Listening to the Past: Digital Approaches to the History of Sound and Language

Workshop held at the German Historical Institute Washington, March 19–20, 2026, made possible by a grant from the Volkswagen Stiftung. Conveners: Hans Boas (University of Texas–Austin) and Atiba Pertilla (GHI Washington). Participants: Faime Alpagu (University of Vienna), Samuel Backer (University of Maine), Margaret Blevins (University of Texas), Sadie Couture (McGill University), Jana Dunz-Keck (GHI Washington), Stephan Elspaß (University of Salzburg), Laura Fischlhammer (University of Salzburg), Àkos Goscál (University of Pécs), Andreas Greiner (GHI Washington), Katharina Hering (GHI Washington), Mèhèza Kalibani (University of Tübingen), Pratiti Ketoki (University of Minnesota), Ursula Lehmkuhl (University of Trier), Douglas Peach (American Folklife Center, Library of Congress), Ali Raj (Columbia University), Anouk Rehder (University of Basel/University of Strasbourg), Raphael Rössel (GHI Washington), Thomas Schmidt (Linguistic Bits), Josh Shepperd (University of Colorado Boulder), and Joshua Sternfeld.

The "Listening to the Past" workshop brought together scholars from history, linguistics, and the digital humanities to explore the growing importance of audio and audiovisual sources in historical research. Connected to the collaborative project "Let the People of the Past Speak! Turning Migrant Letters of the 19th Century into Speech," the workshop, funded by the Volkswagen Stiftung, reflected a broader scholarly shift toward the history of the senses, in which researchers seek to understand how people in the past experienced and interpreted the world through sound, sight, smell, and other sensory perceptions. Over the past two decades, historians and linguists have increasingly developed

innovative methodologies to study nontraditional sources such as songs, oral histories, and recipes. Linguists, particularly sociolinguists, have used oral recordings and digital analysis of historical texts to trace the development of dialects, language change, and social communication over time. These approaches not only provide insight into linguistic evolution but also reveal the regional and social dynamics that shaped historical communities. Building on these developments, the workshop brought together historians and linguists engaging with sources from North America, Europe, Asia, and Africa, and served as an interdisciplinary workspace for assessing the current state of research and identifying future opportunities for studying and disseminating the sensory dimensions of the past.

The first session focused on linguistic and affective dimensions of historical communication. Laura Fischlhammer examined request strategies in nineteenth-century German correspondence, analyzing primarily emigrant, soldier, and patient letters. Using a micro-analytic approach, she identified a clear predominance of directive ("impositive") forms, such as imperatives and explicit requests, in contrast to the more indirect strategies common in present-day communication. Her findings demonstrate that social distance and writing experience significantly influenced linguistic choices: closer relationships encouraged more direct requests and less experienced writers tended to avoid indirect or mitigated forms. Gender differences were also observed, with male writers showing a slightly greater tendency toward conventional indirect strategies. Faime Alpagu's presentation shifted the focus to audio letters and migration memory, drawing on Kurdish immigrant family recordings from the 1970s. She conceptualized audio letters as more than carriers of information: they function as sites of intergenerational memory, shaped by linguistic, technological, and emotional factors. Alpagu emphasized the "messiness" of listening, particularly in contexts of language loss and poor audio quality, and

argued that recordings gain new meanings through processes of digitization and reinterpretation. Her work highlights how sound mediates absence, intimacy, and memory, especially in transnational family contexts.

The second session addressed sound as both a linguistic and media-historical object. Ákos Gocsál explored Hungarian newsreels from the early 1930s, demonstrating how linguistic metadata can be used to analyze historical speaking styles. He highlighted challenges such as identifying speakers and distinguishing between scripted and spontaneous speech. Newsreels, combining narration with ambient sound, reveal both stylistic conventions—such as the authoritative "voice-of-God" narrator—and moments of authentic interaction. Ali Raj examined "Muslim phonology" in East Pakistan, present-day Bangladesh (1947–1971), focusing on the interplay between Urdu and Bengali. His presentation illustrated how linguistic features became markers of political and religious identity, particularly in the context of state-driven language policies. Pronunciation patterns and naming practices reflected broader tensions between competing nationalisms. Josh Shepherd and Sadie Couture discussed the U.S. Radio Preservation Task Force and the broader issue of representation in audio preservation. They emphasized that sound archives remain uneven and often exclude marginalized voices. Their post-custodial approach, focusing on endangered and privately-held collections, aims to democratize preservation practices while remaining attentive to questions of ownership, access, and institutional responsibility.

The third session explored sound in mass culture and performance. Samuel Backer analyzed blackface minstrelsy and early American popular music, using topic modeling of sheet music collections to trace changing representations of race and romance. He primarily focused on Tin Pan Alley, where he argued the concept of popular song and mass musical culture originated. It emerged out of 1890s and 1900s commercial

music, which was specifically created to appeal to the largest possible audience. During the same time minstrelsy became more widespread and popular throughout various parts of the United States, arguably becoming a steppingstone to popular song. Backer pointed out that minstrelsy was deeply embedded in the structures of commercial publishing and played a key role in shaping mass culture at the turn of the twentieth century. In her presentation, Anouk Rehder focused on sound in contemporary German-language theater, proposing methodological approaches to studying its ephemeral nature. She identified sound as a crucial medium for historical representation, capable of creating "acoustic palimpsests" in which multiple temporal layers overlap. Rehder argued that sound not only conveys historical narratives but also exposes their constructed and ephemeral nature, opening spaces for critical engagement.

The fourth session focused on written sources and digital approaches to the history of sound and language. Ursula Lehmkuhl examined migrant letters as evidence of dialectal variation and non-standardized writing practices. These letters, often written by individuals with little formal education, preserve features of spoken language that are typically absent from standardized texts. Rather than treating orthographic irregularities as errors, Lehmkuhl emphasized their analytical value in capturing phonological and dialectal traits. Importantly, the letters reflect a period before the full standardization of German orthography, resulting in a high degree of variation. This allows researchers to trace how spoken forms were mapped onto writing systems and how individuals negotiated between dialect and emerging standard norms. Digital tools and transcription practices play a crucial role in making these features accessible for systematic analysis. Stephan Elspaß presented the linguistic differences of writers in common letters in the nineteenth century. He noted that fully standardized language is an abstraction rather than a lived reality and that informal texts provide insights into grammatical and lexical variation. By highlighting levels of

informality in correspondence, Elspaß argued these linguistic shifts act as a gateway to a better understanding of regional and socio-economic variations. He stressed that linguistic heterogeneity is inherent to language and that standardized forms represent only a limited perspective.

The fifth session concentrated on the digital reconstruction of historical speech, with a particular focus on nineteenth-century Texas German. The presentations highlighted both the potential and the methodological challenges of using artificial intelligence to transform written sources into audible language. The project "Let the People of the Past Speak," led by Hans Boas and Atiba Pertilla, aims to reconstruct spoken language from historical migrant letters by employing AI-based tools. This work is situated within the broader context of the German diaspora, which produced an extensive corpus of correspondence during the nineteenth and early twentieth centuries. Texas German represents a particularly complex case, as it developed from multiple dialects brought by migrants and evolved in relative isolation in the United States. The variety experienced a significant decline following the First World War due to English-only policies and anti-German sentiment, and it is now spoken by only a small number of elderly individuals. To address the challenges of reconstructing such a variable and non-standardized dialect, the project integrates multiple types of data, including handwritten letters from the nineteenth century, audio recordings from the 1950s, dialect surveys such as the Wenker data, and lexicographical sources.

Thomas Schmidt's presentation emphasized that defining a coherent language variety is inherently difficult because of regional, temporal, and individual variation. The project therefore relies on detailed processes of transcription and mapping, in which written forms are systematically linked to reconstructed phonological representations. The reconstruction process is further supported by the use of text-to-speech

systems and retrieval-based voice conversion technologies, which enable the generation of plausible audio outputs. However, these technologies also present limitations, particularly with regard to the availability and quality of training data. An innovative methodological approach involves the creation of fictional personas who provide a social and biographical context for the reconstructed speech and make the results more tangible. At the same time, this approach underscores the interpretative nature of the reconstruction, as the resulting voices are not direct reproductions of historical speakers but carefully modeled approximations. Margo Blevins highlighted the importance of building a comprehensive knowledge base that includes a wide range of textual genres, such as letters, diaries, and memoirs. These texts are processed using handwriting and optical character recognition technologies and are subsequently corrected manually to ensure accuracy. The inclusion of speakers with varying levels of fluency, ranging from fully fluent individuals to those with partial recall, illustrates the diverse ways in which language is preserved and transmitted.

The sixth session addressed the methodological and ethical complexities of working with historical sound recordings from colonial contexts. The presentations emphasized that listening to the past is not a neutral activity but is shaped by historical power structures and contemporary interpretative frameworks. Pratiti Ketoki introduced the concept of "temporal unease" as a methodological approach to engaging with colonial sound archives. Drawing on recordings of Bengali prisoners of war from the First World War, she illustrated how contemporary listeners encounter these materials differently from the ethnographers who originally produced them. While early recordings were often created within colonial frameworks of knowledge production, present-day researchers may experience a sense of familiarity or emotional connection to the voices. This shift creates a tension between historical context and contemporary interpretation which must be

carefully navigated. Meheza Kalibani further explored the colonial dimensions of sound recordings by analyzing materials produced by German ethnographers. He argued that such recordings are deeply embedded in systems of power, including racial hierarchies, colonial ideologies, and asymmetrical relationships between researchers and recorded subjects. As a result, these recordings cannot be treated as neutral representations of sound but must be analyzed in relation to the conditions of their production. A central contribution of this session was the identification of different forms of silence as analytical categories. Structural silence arises from unequal power relations, while technical silence results from the limitations of recording technologies. Content-related silence reflects the absence of certain topics due to taboos or censorship, and performative silence emerges in moments of interruption or omission during recording. Political silence refers to the absence of explicit resistance or dissent. These forms of silence are not merely gaps in the archive but meaningful elements that shape how recordings can be interpreted.

The workshop demonstrated the richness and complexity of sound as a historical source. Across diverse case studies, participants showed that sound is not merely a medium of preservation but a dynamic site of meaning-making, shaped by social, technological, and political contexts. A recurring theme was the need for interdisciplinary collaboration, combining methods from linguistics, history, digital humanities, and media studies. At the same time, the discussions underscored the importance of ethical reflection, particularly when dealing with sensitive or historically unequal contexts. By bringing together a wide range of perspectives, the workshop successfully highlighted both the opportunities and challenges of "listening to the past." It opened new avenues for research while encouraging scholars to rethink the fundamental nature of their sources and the role of sound in historical inquiry.

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