Jentery Sayers, Narrative Abstract for Nebraska Digital Workshop

How Text Lost Its Source: Magnetic Recording Cultures

How Text Lost Its Source is a cultural history of magnetic recording from 1878 to the present. As no such cultural history exists, it provides humanities scholars with an understanding of how magnetic recording technologies have been used and represented over time and across geographies. While, thanks to Lisa Gitelman, Friedrich Kittler, and Jonathan Sterne, many scholars are familiar with phonographic and gramophonic cultures, magnetic recording remains largely uninvestigated outside of science, engineering, and Matthew Kirschenbaum's recent work on data storage.

Significance of Project: Digital Humanities, Media Studies, and Literary Criticism

Yet *How Text Lost Its Source* is not a history for history's sake. It demonstrates how magnetic recording's vexed legacy in sound reproduction informs a common perception in popular culture and academia today, namely that (unlike print) electronic text is fleeting and ephemeral on the computer screen, seemingly without source or inscription. Despite the fact that audio and electronic texts are stored on physical media, they both are frequently rendered immaterial phenomena. This is especially the case with magnetic audio, which—when compared with the noisy surfaces of tinfoil, wax, shellac, and vinyl—has long been subtended by a cultural impulse to erase any perceivable trace of its inscription during playback. *How Text Lost Its Source* interrogates the intersections of this cultural impulse with writing, broadly conceived. Shifting from Arthur B. Reeve's scientific detective tales and Tony Schwartz's wire recordings to Samuel Beckett's *Krapp's Last Tape*, John McDaid's floppy disk fiction, and Kate Pullinger's collaborative multimedia novels, the project unpacks how narratives (e.g., in fiction

and hardware manuals) and factory standards (e.g., storage capacity) simultaneously enable the historically contingent constructions of imperceptible media and immaterial information.

Method: Boundary Object Theory

Given its broad historical scope, *How Text Lost Its Source* is anchored in four specific technologies, with each functioning as what Susan Leigh Star, James Griesemer, and Geoffrey Bowker refer to as a "boundary object," or an object that meets the shared needs of multiple communities of practice while being put to different uses by each community. The boundary objects I discuss are the telegraphone, the wire recorder, the tape recorder, and the personal computer. And their communities of practice range from scientists, engineers, office managers, and military personnel to artists, authors, musicians, and ethnographers. One benefit of this method is that it avoids vulgar versions of both technological determinism and social constructivism by articulating the research and development of a given technology with unique instances of its use and specific contexts for its enculturation.

Technical Innovations: Three Contributions to Multimodal Scholarship

As a digital project composed primarily in the authoring and publishing platform, *Scalar*, *How Text Lost Its Source* contributes to current digital humanities research by:

Annotating Historical Audio: Recordings on wire, vinyl, tape, and disk comprise some of the project's key archival materials. *How Text Lost Its Source* not only makes those recordings available for audiences to hear while reading interpretations of them; it also annotates that audio through time-stamped commentary on sound files. While such features are now typical in visual culture (e.g., annotating lexia using Commentpress), no such model exists for the scholarly treatment of sound.

Mobilizing the Resource Description Framework (RDF) for Cultural History: *How Text Lost Its Source* leverages Scalar's use of RDF triples (i.e., naming the relationship between two entities) to visualize the technocultural dynamics of magnetic recording's history. Animated through interactive jQuery graphs, these dynamics include: (1) gendered references to high fidelity in advertisements, (2) racialized comments about neighborhoods in noise abatement policies, (3) the production of masculinity through rhetorics of domestication in popular magazines, and (4) the sexualized valences of words like "control" in technical publications. As opposed to text mining methods that, say, examine word frequency, this approach treats the often implicit relationships between two entities as the very objects of inquiry. Such relationships can only be identified by human readers, even if they are ultimately visualized computationally (e.g., through an interactive graph). Although not fully developed, I am imagining this use of RDF as a means for integrating concepts from Birmingham Cultural Studies (e.g., articulation) into humanities computing.

Experimenting with Long-Form Multimodal Scholarship: *How Text Lost Its Source* may be interpreted at the intersection of an online exhibit (composed in a platform like Omeka) and an experimental webtext (found in a journal like *Kairos* or *Vectors*). That said, another issue I would like to investigate with Nebraska Digital Workshop participants is how long-form multimodal scholarship should be designed. When blending audio, video, and text, what assumptions do scholars make about attention spans? About an audience's investments? Or even about digital media? What are the affective politics of multimodal argumentation? How do notions of citation, duration, perception, and persuasion change with new platforms? And how may multimodal projects be composed with sustainability and interoperability in mind?