

## Electronic Currents

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### Coding (and) the Archive: Texts, Markup, and Open Pedagogy

By Trey Conatser, Jake Beavin, Cassie Bradley, Dylan Clark, and Brianna Gill, University of Kentucky

What is the relationship between open pedagogy and the archive, and how can the digital humanities allow that relationship to be explored? Beyond issues of access and affordability, open pedagogy emphasizes collaboration between students and instructors, project-based and experiential learning, and a sense of meaningful interaction with the world. Such an approach invites students to be critical users and developers of digital technologies, attending to the affordances and constraints of the platforms at hand. In short, we *build* educational resources in addition to using them. The Breckinridge Correspondence and Digital Texts Project and its associated undergraduate course at the University of Kentucky seek to model these principles as a way of opening the archive and involving students as decision-making stakeholders. Beyond engaging with primary sources, our work represents an inquiry into digital models, methods, and mediations that transform those sources—and the information they contain—for a wide audience. While the project has several goals, the most visible will be the publication of a web-based, open access, digital documentary edition.

Our work focuses on Mary Breckinridge and the Frontier Nursing Service Records in the University of Kentucky Libraries' Special Collections Research Center. A pioneer in the history of nurse-midwifery in the United States, Breckinridge founded the Frontier Nursing Service to provide mothers and children with skilled health care (and the first nurse-midwifery services in the United States) in the communities of the Appalachian region. We spent our semester with Breckinridge's personal correspondence from 1919, when she arrived in the devastated Aisne region of rural France to assist the nursing relief efforts of the American Committee for Devastated France in the aftermath of World War I. As historians have emphasized, this exerted a tremendous influence on what would later become the Frontier Nursing Service, and the letters provide a rich, ground-level perspective of how that influence played out in daily life.

#### Curating

As our team pored over the letters, we didn't fail to note that precisely 100 years prior, Breckinridge traveled through rubble and ruin, writing home to family and friends. The semester began with open discussions about

what we found notable as we slowly pieced together overarching themes and deliberated on the selection of letters for digitizing, encoding, and publication. Heeding Gabriel Hankins's argument that digital editions of letters in particular allow us not only "to remediate a central part of our cultural inheritance but also to begin to do justice to the larger social fields in which letters were written and thereby better represent the social dimension of epistolary thinking," our conversations focused not just on the primary source per se but specifically on the personal letter as a form that lends itself to the affordances of *digital* mediation and representation.

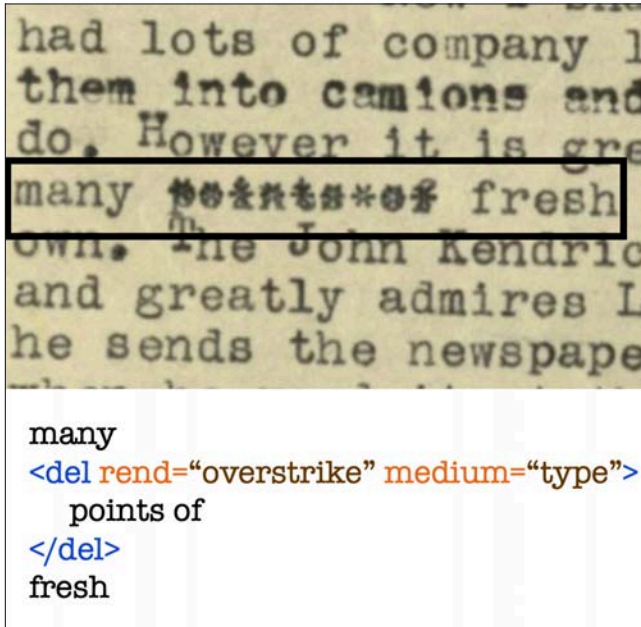
Letters, as we discussed, provide a unique glimpse into life and history as larger events play out in the theater of the local and day-to-day, and each letter offers a snapshot of a larger conversation *in medias res*. From this understanding, our curatorial decisions pursued a constellation of interests: how the letters reveal Breckinridge's personality and perspectives, how they provide rich details of work and life in the region at the time, how they suggest influences for Breckinridge's later work in Appalachia, and how the writing itself may resonate with a reader in meaningful ways. Primed by Randall Jimerson's analogies of temple, prison, and restaurant for understanding the purposes and powers of the archive, our work proposes a fourth analogy: the workshop, to which the "power of interpretation" extends to the assemblage, transformation, and (re) mediation of archival materials for a public audience (27).

#### Encoding

We transcribed the documents in oXygen using extensible markup language (XML), which "tags" structural, transcriptional, and contextual aspects of a document. Those tags follow the metadata standards established by the Text Encoding Initiative (TEI), a controlled, yet flexible vocabulary for describing textual objects. Unlike other coding languages, XML only describes texts and does not instruct a browser or other program as to how those texts should be presented. The TEI guidelines are the backbone of a project's sustainability and open access, preserving the data apart from the more ephemeral code that relies on specific software and devices to display it. Other researchers—including archivists—can use

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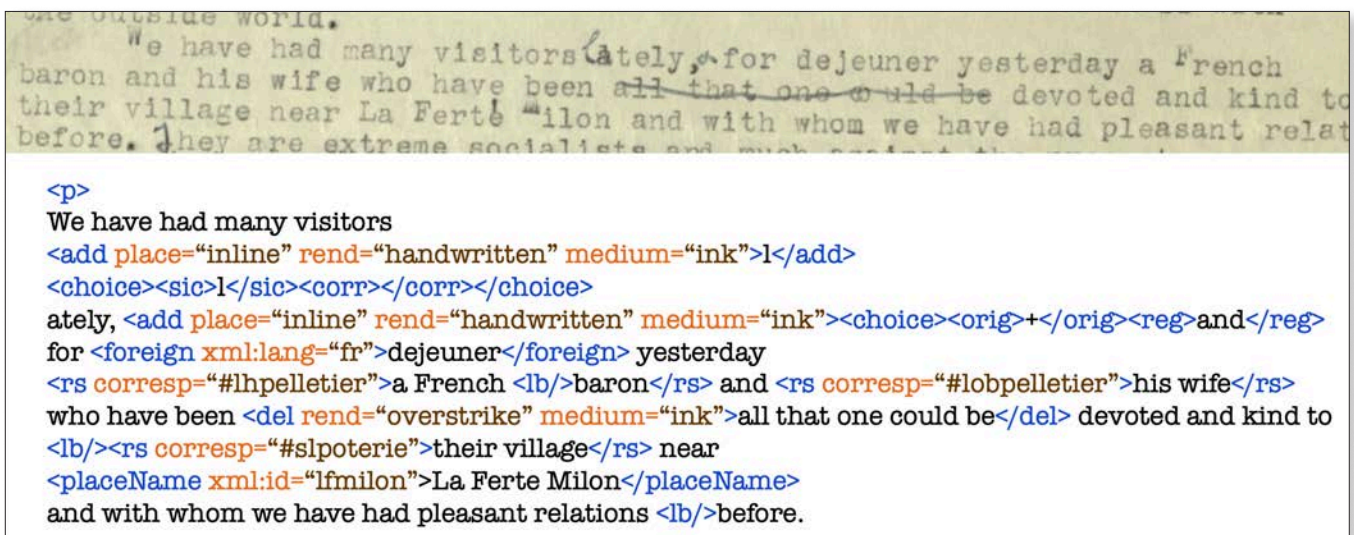


Detail of a deletion and corresponding transcriptional markup. Courtesy of UK Libraries Special Collections Research Center.

this XML file for their own purposes. A further process involving extensible stylesheet language transformations (XSLT) renders the descriptive code file into something that a reader can navigate (a website, for example). Our team worked individually on specific documents, all the while contributing toward the end goal of transcribing and encoding the selection of letters.

The TEI guidelines include over 500 different tags (or “elements”), each of which may contain any number of attributes that, in turn, may be assigned a wide range of values. For example, `<unclear cert="low" resp="#smith">` would refer to a partially illegible string of text that the editor, Smith, has supplied with a low level of certainty. Beyond structural and transcriptional metadata, the TEI guidelines allow for exhaustive documentation of contextual information. Breckinridge’s letters are full of people, places, and events that are vital to understanding her story. And with each of these contextual tags, we embed metadata such as a place’s latitude and longitude and notes on the significance of a named person. The encoding allows for a level of detail that would be impractical or impossible in other formats. We dedicated much of our time to identifying and applying the elements and attributes that would best serve our project, especially given the theoretical possibility that almost everything in a letter can be encoded in some way.

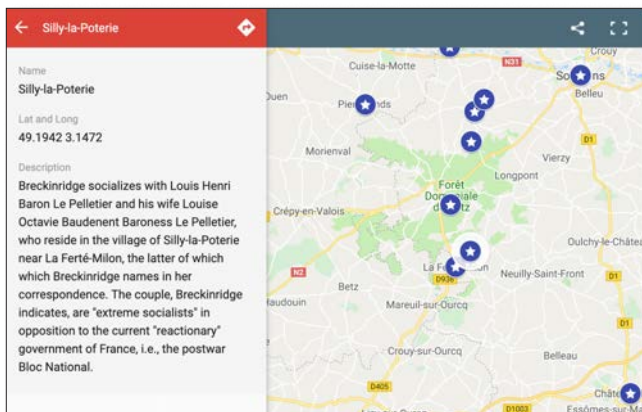
We began the semester with Matthew Kirschenbaum’s notion of coding as modeling: “a selective and premeditated representation of reality” that is “interactive, manipulable, [and] extensible.” All in all, XML and the TEI represent a way of thinking about texts and world, and we found even the most granular acts of description to be profoundly interpretive.



Detail of a letter with corresponding transcriptional and contextual markup. Courtesy of UK Libraries Special Collections Research Center.

## Editing

One of the project's main goals is to provide open educational resources for exploring firsthand accounts of a significant moment in history as well as a formative influence on public health developments in Appalachia. In place of something like a printed anthology, and in addition to the master XML file, our work will result in the publication of a web-based digital documentary edition, defined by Elena Pierazzo as “the recording of as many features of the original document as are considered meaningful by the editors, displayed in all the ways the editors consider useful for the readers, including all the tools necessary to achieve such a purpose” (475). This ultimately gives readers more power to explore and create in a digital interface without altering the original documents.



Screenshot of Google Maps interface with places mentioned in the letters (*Sillery-la-Poterie* selected).

Moreover, correspondence is the ideal candidate for this kind of digital edition because it's often nonlinear and points to many avenues of study, from the biographical to the historical, from broad context to striking (or puzzling) details. The interactive dynamic presentation of our edition will allow the reader to explore a web of metadata and layers of information (e.g., flipping between diplomatic and “clean” transcriptions, exploring an annotated map of places mentioned, locating particular people), all of which provide a fuller picture of Breckinridge living and working surrounded by devastation. Taken as a whole, the possibilities for encoding and the structure of the interface encourage the development of the historical imagination, the *sine qua non* of learning in the archive.

## Collaborating

Working as a team on this project has given us the opportunity to encourage each other, catch mistakes, and bring our individual work together to paint a detailed picture of a year in Breckinridge's life. In no small part, our diverse perspectives came from working with different letters that express a range of ideas, emotions, and experiences at different times in Breckinridge's story. We also noted the similarities and themes: vulnerability, hardship, loss, devastation, and yet, also, hope and joy. Community was important for our teamwork and learning environment, as it was also important for Breckinridge's work in the Aisne. She took that notion of community and infused it into the Frontier Nursing Service, and we too kept an eye to a future community of readers, researchers, and teachers.

After working with a very personal history, we have gained an appreciation for efforts to preserve it and make it available to a wider audience. From stray marks and passing references to significant rewrites and pivotal figures, we dwelled on the stories that the letters tell and considered the marks that we were leaving as stewards of those documents and stories. The editing and encoding process uniquely allowed us to do this reflective work while opening the archive and its texts for others to encounter and interpret.

## Works Cited

- Gabriel Hankins, “Correspondence: Theory, Practice, and Horizons,” in *Literary Studies in the Digital Age: An Evolving Anthology*, ed. Kenneth Price and Ray Siemens (MLA, 2015), [dlsanthology.mla.hcommons.org/correspondence-theory-practice-and-horizons](https://dlsanthology.mla.hcommons.org/correspondence-theory-practice-and-horizons).
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