Representing history: On structuring history lessons as design

Flávio S. Azevedo, Heather Batchelor, School of Education, 105 Furcolo Hall, 813 North Pleasant Street
University of Massachusetts, Amherst, MA 01003
Email: flavio@educ.umass.edu, hbatchelor@gmrsd.org

Abstract: We report on a design experiment in which history lessons are structured in terms of the *design and refinement of visual forms* that can afford powerful reasoning about the nature of history as an ongoing, contested socio-cultural construction.

Introduction

Although distinct in kind, representational practices of technical disciplines and the humanities share commonalties. For instance, narrative and description are practices that cut across science and history, and some researchers are attempting to seize on the pedagogical potential of these commonalties (Stevens et al, 2005). We contribute to these efforts and report on an attempt to structure history lessons in terms of representational practices of science. Specifically, we frame historical narrative construction in terms of the *design and refinement of visual forms* (diSessa et al, 1991) that can afford powerful reasoning about the nature of history as an ongoing, contested socio-cultural construction. This framing follows from the interplay between our target learning goals and hypothesized means through which these goals might be best achieved, as follows:

- 1. Meta-history knowledge: Rather than targeting any particular historical period or event, we seek to facilitate learning of three key structural features of historical accounts: (i) there are multiple and competing narratives of any historical event (Zinn, 1994); (ii) each such narrative reflects the views and interests of particular groups in society, though their precise identification may be complex; and (iii) over time, a certain narrative "wins over" competing ones, though it may also shift. Because these refer to general features of historical accounts, rather than specific historical events, we call them meta-historical knowledge.
- 2. Affordances of design activities: Any representational form, regardless of type, constrains and affords inferences about its referent (Norman, 1993). In line with this idea, we believe that particular kinds of student-created visual forms (e.g., multiple, parallel timelines) might better support their efforts in grappling with meta-historical issues. Additionally, the process and cycles of representational design might more easily lead students to articulate the construction of historical narratives as a matter of constant refinement.

In this poster, we describe the activity dynamics of meta-history lessons, framed as representational design, and the products that students created in these activities. Additionally, we explain these dynamics with regard to pedagogically related themes that emerged and recurred in classroom interactions.

Research context

Our initial trial of meta-history activities was held at a rural high school—dubbed Rural High—in an impoverished school district in Western Massachusetts. The activities spanned a total of five sessions, all of which were held during regular school hours, but at a period in which 10^{th} grade students volunteering for the experiment were excused from their regular duties. Sessions lasted about 90 minutes each, with the exception of the second day, which lasted about 45 minutes.

Ms B—the second author and also a history teacher at Rural High—taught all sessions and recruited students from both her classes and the school at large. Following a first-come, first-serve recruitment policy we ended up with six Caucasian female students (all names are pseudonyms): Laura, Connie, Kara, Gloria, Alba, and Allison. Laura dropped out after the first session, and Alba after the third session. All sessions were videotaped and participant-generated artifacts were collected.

Activities were structured as open-ended discussions so that knowledge construction could organically grow from students' ideas and interests. That said, Ms B sometimes intervened to help students clarify points, synthesize views, or simply to request additional contributions. The following is Ms B's introduction to the task: (7:20) "We're really going to be talking about the Iraq war... a:nd what you know about the Iraq war, then we'll go to what you want to know about the Iraq war, and then we're gonna go into... let's find out more... and the ultimate goal is going to be to think about how the Iraq war will be written in textbooks say: fifty years from now... and how that gets created ((2 seconds)) And we're gonna create a visual diagram of... how our conversations go... we're gonna create a... some kind of representation of what that looks like."

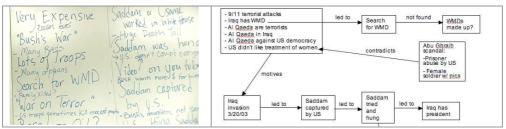
Analysis and results

Our analysis highlights a number of themes that emerged during the sessions. Such themes refer to both activity content (i.e., what students say and do) and form (i.e., the dynamics of activities, as defined by students'

stated and inferred goals). Because of their relative frequency of occurrence, these themes were most influential in determining the flow, direction, and outcomes of the activities.

1. Factual knowledge: "Facts" constitute the raw material from which historical narratives are built. In line with this idea, we sought to ground the discussions in a context about which students are presumably very knowledgeable: the current Iraq war. Confirming our hypothesis, by the end of the first session students and teacher had summarized on the whiteboard 53 "facts" regarding the war (see Figure 1a). These ranged from "hard facts," key dates, processes, economic consequences of the war, and so on.

We note that, as much as generating facts contributed to the overall conduct of the lessons, fact generation was an activity in which students recurrently engaged throughout the sessions. Put differently, fact generation exerted a strong pull on students' activities. With each new fact raised, students tended to feel that their narratives (in whichever form represented, visually or not) were incomplete. This brought a sense of frustration to the group and often stalled activity progress. Importantly, however, considerations about the *completeness* of historical narratives offer us the opportunity to address meta-historical learning goals, specially the selectivity of historical accounts. We hope to seize on these opportunities in future implementations of our activities.



<u>Figure 1</u>. (a) Snapshot of whiteboard showing participant-generated facts about the Iraq war (Day 1); (b) Partial node-and-link representation of such facts, created by the research team and shown to students on Day 5.

- 2. Constructing accurate historical accounts: Closely related to the issues above, students often raised questions that they judged fundamental for a truthful account of history. Prototypically, students would revisit facts in their lists and question their *veracity*, which would then spark a whole new activity aimed at further investigating these facts. While these events sometimes prevented a deeper consideration of our meta-historical learning goals—e.g., by leading into a spiral of ever-deepening questions of veracity—they also offer entry points into such goals. For example, when exploring the results of the search for weapons of mass destruction in Iraq, students bumped into three competing versions of the issue. In future implementations of our activities, we hope to engage students in creating representational forms that can more easily afford inferences regarding the multiple and competing varieties of historical narratives.
- 3. A wealth or representational forms: In grappling with proposed and self-initiated activities, students created a variety of representational forms to depict their narratives. These forms included time lines, bulleted Powerpoint lists, and even a film of sorts. To further seed the discussions, we showed students two adaptations of commonly available forms for representing arguments and narratives. Figure 1b shows one such form, namely a modified node-and-link representation we made based on facts students had previously generated. We found that students had no trouble understanding these forms, as well as proposing changes and additions for better showing features of historical narratives. Our future implementations of meta-history activities will draw on these specific student abilities to foster more explicit consideration of meta-historical issues.

Conclusions

We are at the beginning stages of a long-term research project, so our analysis and results are tentative. With this in mind, we think we have made some progress towards some very high level goals for history instruction. In particular, we have some evidence that students can engage issues of meta-historical nature within a framing of representational design cycles. Further research on these issues seems warranted.

References

diSessa, A. A., Hammer, D., Sherin, B. L., & Kolpakowsky, T. (1991). Inventing graphing: Metarepresentational expertise in children. *Journal of Mathematical Behavior*, 10(2), 117–160.

Norman, D. (1993). Things that make us smart: Defending human attributes in the age of the machine. Reading, MA: Addison Wesley Publishing Co.

Stevens, R., Wineburg, S., Herrenkohl, L., & Bell, P. (2005). The comparative understanding of school subjects: Past, present, and future. *Review of Educational Research*, 75(2), 125-157.

Zinn, H. (1994). You can't be neutral on a moving train: A personal history of our time. Boston, MA: Beacon Press.