A Rigorous Dialectic: Writing and Thinking in History

by Jack Schneider & Sivan Zakai — 2016

Background/Context: As prior research has established, historical thinking is shaped by disciplinary-specific reading and writing. Yet while our understanding of historical reading is relatively strong, our understanding of historical writing—and particularly, the core processes at work in historical writing—is less robust.

Purpose: This research project seeks to advance our collective understanding of historical writing by categorizing the core processes at work in the development of expertise.

Participants: The study examined the work of doctoral students beginning to write their dissertations. As graduate students pursuing Ph.D.s from top research universities, they were experienced in the role of history; but as writers of history, they were novices learning to construct historical scholarship.

Research Design: A qualitative study drawing upon survey and interview data, this project traces the historical writing process of a group of writers working on sustained historical writing projects across a year of their development.

Findings: Among the many skills of historical writers, four particular authorial dispositions stand out as critical. Historical writers, we find, are adept at finding patterns; they are adept at telling engaging and plausible stories; they are adept at modifying their positions; and they are adept at faithfully translating the "foreignness" of the past for a wider audience.

Conclusions: We recommend that K-12 and college educators establish clear goals with regard to what they want students to be able to do, and that they include among those goals the signature competencies of historical writers.

As scholars have shown, historical thinking skills are developed through the process of *doing* history—by asking historical questions, digging through sources, and then crafting written arguments. In other words, historical thinking is shaped by disciplinary-specific reading and writing. Yet our understanding of historical reading is much stronger than our understanding of historical writing. Consequently, if we want students to develop historical thinking skills, we must be able to more clearly conceptualize for K-12 and college-level teachers the core processes in the historical writing process.

Of course, writing in K-12 and undergraduate history classes also matters for another reason—because writing matters. According to the National Assessment of Educational Progress (NAEP), roughly one-quarter of students perform at the "proficient" level in writing—indicating grade-appropriate skill. Seventy-four percent of eighth graders performed at a "basic" or "below basic level." Seventy-three percent of 12th graders performed at these low levels. And the numbers are particularly alarming for students of color, low-income students, and students living in urban areas (National Center for Education Statistics, 2011). In response to these indicators of low performance, several literacy experts have called for integrating literacy and the disciplines (Conley, 2008; Shanahan & Shanahan, 2008). But if we are going to make progress in that direction, we need a clearer picture of how general writing skills and disciplinary writing skills intersect.

This study is grounded in the notion that historical writing matters, and it seeks to advance our collective understanding of historical writing by categorizing the core processes at work in the development of expertise. Examining the work of doctoral students beginning to write their dissertations, it identifies the central tensions aspiring historians navigate as they transition from the world of novices into the world of experts. And going beyond that, the work identifies several "signature competencies" that characterize expertise in historical writing—competencies that educators might work to develop, in some scaled-back but still authentic manner,

among all students.

LITERATURE REVIEW

Scholars have made the case that if more high school teachers and college professors integrated disciplinary thinking and literacy into the classroom their students would become better readers, writers, and thinkers (Monte-Sano, 2011). Looking at the work of K–12 students, college students, history teachers, and professional historians, they have documented the ways that various actors engage in historical reading and writing—the central activities of the discipline.

With regard to writing, historians themselves have worked to identify the key professional skills that they possess. Historical writing, they have argued, locates events and people in particular circumstances that are reconstructed from fragmentary evidence (Mink, 1987). And given inevitable gaps in evidence, historical writing first and foremost involves judicious selection and interpretation of facts (Carr, 1961; Mink, 1987). Yet even if historians succeed in this task, they cannot merely present "the facts." Instead, they must work to craft arguments that advance historical understanding—arguments viewed by other historians as "valid and significant" (Carr, 1961; Hexter, 1971). Additionally, knowing that history is a product created by historians, professionals in the field must take care to substantiate their claims through the use of clear examples, rich detail, and citations (Collingwood, 1943; Hexter, 1971). And they must carefully analyze bias, corroborate disparate accounts, and acknowledge the limits of their sources in order to establish the "secure basis" of their interpretations(Carr, 1961; Collingwood, 1943; Mink, 1987). Even if they have done all this, however, historians must still cultivate a sense of skepticism about their work, knowing that they forever run the risk of writing fiction (Froude, 1864; White, 1973).

Historians acquire all of these skills not by birthright, but by engaging in the work of writing history. In the words of historian Kenneth Pomeranz (2013), "our specializations wind up embodied in our publications, and in ourselves" (p. 5). Novices, however, lack the background and experience to process historical materials and ideas in the same manner that experts do. Consequently, they tend to approach the task of writing quite differently. According to Bereiter and Scardamalia (1987) novice writers transfer knowledge to written texts in a model called "knowledge-telling"—a practice quite unlike what experts engage in. Approaching historical writing as a unidirectional process, students first establish a thesis and then begin finding facts to support it. Similarly, Greene (1994) found that adolescents tend to see the goals of writing differently, not always understanding that history essays require them to construct an argument or situate a topic in historical context. And as Greene found in a later study (2001), even college students tend to list information or share their ideas, rather than analyze evidence or craft their own arguments.

The transition from novice to expert, then, must be characterized by struggle—specifically, the struggle to master core competencies in historical writing. And it stands to reason that teachers can support students in this transition period by engaging them in particular kinds of controlled activities and by working to cultivate specific habits of mind. Yet in order to do this, educators must have a clear understanding of the core competencies historical writers possess, as well as of the key challenges novices face. In other words, they need a framework— what some have called "conceptual structures" or "central tools"—around which they might organize their efforts (Ashby, Lee, & Shemilt, 2005; Harris, 2012).

Scholars of history education have begun to develop such frameworks in the subfield of historical reading. By locating and naming the habits of mind of that experts employ as they read history, scholars have pointed to the "central tools" that educators can teach their students to use. Wineburg (1991, 1994, 2001), for instance, has identified specific processes that historians use when they read documents, arguing that historians bring to texts not only content knowledge, but also an understanding of texts as historical artifacts requiring interpretation. Leinhardt and Young (1996), similarly, have made the case that historians employ "schema-like knowledge and action systems" for classification, corroboration, sourcing, and contextualization (p. 475). And building on such work, the Stanford History Education Group (n.d.) has identified "sourcing, corroboration, contextualization, and close reading" as the signature competencies in historical reading that must be taught to novices.

Like historical reading, the historical writing process has sparked the interest of educational researchers. Scholars have examined the historical writing of K–12 and college students, revealing some of the practices that have helped novices develop greater levels of expertise. One team, for instance, found that argumentative essay prompts challenged students to produce more sophisticated writing (Wiley & Voss, 1999). Other scholars have found that student writing develops when novices are challenged to go beyond reading comprehension and summary of information (Kiuhara, Graham, & Hawken, 2009). Monte-Sano (2011) found that students tend to display stronger historical writing skills when they are asked to annotate primary sources, when they engage in regular informal writing focusing on perspective and synthesis, and when they receive feedback focused on their arguments and use of evidence. And, as De La Paz (2005) found, explicit instruction can play an important role in

middle school writing development. Despite these advances in understanding how students develop as historical writers, however, there is not yet a framework for naming the "conceptual structures" (Ashby, Lee, & Shemilt, 2005) of historical writing akin to those that exist in the scholarship on historical reading.

METHODS

This project attempts to understand how learners make sense of the historical writing process and its role in historical thinking. A qualitative study drawing upon survey and interview data, it traces the historical writing process of a group of writers working on sustained historical writing projects: doctoral students completing Ph.D.s in history.

Drawing upon educational research that looks to expert thinking to uncover and understand central characteristics of disciplinary thinking, this study turns to examples of advanced thinkers in order to glean insights for educating novices. In a twist on the novice/expert literature that informs much of the literature on historical thinking, however, the participants in this study were simultaneously experts *and* novices. As graduate students pursuing Ph.D.s from top research universities, they were experienced in the role of history students and in the process of "doing school" (Pope, 2001). As writers of history, however, they were relative novices—still acquiring the skills possessed by experts in the discipline. Consequently, these historians-in-training present unique subjects for understanding the historical writing process—both as advanced thinkers in the discipline and as learners of the historical writing process.

In examining the thinking processes of these "novice-experts," this study simultaneously builds upon and diverges from prior scholarship in history education. Like previous studies that have looked at the thinking of advanced professionals to understand the central characteristics of historical thinking (e.g., Wineburg, 1991, 1994), this project is predicated on a belief that studying experts as they work is useful in helping locate and name the distinct ways that historians think. Yet it offers new insights into the process of learning to write history by looking at a heretofore unstudied group: advanced graduate students who are developing expertise. While focusing on well-established professional historians reveals important aspects of disciplinary thinking, it also conceals the learning *process* that allowed for these experts to develop such habits of mind in the first place. What seasoned professional historians may see as commonplace or obvious hallmarks of the profession, graduate students are still learning to understand and do. Therefore, we relied upon this group of "novice experts" to illuminate what can be surprising, counter-intuitive, and difficult about learning to write history.

PARTICIPANTS

Participants in this study were recruited from Ph.D. programs in history at four research universities—two public and two private—in the same state. With the help of department administrators and/or faculty members, we sent emails to all history doctoral students at these four institutions, inviting all doctoral students to participate in the study.

After an initial screening process of all interested participants (N = 23), a final group of participants was selected to include only graduate students who were at the early stages of dissertation writing (N = 10). Participants who had not yet completed pre-dissertation milestones were excluded from the study, as they were not each day working on a sustained writing project. Also excluded from the study were those who had already drafted several dissertation chapters, as we could not follow their entire dissertation writing process. This final group of participants, whose research focused on a broad range of historical time periods and topics (see Table 1), was subsequently tracked over the course of the academic year in which they were writing dissertations.

Table 1. Participants.

PARTICIPANT	UNIVERSITY	PERIOD	AREA	FOCUS
Amy	Public 1	20th Century	Europe	Art History
Brooke	Public 1	20th Century	Middle East	History of Education
Carl	Private 1	17th-18th Century	U.S.	Military History
Devin	Private 1	12th Century	Europe	Religious History
Emily	Private 2	20th Century	U.S.	History of Gender
Fae	Private 1	19th Century	U.S.	Cultural History
Gary	Private 1	20th Century	U.S.	Political History
Heather	Public 1	18th Century	Europe & U.S.	Intellectual History
Ivy	Public 1	18th Century	Europe	Cultural History
Jason	Public 1	16th-17th Century	Atlantic World	Environmental History

DATA COLLECTION AND PROCEDURE

The bulk of the data from this study come from semistructured interviews. At three points over the course of the academic year, on an approximately bimonthly basis, we conducted semistructured interviews with participants in which we asked them to reflect on the process of writing their dissertations (see Figure 1).

The purpose of examining the participants' thoughts about the writing process, rather than analyzing the writing itself, was to uncover how "novice-experts" in historical writing conceive of their work and how they build their selves as historical writers. The focus on process, rather than product, allowed us to investigate the ways that participants understood what it means to be a historical writer, and what historical writing entails (Flower & Hayes, 1981).

We set out to understand: What is difficult, puzzling, or confusing for students as they engage in the historical writing process? What challenges does it present for even advanced students, and what skills or habits of mind do these students work to develop to address such challenges? And how do advanced students conceive of the writing process as it relates to thinking in the discipline writ large? In keeping with these interests, interview questions asked participants to reflect on how they engage in and think about central historical tasks—tasks like finding and analyzing historical evidence, constructing historical arguments, and writing history (see Appendix A for sample interview questions).

Some questions remained constant, and were repeated in each interview. These questions, which asked participants to tell us about the argument and narrative structure of their writing, functioned as snapshots in time, capturing at several points throughout the writing process the ways that students were conceiving of their work (see Appendices A and B). Other questions shifted, allowing us to explore different aspects of historical writing with the participants. For example, initial interviews asked participants to reflect on why they chose to do historical work and how they conceive of the relationship between argument and evidence. Later interviews focused more on how participants crafted their own writing processes, as well as on the challenges they encountered in developing and refining their ideas.

In addition to interview data, we drew upon data from written surveys that participants completed at the halfway point between each of the interviews. These surveys asked participants to articulate briefly how they thought about the discipline writ large and the role of the writing process in historical thinking. Some of these survey questions provided forced-choice options that allowed us to see how participants were weighing competing

priorities in the historical writing process. Others requested participants to create visual graphics to represent their thinking and writing processes (see Appendix A for sample survey questions).

At each point of contact (interviews and surveys), participants also filled out a chart in which they listed their current thoughts about the central argument, organizational structure, and title of their dissertations (see Appendix B). The charts served two purposes: they allowed us to see how the structure, central argument, and conceptual language of the dissertation was changing, and they also served as a catalyst for the participants to reflect upon their own learning and progress.

At the end of the academic year, we contacted participants a final time and asked them to provide additional written information about their writing processes. This written reflection offered participants an opportunity to reflect on their learning and development, as well as to share with us any additional information that we had not explicitly asked about—information that they believed was important for us to understand about how they conceived of historical writing.

Figure 1. Timeline.
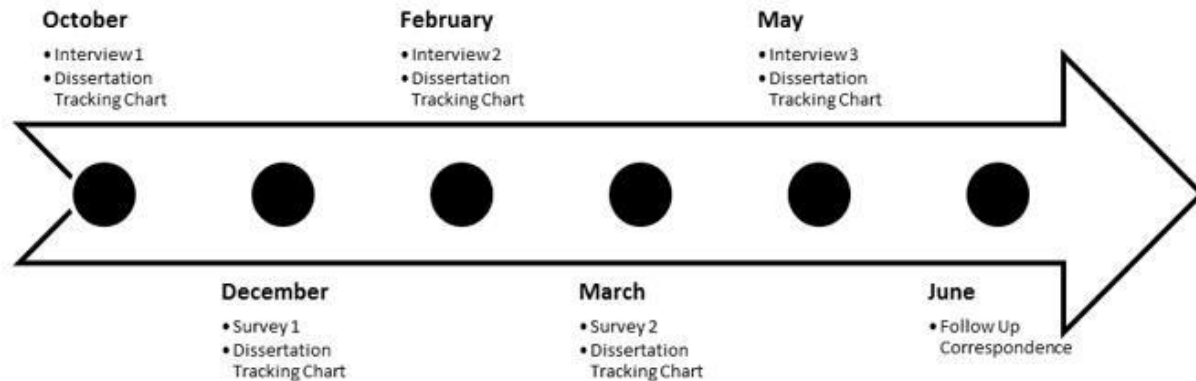
DATA ANALYSIS

In asking advanced graduate students to reflect upon and lay bare their own processes of constructing and writing historical narratives, we attempted to locate, name, and describe the central elements of historical writing. This, we believe, is an essential step in structuring a conversation about what we want students to be able to do; for, in order to have such conversations, we need common elements about which we can talk.

All interviews were digitally recorded and transcribed verbatim. Interview transcripts, survey data, and dissertation-tracking charts were all coded in Atlas.ti. We used two methods to generate our initial list of codes. Some codes were generated using "selective open coding" to search for emergent themes (Emerson, Fretz, & Shaw, 1995). In the tradition of grounded theory, these codes emerged from the thoughts and reflections of the participants (Glaser & Strauss, 1967). For example, participants repeatedly spoke about historical writing as a process of "finding order in chaos" and we coded for the instances in which they conceptualized historical writing in this way. Other codes were generated based on theoretically significant categories from existing research. These focused codes were derived from prior studies of historical thinking and historical writing. For example, previous scholarship has demonstrated that historians often view the past as a place distant to and different from the present (Lowenthal, 1999; Wineburg, 2001), and we looked for ways that participants spoke about the writing process as a way to understand the foreignness of the past (see Appendix C for a partial list of codes).

Once we generated an initial list of codes, our process of analysis followed the "constant-comparative" method (Glaser & Strauss, 1967), moving from generating conceptual categories to comparing categories to generating theory. During this process, we used Atlas.ti to create visual code "networks," wrote descriptive and analytic memos (Charmaz, 1983), and created charts (Miles & Huberman, 1994) to conceptualize the relationships among

the codes. Like the foundational studies attempting to understand the historical reading process (e.g., Wineburg, 1991), the goal of our analysis was to create conceptual categories to describe and explain how participants write history, and how they conceptualize the role of the writing process in learning to think about the past.

FINDINGS

As our study reveals, developing expertise in historical writing is a complex affair. Having completed undergraduate work in the field, our novice-experts were deeply familiar with historical content and practices. And with specific regard to historical writing, they understood the work as being defined by evidence-based interpretation. Additionally, they possessed many of the skills identified by historians as critical—skills that K-12 students and college undergraduates tend not to possess.

Yet our participants still struggled to navigate four tensions, or "balancing acts," at the heart of historical writing. And it is our contention that these balancing acts constitute the key challenges of writing evidence-based interpretations.

Though they are by no means sequential, these balancing acts can be listed in the approximate order in which historians encounter them during a project:

Knowing when to find the puzzle pieces and when to fit them together

Making a story meaningful without making it up

Standing both firm and ready to change

Representing the foreignness of the past to a "domestic" audience.

BALANCING ACT I: KNOWING WHEN TO FIND PUZZLE PIECES AND WHEN TO FIT THEM TOGETHER

The first of the balancing acts that we identified was that of negotiating when to find "puzzle pieces" and when to "fit them together." Seven of the ten participants in our study drew an analogy between writing history and fitting together the pieces of a difficult jigsaw puzzle. For Ivy, "the whole project [of writing history] is a bunch of puzzle pieces that are all locking together." The role of the historian, thus, is to use evidence—"the puzzle pieces"—in a manner "that connects them together convincingly."

The work of solving historical puzzles requires constantly adjusting and manipulating pieces of evidence. As Heather explained, readjusting these puzzle pieces becomes necessary "when you start seeing these cracks that don't add up or don't quite fit." Calling to mind E.H. Carr (1961)—"the more I write, the more I know what I am looking for, the better I understand the significance and relevance of what I find" (pp. 22-23)—Ivy observed that: "You have to keep revising to make sure that they [fit]." Carl also emphasized the importance of adjusting the puzzle pieces. Writing history, he explained, is "like Jenga"—a 3-D puzzle game. "It's like you take one thing out and everything falls down and so you know getting something right here means making adjustments there." Our historians-in-training expressed deep satisfaction when they felt that the puzzle pieces were falling into place, and communicated interest in "finding the patterns" to make this possible.

In fact, for four of our novice experts, the process of solving puzzles was what drew them to history in the first place. As Jason explained, "the most exciting thing about history is you're solving very complicated puzzles all of the time." Carl also appreciated the challenge associated with solving historical puzzles. "There aren't easy answers," he explained, but "I find the problems really compelling." These participants viewed historical puzzles more like riddles than like jigsaws, but they too used the puzzle metaphor to describe their work.

For all their general talk about puzzles, these graduate students made sure to note that the historian's puzzle is different from those encountered in other professions. One of the primary differences is that when historians solve puzzles, they are not in possession of all the pieces. As Jason explained, "The difference between a historian's puzzle and a philosopher's or mathematician's puzzle is . . . they are working with abstract rules that adhere, at least to their minds, objectively and trans-historically; and we work with mess. Everything is tough. It doesn't make sense. We have fragmented evidence. We have to deal with all the various issues of human behavior, of evidence that is coming down to us through very biased human observers, so there is an added element of figuring out that mess which I find really fascinating." For Jason and several other participants, the hallmark of the historical puzzle—whether jigsaw or riddle—was its messiness.

While our participants were working diligently to put together the pieces of the puzzle, they were also cognizant of the fact that there were always more pieces to hunt down—a fact they were constantly reminded of while trying to construct a coherent argument. Emily explained this best, saying, "making sure that my source base is rich enough and diverse enough to support the points that I make—that's an ongoing kind of [challenge]." As Carl explained, "I think the questions I ask suggest obvious sources, [but] I think I'm just in a lot of sources looking for needles in haystacks and hoping in those sort of small moments that I can find repeated evidence that fit into a larger picture." This metaphor of "looking for needles in haystacks" was used by several participants.

Among participants, this balancing act—between assembling the pieces and looking for more—manifested in a process that looked anything but linear. They did not conduct research and then write it up. Instead, they conducted research, tried to piece the puzzle together, discovered holes, and then set out to conduct more research.

This tension between finding the puzzle pieces and fitting them together was reflected in a series of graphic timelines that we asked our participants to create as a way of visually representing the historical writing process.

All ten of the participants in this study indicated that they began with the hunt for pieces of the puzzle. Although the exact details of participants' timelines diverged after the initial search for evidence, all participants showed that historical writing was an iterative process involving some combination of searching for evidence, constructing a historical argument, writing about it, and then repeating the steps (though not necessarily in that order). For some, writing triggered a hunt for additional evidence, and for many the work of constructing an argument emerged from the writing process itself.

The following timeline, drawn by Emily, was typical of the responses we collected from participants:
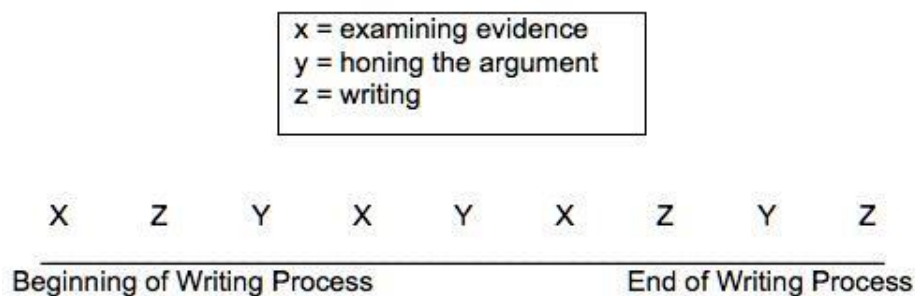
What this timeline—and all the others we collected from participants—shows is that the reading of primary sources does not stand alone in the process of historical sense-making. Never once did participants indicate that they first gathered all the pieces of the puzzle before sitting down to piece them together. Rather, Emily and her compatriots all indicated that the historical writing process was cyclical in nature and involved a series of repetitions—of collecting puzzle pieces and fitting them together.

So much was this the case, in fact, that many of the graduate students in this study balked at creating a timeline, insisting that the historical writing process was not linear. Six of the participants, in reflecting on the exercise, suggested that rather than a timeline, they think of the historical writing process as "circular," "cyclical," or as a "spiral." As Amy explained, the process of historical thinking is "not linear for me, so something that's more circular or cyclical or overlapping would be [better]. I haven't just moved from point A to point B but I'm always coming back to the points that I've gone over, so . . . you're kind of pirouetting towards the dissertation but traveling over the same space over and over again." Emily's reflections also highlighted the cyclical nature of historical thinking. "To me," she explained, "it's much more of a spiral. I am constantly circling back to [my] source base, but then pushing ahead with . . . analysis and building arguments, figuring out where the holes in those arguments are, and circling back to the source base." Thus, rather than marching toward historical understanding, the participants in this study pirouetted—repeating circular movements over time, and slowly putting together a picture of the past.

BALANCING ACT II: MAKING A STORY MEANINGFUL WITHOUT MAKING IT UP

The act of crafting a story became more central in the minds of our historians-in-training the more they worked on their dissertations. While not a single participant mentioned stories or storytelling in the first interview, by the second and third interviews—at which point the participants were more deeply ensconced in the *writing* process

(and not only the process of gathering and making sense of sources), six of them framed their work, in the words of Amy, as an "overlap between storytelling and history." Over time, the process became less about understanding the evidence and instead became about "telling a more coherent and relevant story." For, as Brooke explained, "historians often think in terms of a story that they're going to tell. Like, you see data and you're thinking well how do I put this into a coherent story—how do I make it into a narrative? Because a big job of a historian is to be able to construct a particular narrative of what happened."

Writing history requires moving a step beyond interpreting sources; it requires making *meaning* of them. As Amy explained, "one of the things that I've had to learn is to take something that seems evidently compelling to me and explain *why* it's compelling" (emphasis added). Brooke explained it slightly differently, saying, I'm "trying to frame the consequences of what I'm finding. I found all of this information on people and now it's [about] being able to put together all of these different life stories in a good, coherent whole; and also trying to figure out what is the most important thing about what I'm finding." Over time, graduate students like Brooke began to ask themselves, "How are you going to make a coherent story out of [the facts]? And how does this also fit with why you thought it was important in the first place?" Nine of our participants explained that the process of crafting a story was about making historical arguments that are compelling, important, or meaningful—both for the historian, as well as for what Fae called "larger audiences."

Our historians-in-training often struggled to find a central story. They saw themselves as key actors in the process—speaking of writing as a chance to "tell your story" or "tell my own new story." Yet despite the fact that they were central in "crafting" the story, they believed that the story must not be "made up." It must, they believed, remain true to the historical record and reflect the essence of the past. As E.H. Carr (1961) put it, they must navigate between the Scylla of interpretation and the Charybdis of historical fact (p. 29).

As participants attempted to make stories that were meaningful without making them up, they indicated they held a series of beliefs that to non-historians might seem contradictory. For example, in a survey question in which we asked participants to check all boxes that they believed described the process of writing history, all ten indicated that writing history involved not only "a concern for evidence" and "a concern for accuracy," but also "a degree of creativity." Even more striking, 4 of the 10 indicated that history involved *both* "a sense of certainty" *and* "a willingness to guess," with the remaining six evenly split between those who believed history involved only the former and those who believed it involved solely the latter. When we asked participants to explain how these seemingly contradictory commitments—accuracy and creativity, certainty and guesswork—could coexist, participants explained that this was the hallmark of historical writing: a commitment to storytelling that was both engaging and as "accurate as possible." As Ivy explained, "even when they conflict, you are doing all of it at the same time."

The struggle to make a meaningful story without making it up manifested in a number of different ways. Some, like Carl, struggled to figure out whether to structure their arguments chronologically or thematically. "The difficulty there," he explained, "is developing some kind of chronological narrative against some sort of thematic road map, the thematic road map being really useful for conducting research and building an argument, but the chronological structure being more easy to communicate, especially change over time, which is a historical trademark." For him, the central challenge of historical writing was figuring out how to balance the clarity of a chronological timeline with a more interesting, but also more messy, thematic approach.

At other times, participants struggled to sort out how so many pieces of disparate information, drawn from a wide range of sources, would fit together to tell *any* kind of coherent story. As Carl explained, "It's difficult to figure out on that scale how all of the pieces fit together, and I think it requires thinking in smaller chunks but even just figuring out what the boundaries of those are is challenging." Most participants found "thinking in smaller chunks" to be a useful step in the process.

But when "chunking" their data into much smaller pieces, participants often struggled to find connections between how people in the past lived, what they believed, and what they recorded about their lives. As Ivy explained, fully immersing oneself into the past can lead to the feeling that there is no story at all—only data. As she put it, it can be tempting to think "it's just random." But such a move, she argued, would be "the most damning, the most dangerous thing" for a historian to think, because the historian's task is to craft a meaningful argument from remnants—often incomplete—from the past.

Our participants also struggled with the knowledge that they could not possibly understand everything they hoped to know about the people and places they studied. Five of the ten graduate students in this study used their interviews as a chance to reflect on the limits of their understanding about their own areas of expertise. Some participants worked in the face of incomplete evidence because they studied topics with sparse historical records. Carl, who is interested in how people in the past have mourned loved ones, found in his research that "there

aren't necessarily a lot of sources that directly speak to loss or grief and even when there are people just don't talk about these things in the way that we would hope they do." For others, the records that they hoped to find might have been recorded in the past, but were unavailable to contemporary historians. As Carl explained, often the evidence historians hope to find doesn't exist because "things [were] destroyed, not necessarily rebuilt, or not necessarily noted." Historical records were sealed by governments that wanted to restrict access, or they were destroyed long ago, and yet these historians-in-training still needed to write about times and places whose records were at least partially unavailable.

Still others realized that records *did* exist but were difficult to access. Some access difficulties were a product of language—the sources that would illuminate the past were written in tongues other than English, or in an English not spoken today. Other access difficulties were a product of location. Most sources, Heather explained, "aren't digitized. They aren't online. So you have to physically go to [the archives] to get a lot of [information]." Most participants had difficulty reaching the sources they needed. Ivy most articulately explained this problem, saying, "I go to school in [the U.S.], I'm studying England in the 18th century but I can't just go live in the archives in London—I have to make the best due with the evidence I have."

Even when primary source material is available, challenges remain. As Devin put it, it is impossible to perfectly discern "what was really going on in the minds of the authors." Devin emphasized that history was both messy and in some ways unknowable. He explained, "human experience and ergo history as an event is very messy. Lots of things happen that can never be captured again. But our authors and our sources capture elements . . . [and] by asking questions [we can] start to glimpse that past or parts thereof." In other words, even though historians work without access to all the puzzle pieces, and often ask what Devin called "unanswerable questions," they still are able to "glimpse" the puzzle's image. Jason explained the historian's role as aiming for the unattainable vision of the complete puzzle. "You are trying to get as close to certainty as possible," he explained. "You're trying as best you can to say what actually happened but knowing that that's impossible."

The effort to make do with available evidence and tell a story, and to do so without making sweeping claims that step outside of the bounds of available evidence, was a challenge that most participants contemplated at some point during our study. Though participants were constantly aware that they were working under less than ideal circumstances, they nevertheless spoke about the need to forge on with telling their stories.

BALANCING ACT III: STANDING BOTH FIRM AND READY TO CHANGE

History consists of infinite possible data points and lacks a singular narrative around which all those data assemble. Thus, as historians continue to conduct research in support of their arguments, they are consistently exposed to the possibility that their interpretations of the past might be misguided. And it is frequently the case that historians will encounter evidence that forces them to move in a new argumentative direction. As historian James Oakes (2012) put it, "sometimes all it takes is evidence, new or newly persuasive evidence, to get me to change my mind" (p. 35).

Yet not all irreconcilable evidence is cause for reorienting an argument. After all, many stories can be right simultaneously, or a story can be mostly true with existing counterexamples. Complexity, in short, is the rule. If historians dumped their arguments every time they encountered seemingly contradictory evidence, nothing would ever be written to completion.

The trick, then, is to figure out when to stand one's ground and when to change one's mind. And in keeping with that challenge, our historians-in-training worked to balance a confidence in their arguments with a willingness to consider alternatives.

The vast majority of participants in this study indicated that, even after they worked so hard to craft a solid historical narrative grounded in evidence, they could easily envision something—either new evidence or a differing interpretation by another historian—that could cast doubt on their emerging histories. In fact, in all our interviews with participants, only once did we hear someone say, "I'm trying to think what would make me doubt the central claim of my dissertation and I can't even imagine it." Much more common was a response like that of Amy when we asked whether she could think of something that might cause her to doubt the historical argument she was developing. "Yeah of course," she responded. "I think that's the mark of good history, right?" Six of our participants repeatedly circled back to comments like "it's possible that I will have to rethink" or "I no longer think what I thought." This willingness to change may have stemmed from their unique role as graduate students who were expected to respond to the feedback of more experienced instructors or advisors, and it may have come from their beliefs that willingness to change in the face of new evidence or ideas is a central aspect of historical thinking. In either case, it is apparent is that for these novice-experts, a large part of the process of learning to write history involved a willingness to reexamine and rethink their initial claims.

In developing the stance that allowed these emerging historical writers to be so open to having their ideas challenged, they employed one particularly useful tool: that of constantly asking themselves questions. As Amy explained, "Were I to teach someone what history involves, I would say that generating questions is integral to the job of the historian." The other participants in this study concurred, and all were engaged in a constant process of self-questioning. Eight of the ten participants framed their historical writing process around asking good questions, not around constructing historical narratives or learning about what happened in the past, and seven of the ten indicated in surveys that "an ability to live with questions" was a central characteristic of historical writers. Some participants even arranged the structure of their chapters around central questions. Long before they had working titles, it seemed, they had working questions.

Their questions fell into several categories. All participants asked themselves about the evidence they drew upon to make their claims: Why select these sources? How do I find patterns in the data? How do these pieces of evidence fit together? They also all asked about how their work fit into a larger body of historical scholarship. What does existing scholarship have to say about this? How does my work "fit into historiographies and historical questions that already exist?" Most asked about the people they were studying, self-monitoring that they were not imposing their own views on those they studied. How, they asked, did the people of the past—living in such different times and places from our participants—respond to situations in their lives? Why did they act in the ways they did? Some also questioned the greater purpose of their work as historians, asking: What's important about this work? Why does this matter?

What is worth noting here is that these historians-in-training did not just *think* about evidence, historical scholarship, the foreignness of the past, and the value of writing history. Instead, they actively, consciously, and consistently *asked themselves questions* about these central aspects of historical thinking.

The process of self-questioning, which one participant described as an element of professional "culture," served as a key tool in developing both self-assurance and humility about one's work. Echoing historian C.H. McIlwain (1937), who declared that "all history should be a lesson in humility to us historians," our participants continually questioned themselves—steadily renewing an intellectual openness to change. As Heather explained:

"You're always going to have pieces of evidence that don't fit. And a lot of times you wonder, well does that mean I have to change everything? You get into the archives and you start second guessing yourself, like am I really seeing this? Or am I just being blind to other options because I'm looking at the [writings] of these 20 people? What if there are five others that I just don't know that exist or I'm just not looking at because I don't think they'll fit into this?"

For Heather, doubting her own process and the evidence on which she was basing her work not only allowed her to speak with authority about the area of expertise she was developing, but also allowed her to keep in perspective the limits of her own knowledge. If other historians found additional evidence, or questioned the argument she was constructing, that would not be a setback because she had already been asking these questions of herself and identifying the weaknesses in her thinking.

Yet that process of rigorous questioning also meant that when our participants arrived at answers, they were relatively confident in their positions. As Devin explained, "I've been thinking a lot about the methodologies and assumptions current in the study of my period and raising questions about them. From this, I believe I am honing my thinking."

Because history is always constructed by fallible people and based on incomplete written records and artifacts preserved by other imperfect human beings, any quest for historical understanding must come with a healthy dose of skepticism. Constant self-questioning allowed the novice-experts in this study to cultivate just such a sense of healthy skepticism. As Carl explained, "In science you ask questions, you propose hypotheses. You do that in history [too], but there's no stability. The ground is just always shifting on you. You know when you read a historical document it's not objective."

The act of continual self-questioning allowed these historians-in-training to embrace the fact that historical understanding—both their own and that of the discipline writ large—is constantly shifting. In the course of the academic year that we followed them, all of the participants underwent changes in the way that they were thinking about their particular dissertation topics and about the discipline of history. A common refrain that we heard in interviews was, "six months ago I would have told you x, and actually I think that's not true anymore." This shift in thinking, as Heather explained, is the product of the fact that history is

"not final. You have to be always willing to look for more documents. You have to be searching and pushing and

willing to be flexible and realize that okay, this is the narrative we have had for so long, but now the new evidence that we've found or the way that we are looking at things differently shows that that's wrong. . . . So when you have moments like that, you have to be willing to say that perhaps we were doing this wrong and need to readjust it."

In short, the process of writing history demands a flexibility of mind that our historians-in-training had already begun to cultivate. They believed in their narratives. Yet they were willing to change their minds, as they had clearly done many times before.

When asking participants to reflect on what accounted for their changes in thinking, their responses generally fell into two categories. The first, and most commonly cited, was what Carl called "working with evidence." Some participants looked at primary source documents they had not previously considered, and these sources caused them to question their previous beliefs and assumptions. Others expanded the secondary historical sources they were reading and, consequently, encountered new ideas.

A second common reason participants gave for shifts in their thinking was getting feedback from a community of other historians, whether peers or teachers. These other historians were able to pose questions our participants had not yet thought to ask, thereby challenging or complicating their initial thinking.

A few participants insisted that their thinking did not change so much as sharpen or clarify over the course of the academic year. As Carl explained, one trait of the historian is "very earnestly ask[ing] questions that we don't have answers to, so it's not necessarily a matter of changing our minds but it's a matter of . . . trying to figure out what we think in the first place." That is, while some participants actively changed their minds about what and how they thought about the past, others simply underwent an extended process to arrive at their own arguments. In either case, as they learned more, they remained open to new ideas, novel ways of framing their arguments, and shifting conceptions of history. Nevertheless, most of these participants concurred that it was a given that "a historian would change her mind" as she wrote.

Whether their thinking changed or simply emerged, what allowed thinking to crystallize into new ideas, new arguments, and new historical interpretations was the historical writing process. When we asked participants what accounted for the differences between their prior and current historical understanding, many responded as Amy did: "I think really for me it was writing." Their new thinking emerged as a natural outgrowth of writing history.

BALANCING ACT IV: REPRESENTING THE FOREIGNNESS OF THE PAST TO A "DOMESTIC" AUDIENCE

David Lowenthal (1999) has used the metaphor of a foreign country to describe the nature of the past, and for many of the participants in this study, training to become historians allowed them to "visit" other cultures and "observe" other ways of life—even if they never physically traveled for research. In fact, six of the ten graduate students in this study explicitly discussed their "journeys" to other times and places. As Amy explained, studying the past allowed her "to go to this other place and explore this other culture but also explore the weird world of the past at the same time. . . . Learning about the past is for me like a similar way about learning about a different people." Fae concurred, adding: "For me [history is] really about the ability to understand past cultures and societies, and it provides a really great opportunity not only to understand the past but to think about our own culture in other ways."

For many of our participants, this ability to metaphorically travel to another time and place was a large part of what they found compelling about the study of history. As Devin explained, "I really just get a great thrill [in] trying to imagine this world—and you know . . . this is the same planet that these people lived on, but it's a different world entirely and trying to catch a glimpse of how they looked at their world just thrills me." Carl, echoing this sentiment, observed: "The more time that I spend thinking about history and reading about history and working with primary sources, the thing that [has] really excited me [is] just how different the past is. And how much perspective that gives on the present or gives *us* on the present."

And yet, despite their excitement at getting to "explore" foreign lands and cultures, the past remained a strange and distant place. Several participants described the past as "weird," "wacky," or "odd." As Carl explained, the past is "just radically different." And the more these novice historians learned about the times and places they studied, the more they came to understand how people in the past had different cultural norms and experiences than contemporary historians do. These historians-in-training often marveled at how different the people they studied were from themselves—how they had different rituals for marking joyous and traumatic life events, different family and societal structures, and different ways of seeing, interpreting, and even tasting what was in their world. People in the past, according to Carl, "seem to have the capacity to hold these giant contradictions in their consciousness without it necessarily being problematic in the way that I think it might be" because they did

not experience them as contradictions in the same way contemporary interpreters do.

Yet while the past remained "wacky" and "odd" to these historians-in-training, they gradually learned how to talk about this "foreign country" in a clear and consistent way. They were, of course, conscious of the foreignness of the past from the outset. But as time went on, they were better able to locate *when* and *how* these other people, societies, and cultures were so different from our own. In other words, our participants learned how to describe and name differences in comprehensible ways.

The challenge that our participants faced was, somewhat surprisingly, not that of working to make the past seem *more* familiar to a contemporary audience. Instead, they actually strove to make it *less familiar*—to help others recognize cultural, religious, and societal differences between people of the past and people today. Yet they needed to do so in a way that was comprehensible to contemporary readers. As Fae put it, they worked to find stories that would be "understandable today" and "attuned to the specificities and worldviews of people of the time."

For some of our participants, part of how they viewed their own role as historians was as a kind of translator, rendering what initially appears to be familiar into a more strange and foreign past. As Brooke explained, the people she studies did not actually know one another. *She* puts them together to craft a narrative. In doing so, she explained, "you're putting together, for me especially, all of these individuals, all of their lives, and then making kind of a sweeping generalization, no matter how well rounded, about what they meant. I mean if you don't do that it's not very interesting; it's not a very useful piece of historical writing. But even so, doing so is kind of—I always feel a bit like you're brutalizing subjects by telling them why they're important." In other words, not to make any generalizations across people would make for a boring historical account; but to make too many connections does not honor the real lived experiences of those being studied.

Heather, too, struggled with this challenge. In her words, she thinks about history as a "theater of imagination." That is, any understanding of people in the past comes through the interpretive lens of the historian. As she put it: "I can get in and I can see what people said about things and how they acted, but getting into how they thought about any given idea or topic is hard and I feel like I'm treading on very thin ice there because you don't want to assume too much about what was going on 200 years ago—300 years ago. You can't really get there." Without understanding "what were people thinking [and] why" makes it difficult to understand the past. Ivy explained this as "the hardest roadblock" in writing history, because "people don't talk about the mundane details of their life" that would allow contemporary historians to better understand them.

Yet historians still *do* try to understand people in the past. And they seek to help others build understandings of the past, as well. Consequently, historians are perpetually locked between two opposing forces: the need to make the past familiar, without which it would not be understandable today, and the responsibility to accurately capture the actions, thoughts, and beliefs of people in the past who may have acted, thought, and believed in very different ways than people do today. Navigating or translating between these two worlds was one of the primary tasks of these historians.

DISCUSSION

Learning how to write like a historian is a complex venture. Historians have a number of skills, some of which are common to professional writers, and some of which may be unique to the discipline; no clear boundary exists. And this project was not designed to separate out general writing skills from those entirely distinct to history.

Yet it is clear from this study that, among the many skills of historical writers, four particular *authorial dispositions*—signature competencies, it would seem—stand out as critical to success. These dispositions are not developed in the writing, but rather in the *writers*. And insofar as that is the case, it seems that they offer a useful framework for thinking about the development of historical writing skills among novices.

So, what might we say about these dispositions? How might we foster conversations among K–12 and college educators about the teaching of historical writing?

1. HISTORICAL WRITERS ARE ADEPT AT FINDING PATTERNS

The ability to find and organize disparate information from a variety of sources is an essential characteristic of good historical writers. But a sense of when more puzzle pieces need to be found, or when the puzzle can be put together, is not easily acquired—something many historians have discussed when reflecting on their craft (e.g., Carr, 1961). Our historians-in-training worked diligently, and often grew quite frustrated, in pursuit of patterns that all too often seemed elusive. Knowing that such work was essential, but not yet having developed total

mastery, these novice-experts were dedicated to a process that often left them feeling uncertain. Yet over time, they expressed greater confidence in their abilities to piece together stories from fragments.

K–12 students can only learn to find and organize puzzle pieces when they understand that history is puzzling. Too often, however, students believe that history is about memorizing lists of names, dates, and major events (Wineburg, 2001). But when teachers frame history as a subject involving solving puzzles, students can develop both their skills and interest in history (VanStedright, 2000). Thus, as scholars of teaching history have explained, framing work in the discipline as about solving puzzles is a necessary first step to helping students develop as historical writers and thinkers (Wineburg & Schneider, 2009).

Once students understand that the process is a puzzling one, they next have to see the limits of the puzzle metaphor. Historical writers, after all, understand that their work involves constantly sorting out whether they are in possession of the right pieces. So while basic understanding of the discipline is about seeing puzzles, developing expertise involves the acts of searching and weighing. Thus, presenting students with packets of primary source documents—a seemingly unquestioned "best practice"—may be insufficient for developing disciplinary expertise unless it is accompanied by exercises in which students ask whether their sources are sufficient and, if not, what else they need to find. More than just sources, historians possess a sense of when something is missing, where they might search, and when to stop looking for it.

2. HISTORICAL WRITERS ARE ADEPT AT TELLING ENGAGING AND PLAUSIBLE STORIES

Historical writers seek meaning and push past description to tell stories of significance. But they never push past the evidence base. As Amy put it, "I think that the overlap between storytelling and history is something that a lot of historians are interested in but could make history education more compelling for younger students." Historical writers tell engaging, well-supported, stories (eg. Hexter, 1971). Yet the process of learning to walk the line between what is interesting and what is likely to be true is challenging. For the novice-experts in this study, it often evoked feelings of anxiety and doubt. Yet even these feelings were employed in the service of history, for as they doubted themselves, our participants redoubled their efforts to revise their work. They understood that history is as much about *re*writing as it is about writing.

To learn to tell stories that are compelling and true, K–12 students and college undergraduates would need to do two things. First, they would need to learn about what makes storytelling *in general* engaging—supported, perhaps through cross-curricular writing instruction. Second, they would need to develop a felt sense for when their stories have been adequately rooted in historical evidence. After all, historians work with shards of evidence, giving them greater freedom to arrange their narratives in ways that are provocative or engrossing. Yet despite this freedom, historians are restrained by the concept of evidence, always conscious of when documents are being read too narrowly, or when sources are being stretched too thin.

3. HISTORICAL WRITERS ARE ADEPT AT MODIFYING THEIR POSITIONS

Historical writers stake out claims and seek to find further evidence to substantiate them. They constantly ask questions of both the texts they examine and the arguments they are constructing. And when they find contradictory evidence, they adjust their claims. Sometimes that means throwing out an entire argument. Usually, however, it means making adjustments and maintaining a position of doubt toward one's own argument. Historians can sometimes make this sound easy (Collingwood, 1946). But our participants often erred on one side or the other—expressing high levels of confidence or extreme doubt. As they developed expertise, however, they moved toward the middle—feeling increasingly sure of the stories they were telling, while also becoming more willing to imagine scenarios in which they might need to start over. Their journey involved both standing firm and being ready to change because they developed a robust evidence base, yet had learned to recognize the potential insufficiencies of their evidence.

History educators can help their students develop as historical writers by working to nurture these habits of mind in the classroom. By emphasizing the importance of evidence and teaching them how to find and deploy it, educators can teach students to stand firm. But they must also promote among their students a readiness to change positions. This can be done by cultivating a culture of humility and incomplete understanding in the classroom—helping students to see the limits of their assertions. It also, however, requires building a community of engaged learners who "check" each other's reasoning and who collectively nudge each other toward the ledge where expert historical writers stand—on the edge of knowledge and disbelief.

4. HISTORICAL WRITERS ARE ADEPT AT TRANSLATION

Historical writers recognize difference and respect it—seeing other worlds as inherently unlike ours and deeply

valuable in their own right. At the same time, however, they try to communicate that difference and find ways to make it comprehensible to others. In sum, they work to represent what is different in an intelligible way while preserving its very difference. Experts have practiced this so frequently that they can sense when they are deforming the past, or when they are failing to communicate. But our participants often expressed frustration with what occasionally felt like what one called "an impossible task." Yet as they continued to work on their projects, they developed a new sense of mastery—not only over the subject, but increasingly over the process of historical writing. They felt more confident about translating the strangeness of the past for an audience of the present.

If historical writers are adept at translation, it would seem to suggest that students need to practice seeing where the past is "foreign" (Lowenthal, 1999). Teachers, for instance, might move away from exercises where students are asked how *they* would have felt had they lived in a particular historical setting. And, instead, teachers might move toward exercises in which they ask students how *specific individuals from the past* may have felt. Teachers might additionally ask students to consider the evidence base for such speculation, and also ask students to consider what is familiar and what is surprising. Students are inclined to see people from the past as very much like themselves, and that can be productive, but only if that perspective exists in tension with the view that people differ radically across time and space, and that it takes work to understand them.

CONCLUSION

Historians make distinct moves when plying their trade—something scholars in education have documented in the past two decades in research on historical reading and writing. But while much has been written about how to read like a historian (Hynd-Shanahan, Holschuh, & Hubbard, 2004; Shanahan & Shanahan, 2008; Wineburg, Martin, & Monte-Sano, 2011), less work has been done on how to *write* like a historian. In that smaller body of scholarship, little work has been done in terms of identifying the key challenges faced by those writing evidence-based interpretations (cf. Monte-Sano, 2010).

Historical writing is a complex enterprise involving the deployment of a range of tools. But the development of expertise seems to require the navigation of several critical tensions. Historical writing challenges students to seek appropriate evidence and to craft plausible stories even in the face of incomplete information. It demands flexibility of mind and requires students to modify their positions in light of new evidence or ideas. And it allows students to translate knowledge to different audiences, as well as to carefully frame the importance of their work. These are hallmarks of historical writing—signature competencies developed in the acquisition of expertise.

As this work reveals, historians-in-training are not born with these skills and dispositions. Nor do they master them quickly. In this study, our novice-experts needed to keep working to navigate these tensions. They were learning through the work itself—developing mastery in historical writing inductively, through daily experience.

Yet not all students go on to Ph.D. programs or engage in sustained historical writing projects. Might it be possible, then, to help K–12 students and college undergraduates develop these skills in some developmentally appropriate yet authentic way?

Before answering that, it is worth re-exploring the question of why such an aim might prove valuable.

As our research reveals, the novice-experts mastering the skills of writing like historians were not merely learning a professional practice. They were developing dispositions and modes of thought. They were cultivating a unique approach to cognition characteristic of experts in the field. And they were learning to think in new ways—making tough judgments, doing so with open minds, with a concern for the truth, and with a willingness to revise their opinions. This form of critical thinking is, we argue, important not just in the abstract, but also for the very concrete act of citizenship.

As for *how* K–12 students can develop these skills, much work remains to be done, and this study does not offer clear instruction about what educators should do in the classroom. We can say, however, that awareness of these critical dispositions is an important first step. Knowing what we want our students to be able to *do*—knowing the skills we want them to acquire and the dispositions we want them to develop—we can begin to talk knowledgeably about what activities might *produce* those outcomes.

One final point is worth making, and that is about the joy of history. The joy that historians experience is the joy of discovery—of assembling puzzle pieces, finally figuring out a messy problem, and communicating something new. Yet that joy, which so powerfully draws historians into the profession, is all too often absent from K–12 classes and undergraduate seminars where students dutifully, if reluctantly, read through accounts of "what happened."

Historians start new projects not because they have been assigned, but because they promise to surprise, and perhaps even to enlighten. That, too, is something that our novice-experts learned. And all students should be so lucky.

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Appendix A:
Sample Interview and Survey Questions

Background Information Questions

Some questions, especially those in the initial interview, were intended to gather basic background information

about participants. These questions allowed us to get to know the participants, build rapport with them, and ask about their backgrounds including what drew them to graduate school in history, to the particular programs in which they were enrolled, and to their dissertation topics.

Sample Background Information Interview Questions:

What brought you to graduate school in history?

What about being a historian most excites or interests you?

What is the topic of your dissertation?

Why did you chose _____ as the topic of your dissertation?

Questions about the Dissertation Writing Process

In each interview and survey, we asked participants to talk about their own dissertation work and to reflect on their process of writing the dissertation. These questions offered "snapshots in time" of different points in the dissertation writing process, and allowed participants to offer concrete examples of how they engaged in and conceived of the historical writing process.

Sample Dissertation Writing Process Interview Questions:

Will you please fill out the following dissertation chart [see Appendix B]?

You just wrote down what you think is the central argument of your dissertation.

What evidence made you think that this is the central argument?

Are there any parts of the argument that you just laid out do not yet have evidence to support it, and if so what are they?

What is your next step in creating an argument for this dissertation?

Are there any significant differences between the argument that is central to your dissertation today and the argument of three months ago? If so, what do you think accounts for the differences?

What's the biggest intellectual challenge that you are facing right now as you are writing your dissertation?

Sample Dissertation Writing Process Survey Questions:

 For each chapter, please provide a title and use check marks to identify one of four stages of completeness. Please do this from working memory. There is no need to call up a prospectus from your files. If you have fewer than 8 chapters, please adjust accordingly.

	Title	Preliminary Thinking	Researched	Drafted	Final
Chapter 1	Click here to enter text.	☐	☐	☐	☐
Chapter 2	Click here to enter text.	☐	☐	☐	☐
Chapter 3	Click here to enter text.	☐	☐	☐	☐
Chapter 4	Click here to enter text.	☐	☐	☐	☐
Chapter 5	Click here to enter text.	☐	☐	☐	☐
Chapter 6	Click here to enter text.	☐	☐	☐	☐
Chapter 7	Click here to enter text.	☐	☐	☐	☐
Chapter 8	Click here to enter text.	☐	☐	☐	☐

On the scale below, please place an X in the place that you think best describes the work of writing your dissertation

fact-finding

creativity
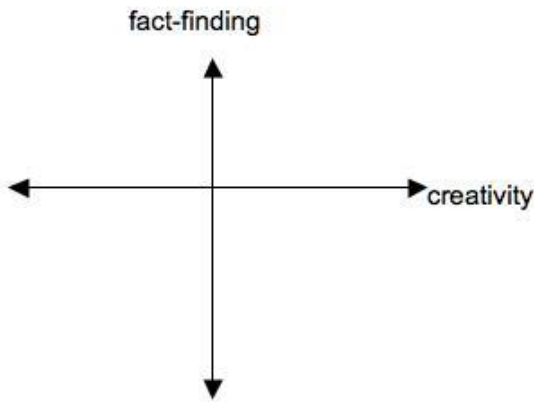
Questions about Historical Writing
While questions about the dissertation allowed us a glimpse into the historical writing process as participants experienced it, we also asked questions that attempted to elicit how participants thought about historical writing in general, not explicitly tied to their own projects. These questions asked participants to reflect upon and attempt to name what constitutes historical writing.

Sample Historical Writing Interview Questions:

What do you think are the hallmarks of the historical writing process?

Probe: what, in your mind, distinguishes the historical writing process from the more general writing process outside of the discipline?

What is the relationship between the way that historians write and the way historians think?

If you were to teach a class on historical writing, what would your three big lessons be for your students?

When you took the last written survey for us, we asked you to put the letters X, Y and Z on a line which was designed to try to represent the historical writing process, where X represented examining evidence, Y represented honing the argument and Z represented writing [see below]. Can you imagine another diagram that would better represent or better capture the historical writing process?

Sample Historical Writing Survey Questions:

In the space below, please construct a visual representation of the historical writing process.

Please use the following key:

x - examining the evidence
y - honing the argument
z - writing

You may place the letters anywhere you like in the blank space below, as many times as you like, in any pattern or design, and in whatever size font you like.

The process of writing history: (check all that apply)

☐Reveals weak points in my argument
☐Reveals strong points in my argument
☐Is a way of expressing what the argument is
☐Is a way of determining what the argument is
☐Serves as a means of organizing collected evidence
☐Serves as a means of identifying the need for further evidence
☐Involves interpreting
☐Involves guesswork
☐Involves certainty
☐Produces surprising results
☐Produces expected results

Questions about the Discipline of History
In addition to asking participants to name the unique attributes of the historical writing process, we also asked them about the discipline of history writ large. Some of these questions focused on concepts discussed in the scholarly literature (e.g., the relationship between evidence and argument), while others allowed us to follow up on patterns and trends from participants' answers to prior interview and survey questions.

Sample Discipline of History Interview Questions:

If history were to be thought of as a laboratory science, what would the historian's lab look like and what would the key process taught to interns at the lab be?

We've been hearing from a lot of participants in this study that historians sometimes change their minds. There may be historians who don't change their minds, but for those historians who do change their mind as a writing project develops, I'm wondering if you could explain to me why that would that be the case. Why do some historians change their minds?

What do you see as the relationship between historical evidence and a central argument or narrative?

What evidence, if any, might you come across that would cause you to doubt or question the argument that you now think is central to the dissertation?

Sample Discipline of History Survey Questions:

Writing history promotes: (check all that apply)

☐A sense of skepticism
☐A degree of creativity
☐An ability to live with questions
☐A concern for evidence
☐A willingness to guess
☐A sense of certainty
☐A concern for accuracy

Writing history involves: (rank in order of importance with 1 being most important and 7 being least important)

☐Generating questions
☐Getting a sense of what others have written
☐Searching for evidence
☐Meticulously examining evidence
☐Crafting a coherent story about the past
☐Speculating about the past
☐Creating a convincing argument

Appendix B:
Dissertation Chart

In each of the interviews and surveys, we asked participants to complete the following handout.

Name:

Working Dissertation Title:

In 2–3 sentences, what is the central argument of your dissertation?

For each chapter, please provide a title and use check marks to identify one of four stages of completeness

	Title	Preliminary Thinking	Researched	Drafted	Final
Chapter 1					
Chapter 2					
Chapter 3					
Chapter 4					
Chapter 5					
Chapter 6					

Note: In light of your chapter titles, feel free to go back and revise the central argument if necessary.

4. How confident are you that this argument will persist unchanged until you complete your dissertation?

1 ☐   2 ☐   3 ☐   4 ☐   5 ☐
Not confident   extremely confident

Appendix C:
Partial List of Codes

Argumentation
Asking questions
Balancing competing claims
       Certainty and doubt
       Challenges in writing history
       Changing or shifting conceptions of history
       Decision making
       Definitions/conceptions of history
"Finding order in chaos"
       History "lab"
       "I no longer think what I thought"
       Interpreting evidence
       Making the familiar strange
       Past as a foreign country
       Puzzles in history
       Reasons for studying history
       Reflections on learning historical thinking skills
       Risk taking/"leap of faith"

Role of colleagues
Role of teachers
Seeking additional evidence
Sources and their use
Storytelling
"Trial and error"
Unknown/unknowable