

THEME: SOUNDS OF LANGUAGE—LANGUAGES OF SOUND

Introduction: Language, Sound, and the Humanities

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ABSTRACT

Presenting the joint historical and methodological framework of the theme issue “Sounds of Language—Languages of Sound,” this introduction situates the individual contributions within a broader history of the humanities. The eight contributions address the period between approximately 1890 and 1970—from the modern disciplinary formation of knowledge about sound and the rise of the social sciences and humanities to the beginnings of computerized sound research. During this period, disciplines as diverse as linguistics, musicology, history, sociology, law, and theology all aspired to give scholarly attention to sound, and in particular to the spoken word. Starting from the observation that late nineteenth-century scholars of language turned from expert readers of historical texts into expert listeners to living languages, we trace the dual use of language as an object and a tool of knowledge production. As a research theme, language often broke through frontiers between the humanities, the social sciences, and the natural sciences, as well as between academic and nonacademic domains of knowledge. At the same

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time, new languages and modes of speaking arose as tools to examine, represent, and utilize sonic phenomena—whether in speech, music, or other sonic environments. The theme issue's three claims are, first, that sound both enabled and necessitated new alliances between otherwise divergent fields of knowledge; second, that sound and language motivated humanities scholars to reconsider or even reinvent their methodologies; and, third, that research on sound and language was deeply permeated by issues of power and politics.

It was early in the morning of June 3, 1911, in a lecture hall at the Sorbonne in Paris. In a few minutes, philologist Ferdinand Brunot's long-awaited Archives de la parole would open for business. Émile Pathé, cofounder of the famous French record company, was still rigging up his showpiece, a highly polished phonograph donated to the

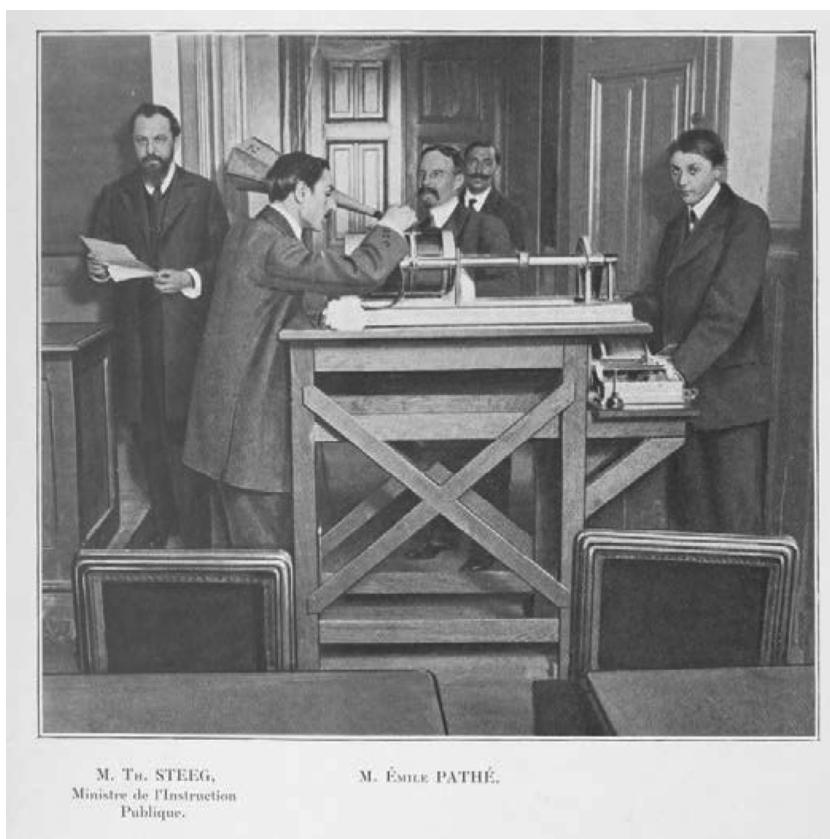


Figure 1. Émile Pathé prepares his phonograph for the inauguration of the archives. Digital copies of “Discours de M. Ferdinand Brunot,” in *Université de Paris, Inauguration des Archives de la Parole, 3 Juin 1911* (Paris: Albert Manier, 1911), Bibliothèque Nationale de France.



Figure 2. The French Minister of Culture, Théodule Steeg, speaks directly into the funnel of the phonograph, while Ferdinand Brunot waits beside him. Digital copies of “Discours de M. Ferdinand Bruno,” in *Université de Paris, Inauguration des Archives de la Parole, 3 Juin 1911* (Paris: Albert Manier, 1911), Bibliothèque Nationale de France.

university by Pathé Records (fig. 1). Only when the audience was seated did Brunot appear at the door, ready to give his *Discours d'inauguration* (fig. 2).¹ Brunot proceeded to unveil his high hopes for the new archive, which was to help collect the sounds of all the world's languages, create a phonographic atlas of all the French dialects, enforce French as national language through teaching records, and preserve the voices of French celebrities.²

When Brunot founded the archive, he was already a distinguished professor of the history of the French language at the Sorbonne and coeditor of the ambitious *Histoire de*

1. Published as “Discours de M. Ferdinand Bruno,” in *Université de Paris, Inauguration des Archives de la Parole, 3 Juin 1911* (Paris: Albert Manier, 1911), 7–19.

2. Pascal Cordereix, “Ferdinand Brunot et les Archives de la parole: Le phonographe, la mort, la mémoire,” *Revue de la BNF* 3, no. 48 (2014): 5–11.

la langue française des origines à 1900, a multivolume study that placed much emphasis on the historically variable relationship between written and spoken language. Brunot had witnessed the advent of experimental phonetics in late nineteenth-century France, with its new methods of speech analysis utilizing a myriad of measuring instruments and graphic inscription tools, mostly invented by the physiologist Étienne-Jules Marey and the linguist Abbé Jean-Pierre Rousselot. The Archives de la parole could also draw on the collecting strategies of other recently established sound archives, such as the phonogram archives in Vienna and Berlin, founded in 1899 by physiologist Sigmund Exner and in 1905 by psychologist Carl Stumpf, respectively. Together, these initiatives marked a significant shift in language studies, as recent research has shown: scholars of language changed from being expert readers of historical texts to expert listeners of living languages.³

Among other things, studying living languages prompted scientists and scholars to reflect upon their own styles of speaking. The inauguration of the Archives de la parole is, once again, a telling example. Along with the two photographs of the event, the Bibliothèque nationale in Paris still holds a recording of Brunot's speech, which shows that he deviated from his written manuscript to demonstrate *in actu* that the spoken word is part of a whole, multilayered "assembly of sounds and noises."⁴ We hear him apparently consciously modulating the prosodic features of his speech, such as tempo, rhythm, and intonation, and adding all the crisp articulation required for early phonograph recording.⁵

Early twentieth-century linguists' interest in the sound of language, it seems, arose in parallel with a new scholarly awareness of the language used to describe sonic phenomena. "Sounds of Language—Languages of Sound" focuses on this intertwining relationship of sound and language. As a contribution to *History of Humanities*, it aims to reflect certain core elements of humanities scholarship more broadly, addressing constellations of sound and scholarly utterance that go far beyond linguistics alone. It has long been clear that defining the nature of language was a central concern for

3. Robert M. Brain, "Standards and Semiotics," in *Inscribing Science: Scientific Texts and the Materiality of Communication*, ed. Timothy Lenoir and Hans Ulrich Gumbrecht (Stanford, CA: Stanford University Press, 1988), 249–85; Robert M. Brain, *The Pulse of Modernism: Physiological Aesthetics in Fin-de-Siècle Europe* (Seattle: University of Washington Press, 2015); Haun Saussy, *The Ethnography of Rhythm: Orality and Its Technologies* (New York: Oxford University Press, 2016).

4. Ferdinand Brunot, *Discours d'inauguration des Archives de la parole*, audio recording, June 3, 1911, Bibliothèque nationale de France, https://gallica.bnf.fr/ark:/12148/bpt6k1279113_0:42-0:44 ("un assemblage de sons et de bruits").

5. See Sylvie Freyermuth and Jean-François P. Bonnot, "Ferdinand Brunot entre académisme et innovation: Analyse phonostylistique et rhétorique du *Discours d'inauguration des Archives de la parole* (1911)," in *Le français parlé des médias*, ed. Mathias Broth et al. (Stockholm: Acta Universitatis Stockholmiensis, 2007), 203–19.

many humanities disciplines throughout the long twentieth century, but our theme issue opens up a new perspective by asking how those disciplines scrutinized the *sounds* of language and, conversely, sought linguistic means to describe auditory phenomena. These ventures in scholarship were, we argue, accompanied by the emergence of new practices of language use outside the academic realm—in everyday life, the arts, and social and political contexts.

The theme issue builds, on the one hand, upon recent work on the formation of acoustic knowledge and new epistemologies of listening,⁶ and, on the other, upon the history of the humanities and their search for common features that go beyond the specific, idiosyncratic needs of each discipline or even every scholar and publication. In particular, our findings support authors who have recently questioned the supposed divide between the humanities and sciences.⁷ Rather than discussing what makes the humanities disciplines that deal with sound special, we ask what problems—and what solutions—those disciplines have shared in their investigations of sound.

More specifically, our authors foreground three different strands of the entanglements addressed by our title, “Sounds of Language—Languages of Sound.” The first claim is that sound enables, and necessitates, new alliances between otherwise divergent fields. If some such alliances remain within the walls of academia, others draw in professional domains or aspire to applications of the humanities outside the university. In the late nineteenth century, it was an interest in the sound of language that led the

6. See, e.g., Alexander Rehding, *Hugo Riemann and the Birth of Modern Musical Thought* (Cambridge: Cambridge University Press, 2003); Benjamin Steege, *Helmholtz and the Modern Listener* (Cambridge: Cambridge University Press, 2012); Veit Erlmann, *Reason and Resonance. A History of Modern Aurality* (New York: Zone Books, 2010); Julia Kursell, *Epistemologie des Hörens: Helmholtz' physiologische Grundlegung der Musiktheorie* (Paderborn: Fink, 2018); Viktoria Tkaczyk, Mara Mills, and Alexandra Hui, eds., *Testing Hearing: The Making of Modern Aurality* (New York: Oxford University Press, 2020). On the interactions between the laboratory sciences and music, see Alexandra Hui, Myles Jackson, and Julia Kursell, eds., “Music, Sound, and the Laboratory, 1750–1980,” *Osiris* 28, no. 1 (2013); on the historical ways of generating knowledge about and through listening, see Netzwerk Hör-Wissen im Wandel, ed., *Wissensgeschichte des Hörens in der Moderne* (Berlin: De Gruyter, 2017). On the evolution of “listening styles” in musical, scientific, and political contexts, see Christian Thorau and Hansjakob Ziemer, eds., *The Oxford Handbook of Music Listening in the 19th and 20th Centuries* (New York: Oxford University Press, 2019); more explicitly on new technologies and their impact on research, see Carolyn Birdsall and Viktoria Tkaczyk, eds., “Listening to the Archive: Sound Data in the Humanities and Sciences,” supplement, *Technology and Culture* 60, no. 2 (2019). A globalized view is given by a recent forum section in this journal: Jonathan Service, ed., “Just Intonation, Japan, and the Origins of Musical Disciplines,” *History of Humanities* 2, no. 2 (2017): 312–87.

7. See, e.g., Hans-Jörg Rheinberger, “Culture and Nature in the Prism of Knowledge,” *History of Humanities* 1, no. 1 (2016), 155–81; and the forum “The Two Cultures Revisited,” ed. Fabian Krämer, *History of Humanities* 3, no. 1 (2018): 5–88.

Berlin psychologist Carl Stumpf to move the scope of his research from music to language, then back again (Julia Kursell). The musicologist Georg Schünemann built on Stumpf's work to seek new ways of speaking on radio, thereby establishing radio studies as a distinct field (Viktoria Tkaczyk). At around the same time, radio began to interest Karl Barth, one of the key proponents of dialectical theology, who combined theology, philology, philosophy, and the practice of radio preaching in search of ways to talk about the Word of God (Karsten Lichau). Music historian, practitioner, and writer Hermann Kretzschmar hoped to remedy music's alleged failure to "speak" intelligibly to listeners by proposing a new discipline of musical hermeneutics, situated at the interface of musicology and journalism (Hansjakob Ziemer). The unruly sounds of language, again, were what prompted US linguists and ethnomusicologists in the 1950s and 1960s to cross disciplinary borders when comparing the uses of pitch in music and in speech. They blurred the demarcations between musicology and linguistics, through both personal exchange and new interdisciplinary approaches (Judith Kaplan). Also in the mid-twentieth century, spoken language entered historical scholarship in the form of oral history, exemplified by historian of science Thomas Kuhn and his decision to base a now famous study on the history of quantum physics on an extensive series of elite interviews (Anke te Heesen). Other lines of research covered in this theme issue were driven by coalitions of intellectual and commercial interests—among them, attempts to find a new discourse in which to embed the standardization of musical pitch in the late nineteenth century (Fanny Gribenski) and endeavors to bring communication studies, law, and philology to the task of expanding the meaning of the term "speech" in the legal thinking of the early twenty-first century (Jennifer Petersen). All eight essays present examples of new disciplinary alliances and of the urge for interdisciplinarity as a way of responding to scholarly, and sometimes social and political, challenges. But these alliances were not smoothly functioning collaborations, nor did they always succeed in solving the problems that had motivated their cooperation. Instead, they often gave rise to new conflicts and unforeseen epistemological problems.

Second, the essays in this collection contribute to a reflection on the uses of technological devices and methodologies in the humanities. The negotiations, investigations, and intellectual effort that were necessary to handle the sonic nature of language and the fleeting nature of sound well illustrate the need for the humanities to constantly reinvent their methodologies. In early oral history, for instance, historians adopted interview techniques from journalism, sociology, and psychology, seemingly weakening the self-evident status of the textual testimony upon which historians had traditionally built their narratives (te Heesen). Most historians in the period used the technology of tape-recording as a simple means of fixation, working mainly from the transcriptions. Linguists, in turn, adapted recording technologies more radically to their own specific needs—for

example, the study of musical pitch variations in language—and turned the tape recorder into a measuring tool (Kaplan). That research was undertaken partly in opposition to the more formalist approaches of computational linguistics, but computer-based methods also gave fresh impetus to the humanities' views of language. Faced with new forms of computer-generated articulation, US legal discourse on free speech turned away from regarding language in terms of phonetics and toward a notion of language as information, drawing on mathematical and engineering discourse on communication as signaling. This rationale echoed a larger shift in which legal reasoning increasingly came to privilege technical over humanistic knowledge (Petersen).

All these essays show humanities scholars adopting and tailoring the media and research technologies available in their day, thus contributing to the “becoming” of those media.⁸ In many cases, economic and commercial forces, too, push technologies toward acceptance in both everyday life and scientific research.⁹ That tendency can be observed in research on musical pitch in the late nineteenth century, when musicologists began to replace textual descriptions of musical sound with commercially usable measuring techniques and numerical means of representing the results (Gribenski).

Our theme issue also reveals adaptations of methods from the natural sciences to the purposes of the humanities. This follows a pattern identified by recent scholarship on the “experimentalization of life,” in which historical constellations of science, technology, and the arts are traced back to the introduction of the experiment into the life sciences.¹⁰ Laboratory-based experimental practices soon spread beyond the confines of the life sciences into the humanities and led to the formation of new disciplines, from experimental psychology and phonetics to empirical aesthetics and formalist literary theory.¹¹ Some of our essays take inspiration from this body of work by looking at particular historical configurations of laboratory research in tone psychology, radio studies, linguistics, and

8. See Joseph Vogl, “Becoming-Media: Galileo’s Telescope,” *Grey Room* 29 (2007): 14–25.

9. Emily Thompson, “Machines, Music, and the Quest for Fidelity: Marketing the Edison Phonograph in America, 1877–1925,” *Musical Quarterly* 79 (1995): 131–71.

10. Hans-Jörg Rheinberger and Michael Hagner, eds., *Die Experimentalisierung des Lebens: Experimentalsysteme in den biologischen Wissenschaften 1850/1950* (Berlin: Akademie Verlag, 1993). See the database “The Experimentalization of Life,” <http://vlp.uni-regensburg.de/index.html> for further publications on the topic.

11. For the case of psychology, see, among others, Henning Schmidgen, *The Helmholtz Curves: Tracing Lost Time* (New York: Fordham University Press, 2014), and *Hirn und Zeit: Die Geschichte eines Experiments, 1800–1950* (Berlin: Matthes & Seitz, 2014); on cinema studies, see Margarete Vöhringer, *Avantgarde und Psychotechnik: Wissenschaft, Kunst und Technik der Wahrnehmungsexperimente in der frühen Sowjetunion* (Göttingen: Wallstein, 2007); on poetics and more closely related to the study of sound, see Brain, *Pulse of Modernism*.

musicology (Kursell, Tkaczyk, Kaplan). As these cases show, however, the scholars involved did not adopt the methods of the laboratory sciences wholesale, but combined them with the existing linguistic, textual, and discursive strategies of humanities scholarship. The resulting “poetologies of knowledge” assert that the knowledge-making power of linguistic expression resides in literary language itself just as much as in the scholarship about it.¹² Scholars not only developed a new ear for language but chose their own words with sophistication and thought carefully about the sounds they made.

The history of the intersection of sound and languages cannot—and this is our third point—be written without reference to its wider contexts, especially its political environments. Prominent studies have already drawn attention to the criticism put forward by avant-garde writers, theater actors, and filmmakers toward nationally, socially, and scientifically defined standards of language and speech in the twentieth century.¹³ If we shift the focus from here to the language-defining power of the humanities in the period, once again the introductory example of Ferdinand Brunot’s phonographic research is revealing. When working on his atlas of French dialects, Brunot selected his speakers in line with very particular agendas. During his field work in the Ardennes in 1912, for example, he admitted only uneducated speakers to the recording setting—his aim being to show that their patois was dull, the language of the unlearned, and ripe for replacement by the unifying national language of French.¹⁴

Brunot is just one example of the humanities scholars working on the sounds of language and the languages of sound who did not remain politically neutral. As the authors in this issue show, humanities scholars during the late nineteenth and twentieth centuries followed explicit or implicit political agendas at various levels: some research initiatives were based in science politics and media landscapes (Kursell, Lichau); others were used to mold legal concepts of free speech or nationalistically inspired practices of pitch standardization (Petersen, Gribenski); further initiatives took place within institutional frameworks that themselves became objects of political battles (Kaplan, Ziemer); while still other research projects were exploited politically far beyond their

12. See, e.g., Joseph Vogl, ed., *Poetologien des Wissens um 1800* (Munich: Fink, 1999); Joseph Vogl and Sabine Schimma, eds., *Versuchsanordnungen 1800* (Zurich: Diaphanes, 2008); and studies on poetologies of knowledge and sonic qualities of language, such as Hans-Christian von Herrmann, *Sang der Maschinen: Brechts Medienästhetik* (Munich: Fink, 1996).

13. See, e.g., Raymond Williams, “Language and the Avant-Garde,” in *The Politics of Modernism: Against the New Conformists*, ed. Tony Pinkney (London: Verso, 1989), 65–80; Michael North, *The Dialect of Modernism. Race, Language & Twentieth Century Literature* (Oxford: Oxford University Press, 1994).

14. Pascal Cordereix, “Ferdinand Brunot, le phonographe et les ‘patois,’” *Le Monde alpin et rhodanien: Revue régionale d’ethnologie* 29 (2001): 39–54.

immediate context of origin (Tkaczyk, te Heesen). At a more abstract level: to collect, study, and modify the sounds of language was to claim interpretative sovereignty over sound cultures and was, in that sense, an issue of power with far-reaching consequences for researchers, subjects, and concepts.

To be sure, this special issue focuses mainly on European and North American developments in the twentieth century, while the politics involved in the choices made by humanities scholars in their research on the sounds of language call for a much broader, global, and long-term perspective. We thus hope this special issue will be read as a first step and that it will prompt new research on how scientists and scholars have shaped the way we think and speak about language today.

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