again to make sense of it.

With the supposition, the historian stacks the information to create an evidentiary foundation from which to depart from the known. In other words, the historian says to herself: “The evidence

on its own does not resolve the query. Therefore, based on the available evidence, prior knowledge, and how I understand the world to work, what is a plausible scenario or outcome?” The exchange below, in which the researcher and H5, the academic French historian, are viewing the Old North’s recently excavated Newman Window, is an example of a supposition employing a hypothesis:

*H5:* Well, after . . . originally it stopped here . . . originally it was a window. Or did they just wall it up?

*Researcher:* They just walled it up.

*H5:* Taxes?

*Researcher:* What do you mean, “taxes”?

*H5:* I don’t know—earlier periods in history, people walled up windows for tax purposes . . . but that doesn’t seem like that would apply to a church. . . . The church seems to have given money to the Crown in other ways besides direct taxation. So why did they wall up the window? Interesting. The other side doesn’t have a window. Maybe they have a little design? Maybe somebody who was rich here was getting sun in his eyes: “Shut that damn window! Wall it up!”

Here H5 is engaged in a systematic elimination of possible factors that may have led the congregation to brick-over a southern-facing window. The evidence is incomplete or misleading and requires an attempt to solve the visual discontinuity beyond the available evidence and her prior knowledge, but the supposition offered is well within the bounds of probable human behavior. However, merely imagining beyond the evidence is insufficient to qualify as “historical thinking.” For a supposition to be historical thinking, it must satisfy the following frames: (a) connect to a specific physical space, (b) consider specific historic agents, (c) pose a hypothesis or if-then statement positing a plausible solution to or reason for the information gap,<sup>4</sup> and (d) root the whole performance in specific prior historical knowledge. Accordingly, the above excerpt rises to the level of the historical thinking:

- a. Connection to the physical space: Newman Window;
- b. Specific historic agent(s): “They” (members of the congregation; those responsible for the maintenance of the church);
- c. Hypothesis: “Maybe somebody who was rich here was getting sun in his eyes: ‘Shut that damn window! Wall it up!’”;

<sup>4</sup> Though not observed in this study, it is conceivable that different historians presented with a different protocol could problem-solve in a manner consistent with the framework outlined here but replace hypotheses and if-then statements with other weak general methods—particularly analogy or generate-and-test strategies (Newell, 1969; Newell & Simon, 1972). Should that be the case, it is recommended that those methods be added to the known strategies employed within the supposition heuristic.

- d. Connection to specific prior historical knowledge: “People walled up windows for tax purposes” and “but that doesn’t seem like that would apply to a church. . . . The church seems to have given money to the Crown in other ways besides direct taxation.”

In this way, by using very controlled imaginings, the historians attempted to solve the problems that arose from having an incomplete record. With the supposition, the historian stacks the information to create an evidentiary foundation from which to depart from the known.

**Empathetic insight.** In addition to their attempts to ascertain what the various historic agents at the Old North did throughout the centuries, in response to some physical stimuli provided by being in a historic place, the historians attempted to understand or describe what these people likely experienced as historical events unfolded around them. The historians attempted to understand the historic agents and employed a nuanced type of empathy that Lee (1984), in his study of historical imagination, describes as an achievement: It is the ability to consider the beliefs, motives, and emotions of people or groups without actually needing to feel these oneself.

Within each of their tours each historian presented at least three instances of empathetic insights in their tours of the Old North (see Table 5). How they came to employ empathetic insights follows a very controlled pattern in which the historians created contextual frames around the possible emotions or interpersonal interactions in a given set of historical circumstances. The ability to construct these frames appears to be dependent upon the historians’ prior knowledge of the period and ability to discern meaning from the site itself via the previous heuristics. In this way, empathetic insight is less about gathering new information than it is about using the information previously gathered to render possible interpretations about the lives of the historical agents. Accordingly, historians with greater prior knowledge (H1, H2) employed empathetic insights more frequently than their junior counterparts.

For example, H2, the American Civil War historian, who easily read the site throughout his protocol, pondered complex interpersonal relationships amid the larger religious and societal struggles of the time:

Here’s an example of the heartbreak I was suggesting might have been present in this parish. [Reverend Byles] may have been well loved by many, but because of his political allegiance, or his allegiance to the

Church of England, and the king of England, he’s banished. And if he comes back—death without benefit of clergy? For a priest? That’s tough to read. We still have that kind of tension today. People suspected are in some danger because they look Muslim, or in previous years, in the 1850s, Catholics, particularly Irish Catholics, but, death without benefit of clergy? That has Puritan overtones, or overtones of the Middle Ages, Catholics torturing and killing Protestants, and Protestants doing the same to Catholics.

The structure of H2’s comments are set out in Table 7.

Conversely, H3, H4, and H5 offered fewer instances of empathetic insight, but when they did, it was within an area related to their area of expertise. For example, H4, whose work requires extensive knowledge of the building practices of early New England settlement, described the reaction that early settlers might have had to finding the vast forests of the eastern woodlands:

The boards that were of a certain width were saved for the king for the masts of his ships. When you look at these, how huge those trees must have been, . . . but knowing that people settled here from England, [which] they pretty much deforested, and then just the sheer joy they must have had when they saw all this wood and then chopped it all down. . . .

The framing of the empathetic insight from H4’s comments above are set out in Table 8.

This is not evidence that what historians employ is a more authentic historical empathy than that of nonhistorians, nor that historical empathy is divorced from other forms of analysis. Rather, it is evidence of the structure historians create so that they may consider the affective factors of historical agents’ lives beyond what strict analysis of the artifacts permits. The use of these frames provides the structure from which the historians can reasonably depart from the available evidence to consider affective conditions and influences without devolving into flights of fancy. Conversely, the restraint showed by the historians less versed in the particulars of the site indicates how conservatively historians employ empathetic insight.

**Similarities and Differences**

The underlying assumption that ran through all the historians’ protocols was that the building before them was inherently layered. Unlike in work with documents in which historians attempt to assemble a whole from fragments, the historians in the present

Table 7  
*Analysis of Historian 2’s Empathetic Insight*

Emotion/value/belief	Political situation <sup>a</sup>	Clergy punishment <sup>b</sup>	Religious persecution (general) <sup>c</sup>	Religious persecution (specific) <sup>d</sup>
The heartbreak I was suggesting might have been present in this parish	But because of his political allegiance, or his allegiance to the Church of England	And if he comes back, death without benefit of clergy? For a priest?	We still have that kind of tension today. People who are suspected of being or are in some danger because they look Muslim, or in previous years, in the 1850s, Catholics, particularly Irish Catholics	That has Puritan overtones, or overtones of the Middle Ages

<sup>a</sup> Statement related to the political situation in the colony. <sup>b</sup> Statement related to harshness of denying religious ritual to clergy as punishment for political position. <sup>c</sup> Statement related to historic religious persecutions in general. <sup>d</sup> Statement related to religious persecutions specific to the site context.

Table 8  
*Analysis of Historian 4's Empathetic Insight*

Emotion/value/belief	Crown–colony relationship <sup>a</sup>	Natural resources <sup>b</sup>	Settlers' backgrounds <sup>c</sup>
Just the sheer <i>joy</i> they must have had when they saw all this wood	Boards that were of a certain width were saved for the king for the masts of his ships.	How huge those trees must have been	But knowing that people settled here from England

<sup>a</sup> Statement related to understanding the mercantile relationship between the early colony and the Crown. <sup>b</sup> Statement related to understanding natural resources. <sup>c</sup> Statement related to understanding the life background of the settlers.

study emphasized the deconstruction of the building into its parts and patterns. The visual dissonance created by the features of the Colonial Revival restoration became the dividing line between the more experienced historians and their junior counterparts. It appears the historians used such artistic or philosophical expressions evident in the historical record as pattern-indexed schema (Larkin, McDermott, Simon, & Simon, 1980) to pull forward whole sets of specific, relevant prior knowledge. Awareness of and facility with these indices determined the depth of analysis possible.

### What About Paul Revere?

The Old North Church is best known for its role in the American Revolution and Paul Revere's famous ride. Revere's ride was a single event that produced no physical evidence within the church, thus it went largely unmentioned in the historians' analysis of the site.

## Discussion

### Proposed Framework

As indicated by the analysis above, Wineburg's (1991) heuristics for historical thinking—corroboration, sourcing, and contextualization—are a good analytical foundation, but fall short as a tool for describing how historians interpret historic buildings. Therefore, a modified and expanded framework is proposed for historic thinking at historic sites: origination, intertextuality, stratification, supposition, and empathetic insight.

**Origination.** The historian attempts to discern the multiple factors involved in a building's origins, rather than identify singular documentary authorship. The "authorship" of a building is an essentially collective activity comprising the choices made and/or required by a multiplicity of interested parties and conditions. Thus, historians appear to attempt to understand these circumstances by asking "How did this building come be to in this place?"

**Intertextuality.** The historian checks the architectural features and the procedural workings of a building, bringing to bear prior understanding of the form, functions, duties, or rituals of similar historic buildings he or she has encountered previously. In their analysis, historians situate the building that is the subject of analysis intertextually—in a field of related buildings—to draw comparisons. The question they appear to ask is "How does what they did here compare with what has been done elsewhere?"

**Stratification.** The historian sorts through the layers of evidence available and places the individuals, events, or building elements within the layer most appropriate to further the discussion, identifying anachronistic elements and assigning them to

their appropriate time period or place. Rather than situate a document in a single time or place, the historians sift through the multiple strata of time evident within a single place to locate individuals, events, or building elements within their proper context. The central question of stratification is "What are the multiple time periods evident in this building, and what do they tell me about its history?"

**Supposition.** The historian departs from the evidence presented and offers hypotheses that explore the reasons behind the existence of particular physical evidence, phenomena, or events, while rooting that historical possibility in the evidence at hand. When historians find themselves in a situation where the evidence on its own does not resolve the query, they take a very controlled imaginative leap to suggest a plausible scenario or outcome. The question they ask is "Given the available evidence, my prior knowledge, and how I understand the world to work, what plausible scenario or outcome could explain this feature or phenomenon?"

**Empathic insight.** In response to physical stimuli provided by being in a historic place, the historian constructs a series of contextual frames within which to consider the affective factors acting upon and within a historic agent. The question historians ask is "Given the available evidence, my prior knowledge, and how I understand the world to work, how would the people who occupied this space have responded (socially, emotionally, intellectually) to the space and the circumstances of the time?"

### Implications for Practice

Since Wineburg (1991) first laid out his heuristics, history educators have used that framework to encourage the use of primary texts and visual sources to encourage more authentic history instruction. It is clear, however, that Wineburg's framework does not sufficiently address the full spectrum of historic sources used in historical study. Thus, there has been no systematic way to use these resources to encourage historical thinking. As we seek to provide more authentic, more historian-like" history instruction, we should not limit the types of historic materials we bring into that discussion, any more than we should merely emphasize received historical narratives. As historical archeologist James Deetz (1996) noted:

The written document has its proper and important place, but there is also a time when we should set aside our perusal of diaries, court records, and inventories, and listen to another voice. Don't read what we have written; look at what we have done. (p. 260)

If historians use historic buildings as texts vital to their work, then leaving buildings out of historical study is allowing a certain

historical illiteracy to persist. The proposed heuristics provide a way for historic sites to move beyond the historical narrative and encourage more historian-like analysis with students, with visitors, and in teacher education activities. Indeed, these heuristics provide a foundation from which historic sites might make explicit the unspoken assumptions that frame historians' work: There is a distinct difference between the historical past and our construction of a particular version of that past.

There are few places where the line between the past and our construction of it is less evident than at historic places. To be sure, it exists, but as evidenced in the present study, it is difficult for all but the most seasoned veterans to discern. Thus, the questions posed within the heuristics become essential, minimally, to help novices become aware that such a line exists. Rather than presenting a building as being built in 1723, merely posing the question "What are the multiple time periods evident in this building, and what do they tell me about its history?" invites into the discussion consideration of all the historical agents over the years between 1723 and today responsible for the building and its maintenance, preservation, and interpretation. The historic site ceases to be a historical moment encased in amber, but begins to speak to the ways in which contemporary interactions with the past can affect our ability to get to any particular historical "truth."

**Structuring inquiry.** The question posed at the outset of this article—How do we model historical expertise that is broadly relevant to students and lifelong learners?—requires a consideration of how to apply these heuristics for novices both in classrooms and at historic sites.

Each heuristic, with its embedded question, can function independently to guide different elements of inquiry. In particular, the contextual frames outlined in the form of suppositions and empathetic insights are explicit so that educators may help students and visitors structure their use for inquiry.

These heuristics offer ways to deepen the building analysis encouraged through programs like the National Park Service's Teaching with Historic Places, and to align on-site activities more strongly with classroom lessons. Further, they also offer a structure for programs beyond the "then and now" (Barton & Levstik, 2004, p. 213) butter-churn-and-quill-pens tours that emphasize what people in the past lacked—from washing machines to enlightened views about women—leaving students with the sense that history is populated with "feeble-minded people blundering from one self-evidently mistaken course to another" (Lee & Ashby, 2001, p. 27).

In an era of high-stakes testing and an emphasis on seat time, it is easy to dismiss visits to historic sites as mere enrichment activities and not true educational opportunities (Hall & Scott, 2007; Tal, Bamberger, & Morag, 2005; Tal & Steiner, 2006; Zeisler-Vralsted, 2003). However, students need not leave their classrooms to engage historic buildings, because every school building is, in some way, a historic building. School buildings, no matter when they were built, are physical manifestations of the values and struggles of communities over time (cf. Zimmerman, 2009). As such, they stand as one of the greatest untapped historic resources available: If you have a classroom, you have a historic structure in which to employ analysis and interpretation.

Although introducing historic building analysis via these heuristics may seem cumbersome, particularly for young children, much of what is outlined is consistent with what children already

do. Drawing from the research about photographic analysis, we know that the ability to interpret historical time through visual data, however crudely, begins at a very early age and remains relatively stable well into adulthood (Barton & Levstik, 1996). Further, students use architecture second only to clothes as an index of age to mark different historical eras (Barton, 2001). What remains is to support these understandings and formalize procedures that encourage their use.

**Using historic buildings to improve contextualization.** Most students initially encounter political or government documents in school, but they have encountered many different types of buildings, for many different purposes, well before the onset of formal schooling. We can use this familiarity with buildings as part of daily life to create bridges into the study of history (Perkins, 1987).

One of the most persistent problems in history education is helping students develop their ability to contextualize historical information (Mosborg, 2002; Nokes, Dole, & Hacker, 2007; Shemilt, 2000). Yet, this is where beginning the most rudimentary historical analysis with buildings may have an advantage over working with traditional documents because, as we have seen with the historians' analysis, it is virtually impossible to see a building as "decontextualized, disembodied, and authorless" (VanSledright, 2010, p. 116).

What effect would it have on students' ability to contextualize information if they worked to establish multiple time periods within a single, familiar form (buildings) before working with multiple time periods across multiple unfamiliar forms (documents)? How would it change students' ability to begin historical interpretation to teach students that every building they see is the physical manifestation of a series of choices made by historical agents before attempting to teach the same skill in documents? If students learned to see the multiple time periods evident in a historic building, would that help anchor their sense of historic time in a way that has been elusive when working with documents?

The answer to such questions of transferability is, as yet, unknown, but it offers intriguing opportunities to encourage more meaningful historical analysis of the "richest mix" of materials within the existing curriculum.

## Conclusion

The heuristics outlined here provide the means through which to bring a wider range of historic materials into the discussion of what it means to think historically. It is incumbent upon historic sites and museums to take the lead in integrating this inquiry into their work with students and teachers. In particular, it is essential that sites work with teachers to help them bring this type of inquiry and analysis back to their classrooms, in part so we can move away from the notion that history is a thing that happened to long-dead people, in some other place, a bus ride away. Instead, encouraging historical thinking using buildings offers the opportunity to model historical expertise that grounds historical inquiry in places and media that are accessible and meaningful to students at every level of historical interest, ability, and understanding.

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