

Spaces of the Ear:
Literature, Media, and the Science of Sound
1870-1930

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ABSTRACT

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Spaces of the Ear examines the concomitant emergence of new forms of acoustical embodiment across the diverse fields of literature and science in the historical period beginning with the Franco-Prussian War and ending with the introduction of early information theory in the late 1920s. In opposition to popular accounts of changes in listening practices around 1900, which typically take the disembodied voices of new media such as the phonograph and radio as true markers of acoustical modernity, the dissertation emphasizes the proliferation of new modes of *embodied* listening made possible by the explosion of urban and industrial noise, contemporary media technologies, the threat of auditory surveillance, and the imposition of self-observational and self-disciplinary practices as constitutive of artistic, scientific, and everyday life. In doing so, I show how distinct elements of modern soundscapes and corresponding techniques of listening informed both the key thematic and formal elements of literary modernism. In particular, I argue that modernism's often-cited narrative self-reflexivity drew on conceptions of a uniquely embodied listener and the newfound audibility of the body, and overlapped with contemporaneous scientific knowledge surrounding the physiology of the ear and the role of the body in the perception of sound.

Chapter 1 focuses on the role of non-literary discourse on urban noise and the cacophony of the modern battlefield in formal developments central to late nineteenth-

century literary aesthetics, taking the largely forgotten Austrian impressionist Peter Altenberg as my primary case study. In Chapter 2 I analyze the ways in which Franz Kafka appropriated elements of the modern soundscape and, in particular, ontological disorders common to the factory worker, in conceptualizing the mechanisms of the modern legal system and its epistemological and perceptual effects on its subjects. Chapter 3 again focuses on works by Kafka, this time juxtaposing scientific practices of self-observation within acoustical research with Kafka's literal and metaphorical figurations of self-auscultation and its function as a narrative strategy in "The Burrow" (1923/24).

Chapters 4 and 5 sketch out a competing conception of hearing within Gestalt psychology, early stereophonic sound experiments, and literary texts by Robert Musil, which portray the modern listener as surprisingly active and confident in deciphering and navigating an increasingly complex auditory environment. In the process, the site of acoustical embodiment is displaced from the side of the subject to that of the object, engendering notions of "auditory things (*Hördinge*)" with physical, corporeal properties, which can be traced through space as three-dimensional entities. In the final chapter, I situate the effacement of the listener's body and simultaneous foregrounding of 'auditory things' in Musil's novella, "The Blackbird (1928), against the backdrop of early information theory and non-corporeal notions of *Rauschen* (noise, rustling, static).

Contents

Table of Contents	i
List of Illustrations	ii
Acknowledgments	iv
Introduction	1
Chapter 1: Acoustical Reform: Noise and Literary Form around 1900	20
Chapter 2: Listening to the Law: Auditory Interruptions, Industrial Space, and Kafka's <i>Trial</i>	92
Chapter 3: Inside the Ear: Silence, Self-Observation, and Kafka's Corporeal Spaces	141
Chapter 4: Stereoscopic Sound: Robert Musil and the Archaeology of Acoustic Space	197
Chapter 5: Narration as Acoustical Experiment: Musil's "The Blackbird"	260
Conclusion: Auditory Embodiment and the Historical Avant-Garde	304
Bibliography	311

List of Illustrations

- Fig. 0.1. Franz Kafka sits at his desk listening to the chaotic noise of his neighbors on the other side of the wall. From: Franz Kafka, *Tagebücher 1914-1923*, p. 728.
- Fig. 1.1. Liliencron's infantry call notation. From: Detlev von Liliencron, *Adjutantenritte und andere Gedichte* (Leipzig: Wilhelm Friedrich, 1883), p. 156.
- Fig. 1.2. Illustration of Plessner's antiphone. From: Maximilian Plessner, *Die neueste Erfindung: Das Antiphon; ein Apparat zum Unhörbarmachen von Tönen und Geräuschen* (1885).
- Fig. 1.3. Illustration of Plessner's antiphone situated inside the ear. From Plessner, *Die neueste Erfindung*.
- Fig. 1.4. Logo for the anti-noise group highlighting the deep entanglement between the brain and ear. From: *Der Lärmschutz*, 4. Jahrgang, Nr. 6 (June 1912), p. 86.
- Fig. 1.5. In the original issue of *Herder-Blätter*, Kafka's "Great Noise" appears as a tiny, insulated block of text situated at the bottommost edge of the page. From: *Herder-Blätter: Faksimile-Ausgabe zum 70. Geburtstag von Willy Haas* (Hamburg: Freie Akademie der Künste, 1962), p. 44.
- Fig. 3.1. Late nineteenth-century illustration of the outer ear. From: Paul Wossidlo, *Leitfaden der Zoologie für höhere Lehranstalten*, 5th Ed. (Leipzig: Fischer & Wittig, 1893), p. 305.
- Fig. 3.2. Late nineteenth-century illustration of the inner ear. From: Wossidlo, *Leitfaden der Zoologie für höhere Lehranstalten*, p. 306.
- Fig. 3.3. August Lucae's rudimentary masking tool used in therapy for patients suffering from subjective noises. From: August Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen* (Berlin: Otto Enslin, 1884), p. 39.
- Fig. 4.1. Diagram of Alexander Graham Bell's experimental setup. From: Bell, "Experiments Relating to Binaural Audition," located between pages 172 and 173.

- Fig. 4.2. Steinhauser's geometric rendering of acoustic space. From: Steinhauser, *Die Theorie des Binauralen Hörens: Ein Beitrag zur Lehre vom Schalle* (Wien: Gerold, 1877).
- Fig. 4.3. Steinhauser's geometric rendering of acoustic space.
- Fig. 4.4. Steinhauser's geometric rendering of acoustic space.
- Fig. 4.5. Artistic rendering of Ader's 1881 stereophonic transmission, with the sounds of the orchestra on the right travelling from the concert hall into the city on the left. From: Fauser, *Musical Encounters*, p. 289.
- Fig. 4.6. Visitors to the 1889 Paris World's Fair enjoy Ader's stereophonic telephones. From: Fauser, *Musical Encounters*, p. 287.
- Fig. 4.7. An enthusiastic and distracted listener applauds the distant musical performance. From: Fauser, *Musical Encounters*, p. 291.
- Fig. 4.8. Hornbostel and Wertheimer's *Richtungshörer* in operation during World War I. From: Bochow, *Schallmesstrupp 51*, p. 32.
- Fig. 4.9. Typical map drawn from information gathered by sound-ranging units during World War I. From: Bochow, *Schallmesstrupps 51*, p. 25.

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Introduction

If sounds are noises but not words, are they meaningful?
John Cage, “Composition as Process”

My study of the interrelations between literature and acoustical modernity begins, somewhat ironically, with an image: a sketch from Franz Kafka’s diary dated the 15th of February, 1915.¹ At first glance the objects that make up the simple, black-and-white drawing are difficult to discern. On the left side one clearly sees a lone figure engaged in some activity at a desk with his back turned to the viewer (fig. 0.1). On the right side we then see a scribbled mess of lines and in the middle a bulky rectangle that seems to separate the chaotic shapes from the writer on the left. An entry directly below the sketch provides a succinct explanation for what we see: “Today listened once again to the French lesson of the landlord’s daughter (*Heute wieder die Französischstunde der Haustochter angehört*).” What initially appears as a meaningless scribble on the right-hand side is revealed to be two distinct figures, a teacher and a young student, whose conversation the author is forced to overhear through the wall.

The remarkable difference between the style of well-defined lines for the listener on the left and the scribble on the right suggests that, in passing through the wall, the sound has been transformed in some way. Rather than acting as a neutral conduit, the wall is a structure that selects, suppresses, and distorts what can be heard. On this view, the architectural barrier functions to filter and strip sound waves into incoherent noises. At the same time, the sketch may be interpreted as borrowing from contemporary

¹ Franz Kafka, *Tagebücher 1914-1923*, ed. Hans-Gerd Koch (Frankfurt a.M.: Fischer Taschenbuch Verlag, 2008), p. 728.

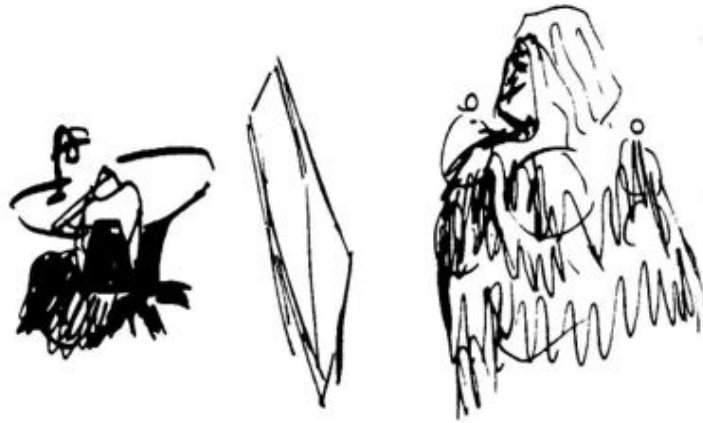


Fig. 0.1. The author at his desk listening to the chaotic noise of his neighbors on the other side of the wall. From: Franz Kafka, *Tagebücher 1914-1923*, p. 728.

discourse on modern noise as unruly, formless, illegible, and uncivilized, and translating these characterizations into a visual form. According to this reading, the seemingly harmless and trivial conversation heard through the wall is depicted in scribbles not because it has been distorted in the course of passing through the barrier, but because it has been designated as noise—an unwanted interruption, incomprehensible and fluid, lacking clear contours and resistant to easy legibility.

Although his back is turned to the viewer and the image is lacking in detail, the figure at the desk appears to be engaged in the act of writing. Seen in this light, the sketch suggests that the scene of writing has become embedded within and responds to the particular spaces in which literary production occurs. According to the drawing, writing is not only interrupted by noise, but simultaneously records the acoustic dimension of highly permeable spaces. It is from this perspective, with his ear directed towards the wall of neighboring spaces, that Kafka as well as contemporary writers such

as Peter Altenberg and Robert Musil would compose a large number of their literary works. In their diaries and letters, they frequently complained about the noise produced by neighbors and searched for spaces that would be quiet enough to suit their literary activities.² As early as 1906, Peter Altenberg recommended the crude noise-abating device, the antiphone, as well as specially designed, acoustically insulated hotel rooms to his readers as antidotes to the constant din around them.³ In 1915, shortly after recording his sketch, Kafka similarly began using Ohropax brand earplugs while writing—a habit that by 1922 had become a self-proclaimed necessity.⁴

This dissertation examines the ways in which literary production was shaped by, and actively participated in, what I term ‘acoustical modernity’— a heterogeneous and geographically restricted, auditory environment, which, in addition to the disruptive sounds of neighbors in highly permeable spaces, was characterized by the presence of new sources of aggressive and invasive noise, mechanical sound, and the proliferation of electro-acoustic technologies, scientific instruments, and the emergence of experimental spaces and soundproof rooms dedicated to acoustical research. Rather than positing the existence of some singular, all-encompassing ‘*soundscape* of modernity,’ I highlight the interaction between multiple, competing, and overlapping soundscapes, and acknowledge the extent to which the modernization of sound and acoustic experience was uneven,

² See Franz Kafka, *Tagebücher 1909-1912*, ed. Hans-Gerd Koch (Frankfurt a.M.: Fischer Taschenbuch Verlag, 2008), p. 38; ; Franz Kafka, *Briefe an Felice und andere Korrespondenz aus der Verlobungszeit*, ed. Erich Heller and Jürgen Born (Frankfurt a.M.: Fischer Taschenbuch Verlag, 2003), pp. 627-30; Franz Kafka, *Briefe 1902-1924*, ed. Max Brod (New York: Schocken Books, 1958), pp. 376, 390-98; Robert Musil, *Tagebücher I*, ed. Adolf Frisé (Reinbek bei Hamburg: Rowohlt, 1976), pp. 282, 286, 376-78; Peter Altenberg, “Der Nebenmensch” in *Das Recht auf Stille*, 2. Jahrgang, nr. 2 (February 1910): 10.

³ Peter Altenberg, *Prodromos* (Berlin: S. Fischer, 1906), pp. 78, 79, 84.

⁴ Kafka, April 5, 1915, *Briefe an Felice*, p. 632; Kafka, July 24, 1922, *Briefe 1902-1924*, p. 398.

incomplete, and limited to specific spaces and institutional structures.⁵ Of particular interest to me are the ways in which new technologies, sensory experiences, and techniques of listening emerged from, and aided in the transformation of, the interrelated soundscapes of the modern battlefield, factory, scientific laboratory, and domestic and public spaces of urban centers such as Vienna and Berlin.

As many critics have asserted, systematic research on hearing and the origins of what might be termed a distinctly ‘modern listener’ can be traced back to the German scientist Hermann von Helmholtz and his work on acoustics and the perception of tone beginning in the 1850s.⁶ Indeed, Helmholtz’s influence on subsequent scientific and musico-aesthetic conceptions of sound and hearing cannot be overstated. Scholars have convincingly demonstrated the radical shift in approaches to auditory perception and the study of the ear, which he initiated during this time—his devaluation of the material source of sound and simultaneous foregrounding of the ear’s physiology and processes internal to it, his externalization of the nervous system and instrumentalization of the ear, and, finally, his role in laying the groundwork for future sound reproduction technologies such as the phonograph. By situating the start of my study several decades later, I am by no means contesting Helmholtz’s importance. However, my study of the history of

⁵ On the idea of ‘islands of modernization’ around 1900, see Fredric Jameson, “The End of Temporality” in *Critical Inquiry*, Vol. 29, No. 4 (Summer 2003): 695-718.

⁶ See Hermann von Helmholtz, “Ueber Combinationstöne” in *Annalen der Physik und Chemie* 99 (1856): 497-540; Helmholtz, *Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik* (1862; Braunschweig: Vieweg, 1865). On Helmholtz and the origins of modern acoustical research, see Julia Kursell, “Sound Objects” in *Sounds of Science - Schall im Labor (1800-1930)*, ed. Julia Kursell (Berlin: Max Planck Institute for the History of Science, 2008), pp. 29-38; John Durham Peters, “Helmholtz, Edison, and Sound History” in *Memory Bytes: History, Technology, and Digital Culture*, ed. Lauren Rabinovitz and Abraham Geil (Durham: Duke UP, 2004), pp. 177-98; Benjamin Steege, *Helmholtz and the Modern Listener* (Cambridge: Cambridge UP, 2012); Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham: Duke UP, 2003), especially pp. 62-67.

scientific research on hearing highlights topics that were only indirectly related to his work. Although the study of subjective noises and spatial hearing—which I place at the center of my account—would have been inconceivable without Helmholtz’s earlier work, they are only indirectly related to his study of the perception of tone, and scientists working on these two topics make little reference to his work. More importantly for my project, Helmholtz explicitly strove to exclude the study of *noise* from his systematic examination of acoustics, focusing instead on pure tones and music.⁷

By contrast, I begin by analyzing the cacophony of the Franco-Prussian War in 1870 and its literary appropriation in texts by Detlev von Liliencron and Peter Altenberg. Despite being both temporally restricted to only a few years and spatially limited to a small region of Europe, the war marked a radical intensification and acceleration of sonic experience and provided early indications of the growing mechanization of sound. It witnessed the introduction of the machine gun and its repetitive firing onto the battlefield as well as the first widespread use of telegraphy and railroad networks to transport troops, weapons, and information quickly over vast distances. While medical doctors documented “eardrum injuries” and subjective noises in soldiers overwhelmed and physically assaulted by intense sounds, the poet Detlev von Liliencron borrowed from the same acoustic elements as a stimulus for overcoming what he perceived as poetic stagnation, transforming the abrasive noises of war into formal experiments with genre and the representational capacity of the printed word. The war of 1870, then, introduced new auditory experiences and medical disorders at the same time that it provided a catalyst for literary experimentation.

⁷ See Douglas Kahn, *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge: MIT Press, 2001), pp. 79, 80.

Friedrich Kittler identifies the period around 1870 as “the founding age of technological media (*Mediengründerzeit*).”⁸ It was at this historical moment, Kittler argues, that writing’s monopoly as a storage and communication medium came to an end and was superseded by the gramophone, film, and typewriter. Elsewhere, he shows compelling connections between the introduction of modern recording media and new strategies of textual representation. “Given an assortment of letters and diacritical signs,” he writes with regard to the typewriter, “then in principle it is possible to inscribe more and different sorts of things than any voice has ever spoken.”⁹ What he ultimately wants to show is that, through an unconscious competition with media like the typewriter and the phonograph in final decades of the twentieth century, the literary text began to utilize an economy of signs that “cannot be spoken by any voices” in an attempt to emulate the recording capabilities of these new devices.¹⁰

While Kittler’s historical account of the emergence of new media technologies and their role in reshaping textual representation lends credibility to my own periodization, I believe that his emphasis on medial change as the primary explanation for formal innovation obscures other significant factors in the proliferation of noise and related challenges to legibility and linguistic conventions. Although Kittler rightly observes that, “circa 1900 noise was everywhere (*um 1900 rauscht es allenthalben*),” his use of “noise” is too narrowly restricted to a conceptual understanding of the term borrowed from information theory. In doing so, he ignores the influence of allegedly

⁸ See Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford UP, 1999), pp. xl, 43, 50.

⁹ Friedrich Kittler, *Discourse Networks 1800/1900*, trans. Michael Metteer, with Chris Cullens (Stanford: Stanford UP, 1990), p. 212.

¹⁰ *Ibid.*, p. 257.

harmful noise associated with the expansion of cacophonous urban spaces, battlefields, and factories. The period that Kittler ironically refers to as the “founding age of technological media” also ushered in debates surrounding the physical and psychological consequences of exposure to abrasive sounds, and witnessed the emergence of various anti-noise organizations in Europe and America and the introduction of the earplug onto the commercial market.¹¹ In Vienna, for example, which was touted as the “loudest city in Europe,”¹² an enormous increase in population and street traffic transformed the city into a huge, noisy building site, which was only exacerbated by metal wheels on preexisting cobblestone streets and the ubiquitous din of fully aboveground public transportation.¹³ And while the period did see some of the earliest attempts to zone cities according to acoustic conditions and witnessed the emergence of the science of architectural acoustics,¹⁴ day-to-day life was increasingly defined by acoustic permeability.¹⁵ Urban soundscapes were distinguished by violent, intense noises, but

¹¹ See Karin Bijsterveld, “The Diabolical Symphony of the Mechanical Age: Technology and Symbolism of Sound in European and North American Noise Abatement Campaigns, 1900-1940” in *Social Studies of Science*, Vol. 31, No. 1 (Feb., 2001): 37-70; Peter Payer, “The Age of Noise: Early Reactions in Vienna, 1870-1914” in *Journal of Urban History*, Vol. 33, No. 5 (July 2007): 773-793; Klaus Saul, “Wider die ‘Lärmpest’: Lärmkritik und Lärmbekämpfung im Deutschen Kaiserreich” in: *Macht Stadt krank?: Vom Umgang mit Gesundheit und Krankheit*, ed. Dittmar Machule (Hamburg: Dölling und Galitz, 1996), pp. 151-92.

¹² See Hans Haenel, “Die Wohnung und der Lärm“ in *Bericht über den III. Internationalen Kongreß für Wohnungshygiene in Dresden vom 2. bis 7. Oktober 1911*, ed. Friedrich Eugen Hopf (Dresden: Buchdruckerei der Dr. Güntzschens Stiftung, 1911), pp. 256-266, here p. 258; “Es gibt nur a Kaiserstadt” in *Das Recht auf Stille* Jahrgang III, Nr. 5 (May 1911): 23.

¹³ See Payer, “The Age of Noise.”

¹⁴ See *ibid.*

¹⁵ In the German-speaking context we therefore find a surprising counterpoint to what Emily Thompson has brilliantly analyzed as the increasing control over, and enclosure of, sonic spaces through the introduction of new building materials in America. See Thompson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933* (Cambridge: MIT Press, 2002). For discussions of the increasing permeability of domestic spaces during this time, see Kurt Tucholsky “Haus im Neubau” (1924) in *Kurt Tucholsky. Gesamtausgabe. Texte und Briefe*, ed. Antje Bonitz et al. (Reinbek

these more ubiquitous and less temporally restrained noises also emerged within architectural spaces that were unprecedented in their porousness and inability to exclude proximate sounds. This dissertation, while indebted to Kittler's media-historical account, proposes that we expand our understanding of the sources and effects of noise during this period beyond the anachronistic framework of information theory and pay attention to the role of both technological and non-technological forms of *Rauschen* (rustling, static, noise) as well as the violent *Lärm* (noise) associated with the city, factory, and battlefield.¹⁶ While attentive to the text's position within an increasingly complex intermedial configuration of new technologies, the dissertation focuses first and foremost on the practices and unique challenges surrounding the act of *writing sound* between 1870 and 1930.

My choice to study modern auditory culture and changing listening practices through the lens of literary texts may strike readers as surprising. Why turn to print rather than music to study modern auditory culture? Is this not, one might ask, simply a reiteration of phonocentrism and an antiquated mode of textual hermeneutics, according to which the literary work allegedly 'speaks' to readers? Has the text not, at least since the introduction of silent reading as a standard mode of consuming literature, been

bei Hamburg: Rowohlt, 2001), Band 6, pp. 295-96; Tucholsky, "Schutz vor Schall" (1928) in *Gesamtausgabe*, Band 10, pp. 32-35. For an account of the unique difficulties facing architectural acousticians in Germany in the early twentieth century, see *Das lärmfreie Wohnhaus* (Verein deutscher Ingenieure, Berlin, 1934).

¹⁶ Although my study chooses to highlight *Lärm* and *Rauschen* as privileged acoustic phenomena, it is by no means restricted to them. German terms such as *Laut*, *Klang*, *Ton*, *Geräusch*, which could all be translated into English as 'sound' or 'noise,' also make appearances throughout the literary and non-literary texts I discuss. My English translations attempt to maintain distinctions between the various terms whenever possible and include the German original in parentheses where I believe it is most relevant. For an overview of the nuances of German acoustical terminology, see the introductory pages of Max Ackermann's *Die Kultur des Hörens: Wahrnehmung und Fiktion: Texte vom Beginn des 20. Jahrhunderts* (Nürnberg: Hans Falkenberg/Institut für Alltagskultur, 2003).

conceived of as a correspondingly silent medium?¹⁷ To speak to the first concern, I should state at the outset that my interest is less in the voice and orality than in noise and the challenges and insights it presents to textual representation. Rather than a clear narrative voice, it is the mysterious noises in Kafka's *The Trial* (1914/17) and "The Burrow" (1923), or the sonic violence inflicted on the listener in Peter Altenberg's "The Drummer Belin," which disrupts both the process of narration and representational conventions, ultimately ushering in epistemic confusion and an inability to translate sensory experiences into coherent linguistic utterances. Noise is intimately bound up with narrative voice, but the former constantly threatens to mask the latter's meaning and render it illegible. The result is not so much the end of writing, but its partial deformation and an attempt to incorporate these interruptions into narrative structures, to give formal and thematic expression to the ambiguities introduced by noise, the dissolution of boundaries and preexisting linguistic conventions.

Second, it is important to draw attention to the way in which the limits of the 'text' around 1900 were undergoing a radical expansion and redefinition amidst an explosion of new media and productive transfers between the arts. To restrict myself to the most extreme example, Peter Altenberg not only produced acoustically rich textual descriptions in his literary works and experimented with punctuation and onomatopoeia in order to portray acoustic nuances typically unavailable to print. His text "Sage mir, worüber du lachen kannst" was also made into a phonograph recording in 1906. His written work was additionally read aloud at popular venues such as the Cabaret

¹⁷ On the emergence of silent reading practices, see Steven Roger Fischer, *A History of Reading* (London: Reaktion Books, 2005), pp. 159-64; *A History of Reading in the West*, ed. Guglielmo Cavallo and Roger Chartier, trans. Lydia G. Cochrane (Amherst & Boston: University of Massachusetts Press, 1999), pp. 37-63, 276-78, 290-95.

Nachtlicht and Cabaret Fledermaus and at early meetings of Dada Zürich in 1916.

Finally, his texts were adapted by modernist composers for their musical compositions, the most famous being Alban Berg's *Die fünf Orchesterlieder nach Ansichtskarten von Peter Altenberg, op. 4* (1912), which when first performed led to a riot and subsequent legal trial.¹⁸ Thus, when the critic Egon Friedell asserted in 1912 that Altenberg's language "captures all the sounds of the modern world" and that "one would have to read all of his pieces aloud or imagine that they were being shouted through a gramophone," his understanding of the text's acoustic qualities would have surely been influenced by the popularity of oral recitations and musical adaptations of the author's work.¹⁹

By situating the end of my trajectory in 1930 I am then able to evaluate changes to the textual representation of sound with the actual, historical emergence of information theory and its accompanying reconceptualization of noise at that time, without reverting to Kittler's strategy of merely projecting that terminology back onto an earlier period. As scholars such as Mara Mills and Jonathan Sterne have argued, it was the period around 1930 that saw some of the earliest attempts at a general theory of communication and the first formulations of channel capacity,²⁰ at the same time that the rise of psychoacoustics led from an interest in the "electrics of a resonant middle ear" to "an electronics and

¹⁸ See *Tondokumente zur Kultur- und Zeitgeschichte 1888-1932. Ein Verzeichnis*, ed. Walter Roller (Potsdam: Verlag für Berlin-Brandenburg, 1998), p. 46; Alex Ross, *The Rest is Noise: Listening to the Twentieth Century* (New York: Picador, 2007), pp. 59, 60; David P. Schroeder, "Alban Berg and Peter Altenberg: Intimate Art and the Aesthetics of Life" in *Journal of the American Musicological Society*, Vol. 46, No. 2 (Summer 1993): 261-94.

¹⁹ Egon Friedell, *Ecce Poeta* (1912; Zürich: Diogenes, 1992), p. 166.

²⁰ See Mara Mills, "Deafening: Noise and the Engineering of Communication in the Telephone System" in *Grey Room* 43 (Spring 2011): 118-43; Jonathan Sterne, *MP3: The Meaning of a Format* (Durham: Duke UP, 2012). Such efforts at formulating a general theory of communication are commonly traced back to Ralph Hartley's 1928 essay, "Transmission of Information" in *Bell System Technical Journal* 7, no. 3 (1928): 535-63.

informatics of the inner ear.”²¹ The scientist Harvey Fletcher’s influential text, *Speech and Hearing* (1929), for example, broke with previous understandings of noise as a sound that was non-periodic and made up of unpredictably complex frequencies. Noise was now explained as anything that interfered with the proper reception of a signal.²² Facilitated by developments in vacuum tube technology, audiometry, and the telephone, the concept of ‘noise’ was transferred from “audition to information, ear to receiver, acoustic wave to electronic signal.”²³ At the same time, the audiometer allowed scientists such as E.E. Free to undertake scientific investigations of city noise, quantitatively measuring environmental noise by manipulating the intensity of a tone heard through a telephone receiver until it matched the intensity of noise heard through the other ear.²⁴ Such practices enabled scientists to attribute objective, quantitative characteristics to experiences of noise, which, as I show throughout the dissertation, were previously analyzed according to subjective criteria shot through with cultural and classist assumptions.

The emergence of early information theory and the reformulation of noise within the framework of telephony were rendered visible at almost the same time in the pages of Robert Musil’s “The Blackbird” (1928), which I examine in the final chapter of the dissertation. As critics have noted, Musil was familiar with parallel trends in German research on statistics, information theory, and the intelligibility of speech over the

²¹ See Sterne, *MP3*, p. 33.

²² See Mills, “Deafening,” p. 133.

²³ *Ibid.*, p. 133.

²⁴ See Emily Thompson, “‘Mysteries of the Acoustic’: Architectural Acoustics in America 1800-1932” (PhD dissertation, Princeton University, 1992), p. 225.

telephone. In his literary work he now described the perception of sound as the reception of a “signal (*Signal*)” and foregrounded the difficulties experienced by listeners forced to distinguish between “static (*Rauschen*)” and meaningful speech.²⁵

Focusing on the historical period between the emergence of violent noise and the introduction of the earliest technologies for storing sound, on the one hand, and the reconceptualization of noise within early information theory, on the other, this dissertation seeks to expose the ways in which modern auditory experience during this period was closely bound up with notions of *embodiment* and *corporeality*. Drawing on influential work in the history of the senses by scholars such as Jonathan Crary and Jonathan Sterne,²⁶ and taking up Veit Erlmann’s recent call for a closer look at the “materiality of perception,”²⁷ I attempt to revise dominant narratives within the historiography of hearing which tend to foreground the *disembodied* voice of the phonograph and radio as true markers of acoustical modernity.²⁸ By contrast, my project highlights the various forms of auditory embodiment that emerged during the late

²⁵ On Musil’s novella in relation to contemporaneous developments in early information theory in Germany, see Bernhard Siegert, “Rauschfilterung als Hörspiel” in *Robert Musil - Dichter, Essayist, Wissenschaftler*, ed. Hans-Georg Pott (München: Fink, 1993), pp. 193-207; Christoph Hoffmann, *Der Dichter am Apparat: Medientechnik, Experimentalpsychologie und Texte Robert Musils 1899-1942* (München: Fink, 1997), pp. 187-229.

²⁶ Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge: MIT Press, 1990); Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham: Duke UP, 2003).

²⁷ Veit Erlmann, *Reason and Resonance: A History of Modern Aurality* (New York: Zone Books, 2010), pp. 17, 18.

²⁸ See, for example, Michel Chion’s classic study, *Audio-Vision: Sound on Screen*, ed. and trans. Claudia Gorbman (1990; New York: Columbia UP, 1994); Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford UP, 2000), especially 362-93; Tom Gunning, “Doing for the Eye What the Phonograph Does for the Ear” in *The Sounds of Early Cinema*, ed. Richard Abel and Rick Altman (Bloomington and Indianapolis: Indiana UP, 2001), pp. 13-31; Thomas Macho, “Stimmen ohne Körper. Anmerkungen zur Technikgeschichte der Stimme” in *Stimme: Annäherung an ein Phänomen*, ed. Doris Kolesch and Sybille Krämer (Frankfurt a.M.: Suhrkamp, 2006), pp. 130-46.

nineteenth and early twentieth centuries—from the subjective noises and auditory hallucinations caused by the physical destruction of the ear in urban and industrial spaces (Chapters 1 & 2), through new techniques of auditory self-observation, to the development and implementation of a second-order mode of perception, or, the act of listening to hearing itself (Chapter 3). In doing so, I show how modernism’s often-cited narrative self-reflexivity drew on conceptions of a uniquely embodied listener and overlapped with contemporaneous scientific knowledge surrounding the physiology of the ear and the role of the body in the perception of sound.²⁹

This is by no means meant to suggest that earlier conceptions of hearing were entirely divorced from an understanding of the body and sound’s corporeal force. The founder of the German anti-noise movement, Theodor Lessing, never tired of quoting complaints by figures like Kant and Goethe about the noise of their neighbors in the late eighteenth and early nineteenth century.³⁰ In his study of sound in Shakespeare, Wes Folkerth notes that already in the early modern period, hearing was the sense with the “greatest and most immediate access to the body’s internal spirits” and that sound was

²⁹ My use of the term ‘body’ throughout the dissertation needs to be further qualified as belonging almost exclusively to the white, middle-class male, with its emphasis on the European soldier and bourgeois intellectual, although I do dedicate Chapter 2 to the noise of factory work and ontological disorders prevalent among members of the working classes. A study of female and non-European listening practices and acoustic experiences during the same period would surely help to revise and refine the narrative I present here. On sound and gender see Katherine Lacey, “Towards a Periodization of Listening: Radio and Modern Life” in *International Journal of Cultural Studies* 3 (2000): 279-88; Susan J. Douglas, *Listening In: Radio and the American Imagination* (Minneapolis: University of Minnesota Press, 2004); John M. Picker, *Victorian Soundscapes* (Oxford: Oxford UP, 2003), pp. 41-81; Tara S. Rodgers, “Synthesis: Technologies and Others in the Evolution of Synthesized Sound” (PhD Dissertation, McGill University, 2010). On sound and race, see Mark M. Smith, *Listening to Nineteenth-Century America* (Chapel Hill: University of North Carolina Press, 2001).

³⁰ See Theodor Lessing, *Der Lärm: Eine Kampschrift Gegen Die Geräusche Unseres Lebens*, Grenzfragen des Nerven- und Seelenlebens 54 (Wiesbaden: Verlag von J.F. Bergmann, 1908), pp. 24-30; Hermann Beuttenmüller, *Der rechtliche Schutz des Gehörs* (Karlsruhe i. B.: Braunschen, 1908), p. 1.

reputed to have “the most immediate and visceral effect on the perceiver.”³¹ While my argument does not presuppose that there has never been an account of acoustical embodiment before the second half of the nineteenth century, it is important to point out that around 1800 the ear was still understood largely as a “doorway to the soul.” As Folkerth notes, the ear was believed to provide access to the body’s “internal spirits.” I am also well aware that Romantic discourse around 1800 focused on the potentially violent effects of musical sound on listeners and that critics at the time occasionally reverted to physiological, materialist arguments involving the ear’s anatomy and the “aural nerves (*die Nerven des Gehörs*)” in explaining musical experience.³² My assertion is simply that with the rise of mechanical sound and new soundscapes such as the metropolis and modern battlefield, sound’s clear connection to affect and the soul was challenged and complicated. The corporeal impact of noise on the sensitive listener around 1900, along with growing awareness of the body’s own audibility, were key insights for revising older understandings of auditory experience. If sound still retained the ability to reach the “soul,” it first had to traverse the spaces of the ear in all their anatomical and physiological detail. In doing so, modern noise posed a physical danger to the body and left behind unintended side effects.

My account of acoustical embodiment foregrounds the ways in which modern sound was portrayed as infiltrating and traveling through the internal spaces of the ear.

³¹ Wes Folkerth, *The Sound of Shakespeare* (London & New York: Routledge, 2002), p. 55.

³² See John T. Hamilton, *Music, Madness, and the Undoing of Language* (New York: Columbia UP, 2008), especially pp. 101-103. On theories of musical experience citing the ‘aural nerves’ around this time, see Johann Georg Sulzer’s *Allgemeine Theorie der schönen Künste* (1794), sections of which are reprinted in *German Essays on Music*, ed. Jost Hermand and Michael Gilbert (New York: Continuum, 1994), pp. 31-35. Johann Gottfried Herder refers to the tympanum and aural nerves in discussing feelings of the sublime and the beautiful. See Herder, “Critical Forests: Fourth Grove” (1769/70) in *Selected Writings on Aesthetics*, trans. and ed. Gregory Moore (Princeton and Oxford: Princeton UP, 2006), pp. 177-290, here pp. 243, 244.

By “spaces of the ear” I mean to denote both the anatomical spaces internal to the ear as well as the perception of external spaces and architectural structures by means of hearing. The former refers to scientific investigations of the ear’s physiology. By 1900, medical scientists were able to peer inside the ear with an unprecedented level of technological sophistication, photographing and constructing visual models of its anatomical structure.³³ But this same gaze into the cavernous spaces of the auditory organ also informed contemporaneous literary works by Robert Musil and Franz Kafka, which portrayed the ear as a space to be infiltrated and inhabited by other living organisms. The latter corresponds to a more fluid, permeable, and less well-defined experience of actual architectural structures in which distinctions between internal and external spaces are broken down and rendered untenable. A period obsessed with *Durchdringung* (interpenetration) and visual transparency, I argue, also gave rise to a more expansive and invasive soundscape capable of infiltrating the domestic sphere and reconfiguring traditional social relations among individuals in adjacent spaces.³⁴

Finally, in Chapters 4 and 5, which look at literary works by Robert Musil, I outline the emergence of another form of acoustical embodiment that occurs on the side

³³ See *Handbuch der Hals-Nasen- Ohrenheilkunde*, 6. Band, ed. A. Denker and O. Kahler (Berlin: Julius Springer, 1926). On the emergence of otology as a scientific discipline, see Adam Politzer, *Geschichte der Ohrenheilkunde*, 2 vols. (Stuttgart: F. Enke, 1907/13), especially volume two which focuses on the period between 1850 and 1911. Jonathan Sterne locates the beginnings of otology’s institutionalization and formation as a distinct branch of medical science in the middle of the nineteenth century. See Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham: Duke UP, 2003), pp. 31-86. Veit Erlmann traces the history of otology back to the Italian school of anatomy in the sixteenth century, crediting Volcher Coiter with establishing it as an independent field and publishing the first monograph on the ear, *De auditus instrumento* (1573). See Erlmann, *Reason and Resonance*, pp. 60-68.

³⁴ On conceptions of visual *Durchdringung* during this same period, see Andreas Huyssen, "Modernist Miniatures: Literary Snapshots of Urban Spaces" in *PMLA* 122, no. 1 (2007): 27-42; Christoph Asendorf, *Entgrenzung und Allgegenwart: Die Moderne und das Problem der Distanz* (München: Fink, 2005); Heinz Brüggemann, "Walter Benjamin und Sigfried Giedion oder die Wege der Modernität" in *Deutsche Vierteljahrsschrift* 70, no. 3 (1996): 443-74.

of objects rather than subjects. The same cultural context that gave rise to literary and scientific representations of the somatic effects of a more aggressive soundscape also engendered conceptions of sound as a material entity, as an almost corporeal, three-dimensional thing (*Ding*) able to move through space. So while sound was increasingly understood through the physiological structure of the ear and often depicted as the product of the listener's body, sounds with sources clearly outside the body were invested with corporeal characteristics and described as autonomous entities. This notion of the 'auditory thing' was set in motion by the introduction of new technological media like the telephone and stereoscopic photography, and developed by experimental psychologists investigating a category of spatial perception which they termed "spatial hearing (*Raumhören, räumliches Hören*)."³⁵

But pronouncements of a uniquely auditory space also arose from research on subjective noises and intracranial 'phantom sounds' heard inside the listener's head.³⁶ Drawing on this research, scientists argued that the ear alone was sufficient for providing individuals with spatial orientation in the world. Hearing now joined vision and touch as a sense modality capable of perceiving a right and left side, front and back, longitude and latitude, coordinates according to which aural objects could be analyzed and situated in space. In this way, the dissertation is not structured around a single paradigm shift, according to which one mode of listening or conception of sound is simply replaced by

³⁵ See Erich Moritz von Hornbostel, "Beobachtungen über ein- und zweiohriges Hören" in *Psychologische Forschung*, Bd. 4 (1923): 64-114; Hornbostel, "Das räumliche Hören" in *Handbuch der normalen und pathologischen Physiologie*, ed. G. v. Bergmann, A. Bethe, et al (Berlin: Springer, 1926), pp. 602-618; N.J. Wade and Hiroshi Ono, "From Dichoptic to Dichotic: Historical Contrasts between Binocular Vision and Binaural Hearing" in *Perception* 34 (2005): 645-68; N.J. Wade and Diana Deutsch, "Binaural Hearing before and after the Stethophone" in *Acoustics Today* 4, no. 3 (2008): 16-27.

³⁶ See Arthur Henry Pierce, *Studies in Auditory and Visual Space Perception* (New York: Longmans, Green, and Co., 1901).

another. Instead, it emphasizes the tension and coexistence between the rationalization and technological ordering of acoustic space, on the one hand, and the dismantling of spatial and conceptual boundaries amidst noise and sensory overload, on the other.

My cultural history of acoustical embodiment combines the resources of discourse analysis with strategies of close reading in order to analyze the interaction between literary and non-literary representations of the modern listener. Although the diverse fields of literature, technology, and experimental science, operate according to their own internal rules and methodologies and pursue different ends, I take the circulation of specific discursive elements and rhetorical figures across disparate fields of knowledge as a theoretical given. However, just as individual chapters are marked by shifts in the balance between close reading and discourse analysis, so too do the modes of discursive interaction and circulation differ in both form and content from chapter to chapter.

The case of Musil is perhaps the most straightforward, in that the author studied experimental psychology before embarking on a literary career and would have been familiar with the particular scientific theories of hearing I examine. Indeed, notions of spatial hearing were produced and defended by his dissertation advisor Carl Stumpf and his friends and former colleagues Erich Moritz von Hornbostel and Max Wertheimer. Peter Altenberg's familiarity with contemporaneous medical discussions surrounding the pernicious effects of modern noise, albeit superficial and unsophisticated, is also not difficult to verify. He not only championed the noise-abating antiphone, which was intended especially for sensitive writers and curious otologists. He additionally contributed several texts to the official publication of the German anti-noise movement,

which contained innumerable articles by medical scientists on the specific dangers of noise on the body.

The case of Kafka is more complex. Although his work in the insurance industry had likely exposed him to medical literature on the growing problem of subjective noises and other hearing disorders among factory workers—the origins of which he had already glimpsed firsthand in the asbestos factory that he founded with his brother-in-law in 1911—there is no solid evidence that he had read the particular scientific studies of subjective noises that I discuss in Chapters 2 and 3.³⁷ My goal, however, is not to establish a simple causal relationship between literary and scientific representations of auditory embodiment, whereby fictional texts by Kafka and Musil come to be read as mere quotations of non-literary sources in circulation at the time. Much more interesting and relevant, I believe, is the fact that, even in cases where direct contact cannot be verified, both literary and scientific representations of the modern listener characterized the act of listening as a fundamentally *embodied* experience.

Conversely, we should resist believing that scientific discourse at this time served as a solid and immutable foundation, to which literary representations of auditory experience could be fixed unproblematically. Rather than claiming to occupy a stable position from which to examine such disorders, medical scientists working during the same period in which these literary works were written admitted that research on subjective noises constituted a field that was “just as interesting as it was obscure (*ebenso interessante als dunkle Gebiet*),” one pervaded by auditory disturbances “whose causes remain completely in the dark (*deren Ursachen noch völlig im Dunkeln liegen*).” More

³⁷ On Kafka’s experiences in the asbestos factory, see Kafka, *Tagebücher 1912-1914*, ed. Hans-Gerd Koch (Frankfurt a.M.: Fischer Taschenbuch Verlag, 2008), p. 32.

importantly, struggles in the realm of etiology were accompanied by difficulties in accurately representing subjective noises textually. Without a clinically useful practice for determining the nature of subjective noises, one researcher lamented, medical scientists were dependent on the patient's onomatopoetic descriptions (*onomatopoietische Schilderungen*) of what they heard.³⁸ If designations of sound as 'noise' at this time were based on cultural and subjective factors rather than standardized, quantitative measurements of sound waves, medical scientists working during the same period were forced to admit to terminological and epistemological gaps in their research. In short, the modern soundscape ushered in representational challenges that affected the domains of both literature and science.

³⁸ See Gustav Brunner, "Zur Lehre von den subjectiven Ohrgeräuschen" in *Zeitschrift für Ohrenheilkunde* VIII (1879): 185-207, here p. 185; August Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen* (Berlin: Otto Enslin, 1884), p. 1; Karl Grünberg, "Die subjectiven Gehörsempfindungen" in *Handbuch der Hals-Nasen- Ohrenheilkunde*, 6. Band, ed. A. Denker and O. Kahler (Berlin: Julius Springer, 1926): 888-95, here p. 890.

Chapter 1

Acoustical Reform:

Noise and Literary Form around 1900

The instability of noises must have been the condition of possibility for language to evolve. But then, how could language regain stability?
Niklas Luhmann, “The Form of Writing”

In April 1896, at the age of thirty-seven, the coffeehouse bohemian and burgeoning poet Richard Engländer published his first literary work, *As I See It* (*Wie ich es sehe*), under the pseudonym Peter Altenberg. The book consisted of sixty-eight short prose pieces, many of them only one or two pages in length, in the tradition of the French prose poems of Mallarmé and Baudelaire as well as Daniel Spitzer’s “Viennese Walks (*Wiener Spaziergänge*),” which appeared around the same time in the *Neue Freie Presse*.¹ Although *As I See It* was his first published collection, Altenberg was already a well-known fixture in the coffeehouses and bars of Vienna, counting among his acquaintances prominent cultural figures such as Karl Kraus and Arthur Schnitzler.

Due to the author’s already established reputation and the book’s deeply autobiographical tone, *As I See It* caused something of a sensation in Altenberg’s hometown, provoking both consternation and flattering praise from its readers. While Hugo von Hofmannsthal struggled to make sense of the book’s peculiar, fragmented form

¹ On Altenberg’s early literary career, see Andrew Barker, *Telegrams from the Soul: Peter Altenberg and the Culture of fin-de-siècle Vienna* (Columbia, SC: Camden House, 1996), pp. 1-63. On his engagement with the French literary tradition, see Barbara Z. Schoenberg, “The Influence of the French Prose Poem on Peter Altenberg” in *Modern Austrian Literature* 22, nos. 3-4 (1989): 15-32.

and its focus on the mundane aspects of everyday life,² Rainer Maria Rilke deemed Altenberg “the first proclamation of modern Vienna (*der erste Verkündigung des modernen Wien*),” and argued that, with his first publication, the city had “suddenly found its language (*plötzlich seine Sprache gefunden*).”³ Hermann Bahr shared Rilke’s enthusiasm, remarking that the collection “ha[d] its own tone through and through (*hat durch und durch einen eigenen Ton*).” “This voice,” he continued, “has never been heard before; here someone is speaking whom we will not be able to forget. In his mouth every word becomes new and comes to life; we believe we are hearing it for the first time.”⁴

Thus, despite the title’s overt reference to visual perception, Altenberg’s first publication was described by critics in distinctly aural terms, as investing the printed page with the acoustic nuances of the human voice and transforming silent readers into attentive listeners. This somewhat surprising foregrounding of the acoustic qualities of Altenberg’s texts would only become more pronounced and emphatic as his career progressed. Fifteen years after the initial publication of *As I See It*, Egon Friedell characterized Altenberg’s formal experiments with punctuation and onomatopoeic forms of textual representation as an ambitious attempt to lend “dead, printed letters the vibrancy of the accentuated spoken word (*dem toten, gedruckten Buchstaben die*

² See Hofmannsthal’s letter to Beer-Hofmann in *Hugo von Hofmannsthal, Richard Beer-Hofmann: Briefwechsel*, ed. Eugene Weber (Frankfurt: Fischer, 1972), p. 59, as well as his review in the September 1896 issue of *Die Zukunft*, reprinted in *Das Junge Wien: Österreichische Literatur- und Kunstkritik 1887-1902*, ed. Gotthart Wunberg (Tübingen: Niemeyer, 1976), p. 588.

³ Rainer Maria Rilke, “Moderne Lyrik” (1898) in *Sämtliche Werke. Fünfter Band. Worpswede-Rodin-Aufsätze*, ed. Rilke-Archiv (Frankfurt a.M.: Insel, 1965), pp. 360-94, here p. 388.

⁴ “Diese Stimme haben wir noch nie vernommen; hier spricht jemand, den wir nicht mehr vergessen können. In seinem Munde wird jedes Wort neu und lebt auf; wir glauben es zum ersten Male zu hören”; Hermann Bahr, “Ein Neuer Dichter” in *Die Zeit* 7. Nr. 83. (2.5.1896), pp. 75-6, reprinted in *Peter Altenberg: Rezept die Welt zu sehen*, ed. Andrew Barker and Leo A. Lensing (Vienna: Wilhelm Braumüller, 1995), pp. 271-72.

Lebendigkeit des akzentuierten gesprochenen Wortes zu verleihen.”⁵ Altenberg’s use of onomatopoeia, or, *Tonnachbildung*, in particular, epitomized what Friedell took to be the defining characteristics of literary impressionism: “a heightened receptiveness (*Empfänglichkeit*) for sensory stimuli, connected with the tendency to always want to give nothing more than just those physiological impressions.”⁶

In what followed, Friedell drew comparisons between impressionist modes of textual representation, the emergence of new acoustic media and modern soundscapes pervaded by mechanical sound and the cacophony of war:

Even when he writes he merely speaks, or at least tries to. One would have to read all of his pieces aloud or imagine that they were being shouted through a gramophone [...] His language captures all the sounds of the modern world. Occasionally he lapses into a rattling pathos that is overheated and startling; it is the pathos of the machine, which we discussed in the previous chapter. A pathos to which early poets relate like the blasts of a trumpet to the noise of the dynamo or the crack of the mitrailleuse [early rapid-firing machine gun introduced in the Franco-Prussian War, TW], the petard, the platoon; it is shots around the corner, in the middle of one’s train of thought.⁷

Friedell’s account moves beyond tired comparisons of the written and spoken word grounded in a hermeneutic paradigm of textual interpretation, according to which the text possesses a voice that ‘speaks’ to readers.⁸ Introducing a more complex economy of sound, he instead depicts the voice as merely one of the many acoustic phenomena to

⁵ Egon Friedell, *Ecce Poeta* (1912; Zürich: Diogenes, 1992), p. 166.

⁶ “Eine verschärfte Empfänglichkeit für Sinnesreize, verbunden mit der prinzipiellen Tendenz, nichts anderes geben zu wollen als eben nur jene physiologischen Eindrücke“; *ibid.*, p. 163.

⁷ “Auch wenn er schreibt, spricht er bloß, oder versucht es doch wenigstens. Man müßte alle Sachen eigentlich laut lesen oder sich vorstellen, daß sie uns durch ein Grammophon zugerufen werden [...] In seiner Sprache sind alle Geräusche der modernen Welt eingefangen. Bisweilen verfällt er in ein überheiztes, sich berstürzendes, knatterndes Pathos; es ist das Maschinenpathos, von dem wir im vorigen Kapitel sprachen, zu dem sich das Pathos früherer Dichter etwa verhält wie Posaunenstöße zu dem ratternden Lärm einer Dynamomaschine, dem Krachen von Mitrailleusen, Petarden, Pelotons; es sind Schüsse um die Ecke, mitten in Gedankenketten“; *ibid.*, p.166.

⁸ See Friedrich Kittler, *Discourse Networks 1800/1900*, trans. Michael Metteer, with Chris Cullens (Stanford: Stanford UP, 1990).

which Altenberg's writing bears structural affinities.⁹ In addition, Friedell points out, Altenberg's texts conjure up the sounds and experiences constitutive of acoustical modernity, overwhelming readers with an unprecedented intensity and aggression and disrupting their ability to think or process words on the page like soldiers bombarded by the noise of the modern battlefield.

In a text entitled "The Drummer Belin (*Der Trommler Belin*)" from *As I See It*, Altenberg drew on precisely these acoustic aspects of mechanized warfare as a way to disrupt conventional reading practices and lend the text a sense of perceptual immediacy ordinarily excluded from the printed page.¹⁰ Amidst the cacophony of a drum performance intended to conjure up the sounds of the recent Franco-Prussian War (1870-71), the narrator struggles to translate the obstreperous noises he hears onstage into decipherable linguistic utterances for his written account. His vivid description suggests a truly *corporeal* encounter with sound, as the listener's ear is violently infiltrated and physically assaulted by the drum. As a further indication of this physical abuse, the narrative is periodically interrupted by repetitive strings of nonsensical consonant clusters and occasional vowels, with accents to mark rhythm and exclamation points to indicate

⁹ Friedell has by no means been the only critic to highlight the acoustic dimension of Altenberg's texts. Two decades after the publication of *Ecce Poeta*, the literary critic Luise Thon again stressed Altenberg's "effort to sensualize acoustic phenomena through approximate sounds of language (*Bemühen akustische Erscheinungen durch Annäherungslaute der Sprache zu versinnlichen*)"; Luise Thon, *Die Sprache des deutschen Impressionismus: Ein Beitrag zur Erfassung ihrer Wesenzüge* (München: Max Hueber, 1928), p. 7. More recently, Andrew Barker has argued that, "[*As I See It*] is almost equally noteworthy for its sensitivity to sound," and the alternative title, *As I Hear It* (*Wie ich es höre*), "would be almost as suitable a title as that chosen by the author for his literary début"; Andrew Barker, *Telegrams from the Soul*, p. 46. Eckhardt Köhn echoes Barker's assessment and points out the more specific privileging of sound in Altenberg's depiction of urban spaces as "the site of the voice and as the cosmos of the spoken word (*Ort der Stimmen und als Kosmos des gesprochenen Wortes*)"; Eckhardt Köhn, "Stenograph des Wiener Lebens. Großstadterfahrung im Werk Peter Altenbergs" in *Sprachkunst* 17 (1986): 23-37, here p. 33.

¹⁰ Peter Altenberg, "Der Trommler Berlin" (1896) in *Wie ich es sehe* (Zürich: Manesse Verlag, 2007), pp. 104-107. Throughout this chapter, references to *Wie ich es sehe* will be indicated with the abbreviation *Ws*.

intensity (“- - - Rrrrátaplan rrrráta rrrráta rrrráta rrratatatá tá tá tá tá - - - trrrrrrrrrá!”).

Decades before Futurist and Dadaist sound experiments, the noise of modern warfare gave rise to a kind of linguistic noise that challenged readerly legibility and motivated formal innovation within the emerging genre of the prose poem.¹¹

Taking Altenberg as my primary case study, this chapter examines the concomitant emergence of noise as both a discursive element and a representational strategy within fin-de-siècle literary aesthetics. But it also explores these aesthetic issues as inseparable from the non-literary domains of medical research, which, according to a different methodological framework and with different questions in mind, also sought to analyze and represent the physical and psychological impact of acoustical modernity. I am interested in how medical knowledge related to hearing gave rise to a dominant conception of the modern listener as inherently vulnerable and open to physical attack, as well as the ways in which this particular understanding of the body was appropriated within the realm of literature as a catalyst for formal experimentation. This is not to suggest that literary and non-literary discourse existed in a state of unilateral influence, with literature merely drawing from other non-literary domains of knowledge. Indeed, as we will see in more detail below, figures like Altenberg also contributed to medical debates on the effects of modern noise and their literary texts were mobilized in the service of acoustical reform movements like Theodor Lessing’s ‘anti-noise movement (*Antilärbewegung*)’ in Germany.¹²

¹¹ For more on the notion of ‘textual noise,’ see the chapter “Politics of Noise” in Craig Dworkin’s fascinating study of modern experimental poetry, *Reading the Illegible* (Evanston, ILL: Northwestern UP, 2003).

¹² On the German anti-noise movement, see Klaus Saul, “Wider die ‘Lärmpest’: Lärmkritik und Lärmbekämpfung im Deutschen Kaiserreich” in: *Macht Stadt krank?: Vom Umgang mit Gesundheit und Krankheit*, ed. Dittmar Machule (Hamburg: Dölling und Galitz, 1996): 151-192; Lawrence Baron, “Noise

My analysis of the convergence of literary aesthetics and medical conceptions of the modern listening subject focuses on two specific formal elements that rose to prominence at the turn of the twentieth century. The first, commonly referred to in English as ‘onomatopoeia’ and *Klangmalerei* or *Schallnachahmung* in German, denotes those words or strings of letters whose acoustic features bear some resemblance to the auditory phenomena they signify. In semiotic terms, onomatopoeia can be understood as an *icon*, a sign linked to the represented object by some shared quality. At the time that Altenberg published his first collection of stories, the term ‘onomatopoeia’ was used primarily to denote nouns or verbs which had already been integrated into ordinary linguistic usage such as the noun “*Zischen* (hiss)” in German or “boom” in English. These words, although by definition onomatopoeic in that the signifier and signified bear certain similarities to one another through shared acoustic qualities, are hardly comparable to the textual representation of noise recorded in Altenberg’s “Drummer Belin.” There, conventional linguistic utterances are discarded entirely in favor of repetitive, nonsensical strings of consonants and vowels.

Such radical textual experiments were excluded from accounts of onomatopoeia by contemporary linguists and philosophers of language such as Fritz Mauthner and Ferdinand de Saussure.¹³ What is important to note is that, although various modes of

and Degeneration: Theodor Lessing’s Crusade for Quiet,” in: *Journal of Contemporary History*, Vol. 17, No. 1, Decadence. (Jan., 1982): 165-178; Hans-Joachim Braun, “Lärmbelastung und Lärmbekämpfung in der Zwischenkriegszeit” in *Sozialgeschichte der Technik. Ulrich Troitzsch zum 60. Geburtstag*, ed. Guenter Bayerl and Wolfhard Weber (Münster: Waxmann, 1998): 251-58; Matthias Lentz, “‘Ruhe ist die erste Bürgerpflicht’: Lärm, Großstadt und Nervosität im Spiegel von Theodor Lessings ‘Antilärmverein’” in *Medizin, Gesellschaft, und Geschichte: Jahrbuch des Instituts für Geschichte der Medizin der Robert Bosch Stiftung*, Vol. 13 (1994): 81-105; Peter Payer, “The Age of Noise: Early Reactions in Vienna, 1870-1914” in *Journal of Urban History*, Vol. 33, No. 5 (July 2007): 773-793.

¹³ See Fritz Mauthner, *Beiträge zu einer Kritik der Sprache II. Zur Sprachwissenschaft* (Stuttgart: J.G. Cotta’sche, 1901), pp. 360-62, 470-71; Ferdinand de Saussure, *Course in General Linguistics* (1907-1911),

iconic, onomatopoeic expression existed in previous centuries, few presented such radical forms of illegibility as those introduced by Altenberg in his “Drummer Belin” or in contemporaneous works by Detlev von Liliencron and German Naturalists like Philipp Langmann, Arno Holz, and Johannes Schlaf. The age of urban noise and the proliferation of mechanical sources of sound therefore coincided conspicuously with modes of literary representation that can only be described as *textual noise*, non-lexical and nonsensical interruptions to conventional forms of writing, reading, and interpretation. Essential for this aesthetic program was a notion of the author as a passive and physically vulnerable recorder of sensory stimuli, one who no longer attempted to process the world before representing it and who resisted the organization of sense impressions according to conceptual categories or grammatical rules.¹⁴

Extant conceptualizations of onomatopoeia commonly link the practice to the rise of modern technologies of transmission and inscription in the second half of the nineteenth century. This is due, at least in part, to later accounts given by avant-garde practitioners like F.T. Marinetti and Luigi Russolo who celebrated the cacophony of war and theorized that onomatopoeia was one of a handful of poetic strategies capable of giving voice to the dynamism, chaos, and complexity of modern technological life.¹⁵

Projecting this explicit coupling of poetry and technology back to an earlier period

ed. Charles Bally and Albert Sechehaye, trans. Roy Harris (Chicago and La Salle, Illinois: Open Court, 1986), p. 69.

¹⁴ In this way, the conception of the self outlined within literary discourse overlapped with contemporaneous scientific discourse on the ‘suppression of the self,’ in the pursuit of what Lorraine Daston and Peter Galison have termed “mechanical objectivity.” See Daston and Galison, *Objectivity* (New York: Zone Books, 2008), pp. 115-90.

¹⁵ See F.T. Marinetti, “Zerstörung der Syntax. Drahtlose Phantasie. Befreite Worte” (1913) in *Futurismus. Geschichte, Ästhetik, Dokumente*, ed. Hansgeorg Schmidt-Bergmann (Reinbek bei Hamburg: Rowohlt 1993); Luigi Russolo, the chapter entitled “The Noises of Language” from *The Art of Noises* (1916), trans. Barclay Brown (New York: Pendragon Press, 1986), pp. 55-60.

without establishing clear connections between material practices and literary and technological discourse, critics have spoken of Naturalism's "phonographic reproduction" of the external world.¹⁶ Similarly, in his study of French symbolism as a prehistory of Futurist poetics, the historian of science Robert Brain has recently stated that, "Onomatopoeia emerged as the unavoidable medium of dictation from the technological soundscape."¹⁷ In a formulation burdened with deterministic assumptions, Brain reiterates the programmatic statements and myths propagated by the Futurists as undisputed fact. Why, we might want to ask, would onomatopoeia emerge as an "unavoidable" byproduct of the technological age? Moreover, what is it precisely about technology that informs and, according to Brain, overwhelmingly structures the form of these textual experiments?

Decades before the invention of the phonograph, onomatopoeia was used as a form of dictation by scientists studying bird calls in the wild.¹⁸ Onomatopoeia, in other words, not only preceded the introduction of acoustic media. In addition, it was used as a means to transcribe the sounds of *nature* and not those of technology, a tendency that can

¹⁶ See Susanne Hauser, *Der Blick auf die Stadt: Semiotische Untersuchungen zur literarischen Wahrnehmung bis 1910* (Berlin: Dietrich Reimer Verlag, 1990), here p. 138; E.M. Siegel, "Das Sprechen des kulturellen Archives: Sieben Thesen zur phonographischen Schreibweise des Naturalismus" in *Phonographien: Akustische Wahrnehmung in der deutschsprachigen Literatur von 1800 bis zur Gegenwart*, ed. Marcel Krings (Würzburg: Königshausen & Neumann, 2011), pp. 179-88.

¹⁷ Robert Brain, "Genealogy of 'ZANG TUMB TUMB': Experimental Phonetics, Vers Libre and Modernist Sound Art" in *Grey Room* 43 (Spring 2011): 88-117, here p. 107.

¹⁸ See Christian Ludwig Brehm, *Die vollständige Vogelsang: Eine gründliche Anleitung alle europäischen Vögel* (Weimar: Bernh. Friedr. Voigt, 1855), p. 179; Alexander Gerhardt, "Ueber die Lebensweise der Vögel Nordamerikas, welche im Staate Georgia vorkommen" in *Naumannia: Journal für die Ornithologie, vorzugsweise Europas: Organ der deutschen Ornithologien-Gesellschaft* (Dessau: Gebrüder Katz, 1855): 380-97, especially p. 392. On the history of transcribing birdsongs by means of writing as well as early sound recording, see also Joeri Bruyninckx, "Sound Sterile: Making Scientific Recordings in Ornithology" in *Oxford Handbook of Sound Studies*, ed. Trevor Pinch and Karin Bijsterveld (Oxford: Oxford UP, 2011), pp. 127-50. As Bruyninckx shows, there were several competing notational systems for transcribing birdsongs, many of which also incorporated elements from musical notation. The phonograph did not become the preferred method until the late 1920s and early 1930s, although the device had already been presented before the American Ornithologists' Union congress as early as 1898.

also be found in numerous texts from Altenberg's *As I See It*, where the songs of birds or the gushing of a stream are rendered onomatopoeically.¹⁹

While still stressing the importance of encounters with modern technologies, this chapter eschews Brain's reductive account of onomatopoeia as a mere byproduct of technology—one that is, perhaps more problematically conceived of as “unavoidable” at a particular historical moment that is identified retrospectively. By contrast, I view the pervasive use of onomatopoeia within the realm of literature as a historically contingent development made possible by a plurality of discourses related to, among other things, changing conceptions of the human nervous system and the physiology of listening, experiences of newly mechanized warfare, encounters with modern technologies such as the telegraph and phonograph, and an anti-urban discourse that depicted the metropolis as a quasi-battlefield bombarded by “acoustic projectiles” and on the brink of violent class warfare.

Amidst this same cultural context plagued by noise, there emerged an aesthetics of silence, inexpressibility, and unadorned brevity that cut across several cultural domains. As critics have pointed out, this positive coding of silence, or, ‘cult of silence’ around 1900 was deeply entangled with a growing skepticism towards language and its

¹⁹ “The oars sang (*die Ruder sangen*): Plúk-Prlúk, Plúk-Prlúk, Plúk-Prlúk” (*Ws* 26); “Outside at the window the chestnut trees bowed in gusts of wind and the storm went: sch sch sch --. A glass lantern glowed in the distance - - (*Draussen an dem Fenster verneigten sich die Kastanienblätter vor den Windstößen und der Sturm machte: sch sch sch - -*. *In der Ferne schimmerte eine Glaslaterne - -*)” (*Ws* 53); “The bright birch trees trembled. Up in the air the crows cried ‘kraa - - kraa!’ (*Die hellen Birken zittern. In den Lüften schreien die Krähen ‘kraa - - kraa!’*)” (*Ws* 64); “Here and there 38 swans cried out into the night: ‘irrra irrra - - -’ (*[38 Schwäne] schreien hier und da in die Nacht hinaus: ‘irrra irrra - - -’*)” (*Ws* 66); “Somewhere a bird sang (*irgendwo sang ein Vogel*): ‘trrrr - - trrrr - - trrrr - -’” (*Ws* 71). Throughout this chapter my English translations have retained the original German for onomatopoeic phrases, although in some cases— animal sounds, for example— their English equivalents would differ from the German.

communicative abilities, which was especially palpable in fin-de-siècle Vienna.²⁰ This critique of language was perhaps most clearly articulated by the anti-noise sympathizer and paying member of Theodor Lessing's *Antilärmbewegung*, Hugo von Hofmannsthal,²¹ who in his "Chandos Letter" (1902) famously articulated anxieties surrounding the ability to think or speak coherently, while at the same time fantasizing about a more immediate and fluid material of communication capable of transcending the conventions of language.²² The origins of the discussion surrounding the virtues of silence can be traced back to the introduction of new media, the fragmentation and specialization of various fields of knowledge, the decline of the aristocracy and the rise of mass culture, as well as the commodification of the word and its perceived contamination in newspapers and periodicals. But I argue that these same topics were also bound up with real auditory phenomena, not only abstract ideals of silence. Altenberg, who was one of the most vocal advocates of an idealized aesthetics of silence, also published texts in Lessing's anti-noise journal, *The Right to Silence* (*Das Recht auf Stille*), and he was one of the first documented users of Maximilian Plessner's rudimentary noise-cancelling device, the antiphone.

²⁰ See Franz Kuna, "The Expense of Silence: Sincerity and Strategy in Hofmannsthal's Chandos Letter" in *Publications of the English Goethe Society* 40 (1970): 69-94; Christian L. Hart-Nibbrig, *Die Rhetorik des Schweigens: Versuch über den Schatten literarischer Rede* (Frankfurt a.M.: Suhrkamp, 1981); Andreas Härter, *Der Anstand des Schweigens: Bedingungen des Redens in Hofmannsthals "Brief"* (Bonn: Bouvier, 1989); Ernst Osterkamp, "Die Sprache des Schweigens bei Hofmannsthal" in *Hofmannsthal Jahrbuch zur europäischen Moderne* 2 (1994): 111-37; Melanie Grundmann, *Die Pragmatik des Schweigens bei Hugo von Hofmannsthal* (Berlin: Wissenschaftlicher Verlag, 2007).

²¹ Only months after Lessing's *Antilärmverein* was founded, Hofmannsthal openly confirmed his membership to the group and noted enthusiastically to the editors of *Das Recht auf Stille*, "I am completely in agreement with your program (*Ich bin mit Ihrem Programme durchaus einverstanden*)," adding that he would be willing to sign any petition sent to government officials in support of anti-noise legislation. See "'Antilärmitten'" in *Das Recht auf Stille*, Jahrgang 1, Nr. 4 (February 1909): 53-7, here p. 53.

²² See Hugo von Hofmannsthal, "Ein Brief" (1902) in *Das Märchen der 672. Nacht: Das erzählerische Werk* (Frankfurt a.M.: S. Fischer, 1999), pp. 98-109, especially pp. 108, 109.

In the second half of this chapter I analyze the ways in which material practices of noise-abatement and discourse outlining the aesthetic, cultural, and social implications of silence and noise, informed changing conceptions of the prose poem, or, *kleine Form*, as a privileged genre within the German-speaking literature of the late nineteenth century.²³ By promoting brevity and narrative precision as constitutive elements of their program, the authors advocating silence established points of contact with the movement against noise led by Lessing and a circle of medical scientists. But these same anti-noise advocates also regarded aesthetics and textual representation as legitimate targets of noise abatement. The fight against noise was also a fight against ‘textual noise.’ Thus, the period witnessed the emergence of formal innovations tied to both the textual representation of noise as well as its containment and abatement in the form of silence and laconic descriptions stripped of ornamentation. An aesthetics of noise and an aesthetics of silence arose from the same cultural context and served to mutually reinforce one another.

²³ See Ulrich Fülleborn, *Das deutsche Prosagedicht: Zur Theorie und Geschichte einer Gattung* (Munich: Wilhelm Fink, 1970); Stefan Nienhaus, *Das Prosagedicht im Wien der Jahrhundertwende: Altenberg—Hofmannsthal—Polgar* (Berlin: de Gruyter, 1986); Eckhardt Köhn, *Strassenrausch: Flanerie und kleine Form: Versuch zur Literaturgeschichte des Flaneurs bis 1933* (Berlin: Das Arsenal, 1989); Wolfgang Bunzel, *Das deutschsprachige Prosagedicht: Theorie und Geschichte einer literarischen Gattung der Moderne* (Tübingen: Niemeyer, 2005); Andreas Huyssen, “Modernist Miniatures: Literary Snapshots of Urban Spaces” in *PMLA* 122, no. 1 (2007): 27-42; *Kleine Prosa: Theorie und Geschichte eines Textfeldes im Literatursystem der Moderne*, ed. Thomas Althaus, Wolfgang Bunzel and Dirk Göttsche (Tübingen: Niemeyer, 2007); *Kafka und die kleine Prosa der Moderne*, ed. Manfred Engel and Ritchie Robertson (Würzburg: Königshausen & Neumann, 2010).

Detlev von Liliencron: Poetic Form and the Noise of Mechanized War

Altenberg's "The Drummer Belin" portrays a series of performances at Vienna's Ronacher nightclub, an establishment that specialized in variety and vaudeville shows.²⁴ After a striptease and several dance performances, a grey-haired man in a black tailcoat and white tie is introduced to the audience as "the drumming virtuoso Belin (*der Trommel-Virtuose Belin*).” Picking up a small drum from a stand onstage, the man begins his act. The performance immediately conjures up vivid images of war in the minds of the spectators, who are assaulted and physically harmed by the violent cacophony emanating from the single drum:

“The Battle!”:

Rataplán ra ra ra ra - - - from the distance countless troops come running, millions, ever more, ever more, more, more. More - ! They crawl, slide, scurry, fly - - - Stop.

Burst of gunfire - - - ratá! Stop. Fire, fire, fire - - - ratatátá!

The battle sings its song, shouts, shrieks, screams, moans, exhales - - - - . Stop.

Suddenly a terrible uproar (*Wirbel*) begins - - - - Rrrrátaplan rrrráta rrrráta rrrráta rrratátá tá tá tá tá - - - trrrrrrrrrá! The death struggle of life: “The Battle!”

Hurricane-roll (*Orkan-Wirbel*)!

He rapes the ear, stretches it, tears it apart, shakes it, breaks it, penetrates into the soul and causes a shiver - - -! A terrible drumroll (*Wirbel*), a horrible, unrelenting, gruesome, bloody-eared drumroll! Won't he stop? He won't stop, rrrratá, rattles on, tears the nerves, rrrátatátá! Whirl! Whirl! - -!! Rrrratá! Everything is blown across the floor, mowed down, destroyed.

Bang—Bang-----Bang! Rrrrrrrrrát-----. The battle fades away.

Silence.²⁵

²⁴ In a later text Altenberg would claim that the club initiated a sense of “aesthetic freedom” unknown in Vienna at that time. See Peter Altenberg, “Etablissement Ronacher” in *Märchen des Lebens* (Berlin: S. Fischer, 1908), p. 65.

²⁵ ““Die Schlacht!”:

Rataplán ra ra ra ra - - - von ferne ziehen unabsehbare Schaaren (*troops*) in Eilschritt heran, Millionen, immer noch, immer noch, noch, noch, noch. Noch -! Sie schleichen, gleiten, huschen, fliegen - - - Pause.

Geschütz-Salve - - - ratá! Pause. Salve, Salve, Salve - - - ratatátá!

Die Schlacht singt ihr Lied, jauchzt, kreischt, brüllt, stöhnt, athmet aus - - - - . Pause. Plötzlich beginnt ein furchtbarer Wirbel - - - - Rrrrátaplan rrrráta rrrráta rrrráta rrratátá tá tá tá tá - - - trrrrrrrrrá! Der Todeskampf dieses Lebens ‘Schlacht!

Orkan-Wirbel!

Er nothzücht das Ohr, spannt es, treibt es auseinander, schüttelt es, bricht es, dringt in die Seele ein und macht erschauern - - -! Ein fürchterlicher Wirbel, ein entsetzlicher, nachsichtsloser, grausamer, blutohriger Wirbel! Wird er nicht aufhören?! Er hört nicht auf, rrrratá, prasselt herum, zerfetzt die Nerven, rrrátatátá! Wirbel! Wirbel - -!! Rrrratá! Alles wird über den Boden geblasen, gemäht, vertilgt.

Rather than applauding the drumming virtuoso, as they did for previous performances, members of the audience complain about the physical damage that has been inflicted on them through his playing. One spectator observes that “er zerreißt das Trommelfell,” a statement that can be translated as either ‘he tore the drum skin’ or ‘he tore the eardrum.’ While there is no clear textual evidence that the drum had been destroyed, there is ample evidence that the performance violently assaulted the bodies of those listening. However, it is precisely this ambiguity, this interchangeability of drumhead and ear, which enables Altenberg to depict the auditory experience as distinctly *corporeal*—a point I will return to in more detail later in the chapter.

One of the final and perhaps, initially, most puzzling responses to the performance comes from a young woman, who, terrified and pale, exclaims to her husband: “Napoleon - - -!”²⁶ She continues by expressing concern that the drummer will “possibly be fired (*wird vielleicht entlassen werden*)” because he “got so little applause (*hat wenig Applaus gehabt*)” from the audience. Her husband comforts her by explaining that this is highly unlikely, as the performers are all “on contract (*fix engagirt*).” The text then concludes with the young woman once again uttering the name “Napoleon - - -!” This final exchange between husband and wife can be read as a satirical commentary on recent events in France and, more specifically, the deposal of Napoleon III by the forces of the Third Republic following the Franco-Prussian War. Napoleon was in a sense “fired” by the French people, just as the young woman fears the lackluster response from the crowd means the end of the drummer’s tenure at the club. Her husband’s response

Schuss--Schuss-----Schuss! Rrrrrrrrát-----. Die Schlacht ist gestorben. Stille” (*Ws* 105).

²⁶ *Ibid.*, 107.

that the performer's job is most likely not in jeopardy because he is under contract can be seen, in turn, as a cynical acknowledgment of the Napoleon family's dominance over French politics throughout the nineteenth century. Even if booed from the stage tonight, the remark subtly suggests, both the Napoleonic dynasty and the unpopular drummer will surely be back tomorrow.

Seen in this light, one can aver that the brutal battle conjured up by the man's drum would have been read by contemporary audiences as scenes from the recent Franco-Prussian War. Indeed, the sudden transition in Altenberg's text from the onomatopoeic rendering of the drum to images of "millions" of soldiers rushing to the battlefield corresponds to the heightened intensity, speed, and violence that resulted from mechanized warfare. Both the Austria-Prussian War and the Franco-Prussian War made extensive use of railways and telegraphs to transport troops and information quickly over long distances.²⁷ It was also at this time that the first rapid-firing weapons were employed as standard army equipment. The French *mitrailleuse*, for example, explicitly mentioned in Friedell's description of Altenberg's literary style, is considered the world's first machine gun, a hand-cranked 'revolver cannon' that fired 100-200 rounds per minute and whose range extended approximately 1,200 yards.²⁸ Altenberg's recurring use of the letter 'r' and variations of the sequence 'ratatata' in place of more conventional linguistic forms gives voice to the repetitive firing of these early machine guns.

²⁷ On the role of the railroad, see Geoffrey Wawro, *The Franco-Prussian War: The German Conquest of France in 1870-1871* (Cambridge: Cambridge UP, 2003), pp. 48-49, 74. On telegraphy, see English excerpts from Major-General Chauvin's "Organization der elektrischen Telegraphie in Deutschland für die Zwecke des Krieges" (1884) in *The Journal of the Royal United Service Institution*, Vol. XXVIII, No. CXXXVI (1884): 777-808; continued in No. CXXXVII (1884): 1051-1064. On the construction of the telegraph network in Germany, see also Frank Haase, "Stern und Netz" in *Armaturen der Sinne: Literarische und technische Medien 1870 bis 1920*, ed. Jochen Hörisch and Michael Wetzels (München: Fink, 1990), pp. 53-61.

²⁸ See Wawro, *The Franco-Prussian War*, pp. 53, 99-100.

Repetition, as we will see, is one of the defining features of onomatopoeic modes of representation. While also related to broader changes in the nature of work and the rise of industrialization and machine culture, the repetition of restricted sets of letters on the printed page was undoubtedly tied up with the more specific technological development of rapid-firing weapons—a connection that was borne out not only in Altenberg’s text and Friedell’s commentary, but also in works by Detlev Liliencron, which I analyze below.²⁹

Through the violent imagery of the broken eardrum and the onomatopoeic blasts of machine guns, Altenberg thematizes the physical damage that the cacophony of modern warfare inflicted on those forced to hear to it firsthand. Just as the audience members have their ears bombarded and beaten bloody by the sound of the drum, soldiers returning from the Franco-Prussian War complained of ear pain, deafness, and subjective noises caused by the noise of the guns.³⁰ One medical doctor reported several cases of “eardrum injuries (*Trommelfellverletzung*),” thereby invoking the same part of the ear violently assaulted and torn to pieces by the drummer of Altenberg’s text.

In addition, the Franco-Prussian War provided medical scientists with ample evidence that the war caused a wide range of long-lasting nervous disorders.³¹

Altenberg’s text portrays the physical impact of noise on the body, as the din of the

²⁹ On labor and machine culture in the context of American naturalism, see Mark Seltzer, *Bodies and Machines* (New York: Routledge, 1992).

³⁰ See August Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen* (Berlin: Otto Enslin, 1884), p. 19; *Traumatische, idiopathische und nach Infektionskrankheiten beobachtete Erkrankungen des Nervensystems bei den deutschen Heeren im Kriege gegen Frankreich 1870/71* (Berlin: Ernst Siegfried Mittler und Sohn, 1886), pp. 292, 299, 367, 416, 454.

³¹ See Joachim Radkau, “Die wilhelminische Ära als nervöses Zeitalter, oder: Die Nerven als Netz zwischen Tempo- und Körpergeschichte” in *Geschichte und Gesellschaft*, 20. Jahrg., Heft 2 (April-June 1994): 211-41, especially p. 237.

drum/machine gun tears apart the ears of those listening. But the literary work also gestures toward a notion of trauma that is at once embodied in the pale, terrified audience as well as the use of onomatopoeia in textually representing the sound of the drum. The repetitive, onomatopoeic ‘ratatata’ of the guns reproduces the mechanical operations of the weapon and registers its abrasive sound as a kind of textual noise that disrupts the flow of the narrative. At the same time, the use of onomatopoeia suggests that the nature of the experience has been so intense that it cannot be processed by the narrator and, in turn, translated into coherent sentences.

This inability to communicate in any semantically meaningful way is, of course, one of the central tenets put forth in theories of trauma. In their 1893 essay, “On the Psychological Mechanism of Hysterical Phenomena,” Sigmund Freud and Josef Breuer defined psychological trauma as “something that enters the psyche that is so unprecedented or overwhelming that it *cannot be processed or assimilated by usual mental processes.*”³² Situated alongside contemporaneous theories of trauma, onomatopoeia therefore comes to signify a paradoxical linguistic predicament. On the one hand, it signals an attentiveness to sensory impressions, a faithfulness to the nuances of sound, by foregoing conventional nouns and verbs in favor of non-lexical clusters of letters that reproduce rather than describe the sound. On the other, it indicates a narrator seemingly incapable of processing sensory impression into coherent words and sentences, as failing to symbolize for readers what he has experienced firsthand.

³² Quoted in Roger Luckhurst, “Mixing Memory and Desire: Psychoanalysis, Psychology, and Trauma Theory” in *Literary Theory and Criticism*, ed. Patricia Waugh (Oxford: Oxford UP, 2006), pp. 497-507, here p. 499, emphasis added. This understanding of trauma as an incapacity to process or assimilate experience would be expressed in more explicitly semiotic terms in Freud’s *Beyond the Pleasure Principle* (*Jenseits des Lustprinzips*, 1920), where the author characterized the phenomenon as “a type of repetition compulsion that indexes a *failure of symbolization*, an incapacity to render experience into the symbolic language of dreams or mentation”; quoted in Hillel Schwartz, *Making Noise: From Babel to the Big Bang & Beyond* (New York: Zone Books, 2011), p. 598.

Notions of trauma and repetition compulsion gain additional significance when considered alongside the fact that Altenberg's onomatopoeic renderings of modern warfare were borrowed from earlier representations of mechanized warfare by Detlev von Liliencron. Liliencron, who served and was injured in both the Prussian campaign of 1866 and 1870, composed countless poems and short prose works documenting the new auditory experiences that accompanied the advent of modern mechanized warfare.³³ In a text entitled "A Summer Battle" (1886), which recounts events leading up to the Austro-Prussian War of 1866, the violent and sudden sounds constitutive of the modern battlefield are rendered onomatopoeically—from the sound of an exploding grenade (bssst – bum!) and a military drum (Plum-bum, plum-bum, plum-bum), to the repetitive noise of rapid gunfire (taktak – taktaktak – taktak) and the assault waged by a cavalry brigade (ratatata).³⁴

It is, of course, this last series of letters, the 'ratatata' of the cavalry's attack that Altenberg appropriates for his depiction of the violent drum performance. What is important to note is that, despite the sense of immediacy and faithfulness to reality implied by the chaotic arrangement of letters on the page, Altenberg's text borrows from an earlier, first-hand account of mechanized war.³⁵ The onomatopoeic bursts of noise, which function as disruptions to conventional language within Altenberg's literary text,

³³ Liliencron portrayed protagonists afflicted by traumatic injuries to the ear and haunting auditory hallucinations, listing the same symptoms recorded by medical scientists in their case studies of returning soldiers published that year. In one story Liliencron describes a soldier afflicted by a "strong buzzing in the ears (*Ohrensausen*)" and feelings of "vertigo (*Schwindel*)" after being wounded in battle. See Detlev von Liliencron, "Das Wärterhäuschen" (1886) in *Sämtliche Werke von Detlev von Liliencron. Erster Band* (Berlin: Schuster & Loeffler, 1896), pp. 219-42, here pp. 230, 231, 240.

³⁴ *Ibid.*, pp. 50, 57, 51, 58.

³⁵ Altenberg explicitly acknowledged his indebtedness to Liliencron's writing in a short text included in the collection, *Detlev von Liliencron im Urteil zeitgenössischer Dichter. Dem Dichter der 'Adjutantenritte' und des 'Pogfred' überreicht*, ed. Fritz Böckel (Berlin und Leipzig: Schuster & Loeffler, 1904), p. 15.

are in fact already *conventionalized* ways of representing the sounds of the modern battlefield. The “ratatat” of Altenberg’s war, in other words, reveals the way in which even the seemingly arbitrary clustering of consonants and vowels, the textual noise of late nineteenth-century literature, was composed of preformed discursive elements.

In addition to borrowing from Liliencron’s acoustically evocative modes of description, Altenberg’s “The Drummer Belin” is written in the tradition of the prose poem, a genre first introduced into the German-speaking context by Liliencron in his 1883 collection, *The Adjutant’s Ride and Other Proems* (Adjutantenritte und andere Gedichte). It is the title ‘poem’ “Adjutantenritte”—a piece that actually consisted of four smaller, thematically related texts alternating between prose and poetry—that I would like to examine before moving on to Altenberg’s appropriation and reconceptualization of the genre.

The prose poem, or, *kleine Form*, as it was to be called in the early twentieth century, was a highly condensed mode of writing often linked to Baudelaire and the feuilleton tradition of nineteenth century European newspapers. It was later taken up not only by Altenberg but also later modernist authors such as Franz Kafka, Robert Musil, Walter Benjamin, and Rainer Maria Rilke.³⁶ While Baudelaire’s innovative use of the form is well known, Liliencron’s early contribution has often been downplayed or overlooked entirely.³⁷ More than simply providing us with a competing lineage of late nineteenth-century practitioners of the prose poem, a closer look at Liliencron’s *The Adjutant’s Ride* simultaneously demonstrates the extent to which the development of the

³⁶ See Huyssen, “Modernist Miniatures.”

³⁷ One exception is the insightful chapter on Liliencron in Wolfgang Bunzel’s *Das deutschsprachige Prosagedicht*.

prose poem within the German-speaking context was deeply bound up with early experiences of mechanized war. This military history has often been obscured by scholars who instead tend to connect the genre to experiences of shock within the metropolis.³⁸ As I show, at least within the context of noise, it was only later through a process of appropriation and translation that experiences first documented on the battlefields of 1866 and 1870 were subsequently transferred to encounters with the modern metropolis.

The setting of Liliencron's "The Adjutant's Ride" is the Franco-Prussian War and it is again the experience of war that is linked to formal innovation. The third text in the cycle—one of the two written in prose—centers on a violent battle, which in its opening lines describes an exploding grenade that tears a captain's body to pieces.³⁹ From the start, the text emphasizes the acoustic dimension of the battle, portraying the cacophony of whizzing bullets, canon fire, and commanding orders as both a disorienting sensory experience and an aesthetic pleasure, as an overwhelming, singular thunder and a kind of symphony composed of numerous individual noises perceptible to the attentive listener. Again, the sounds of war are rendered onomatopoeically. Amidst the "terrible noise (*furchtbarer Knall*)" of the battle, the sound of a single bullet can be heard striking a garden fence: "Klapp! it sounded softly. Like the stroke of a woodpecker's beak."⁴⁰

In a gesture that prefigures the Futurist embrace of noise and war thirty years later, Liliencron's narrator perceives a hidden poetics in the noise of the battlefield,

³⁸ See Huyssen, "Modernist Miniatures"; Köhn, *Strassenrausch*.

³⁹ Liliencron, *Adjutantenritte und andere Gedichte* (Leipzig: Wilhelm Friedrich, 1883), p. 148; hereafter abbreviated as *AuG*.

⁴⁰ "Klapp! klang es leicht. Wie ein Spechtschnabelhieb"; *ibid.*, p. 148.

revealed to him in a moment of visual blindness and heightened attentiveness to sound.

Moving back and forth from the sound of “a single thundering tone” to the noises of individual shots, the narrator attempts to conjure up the poetry of war for his readers:

Behind us the trot of the cavalry call frequently sounded. We couldn't see the squadrons. But it seemed to me like I was hearing stomping, snorting, and clattering. Shouts from the commando rang in my ear: Sto-pp. ... Sto-pp ... becoming weaker and weaker: Sto-pp ... Sto-pp. Everything rang out, which made the movements of a rider regiment so highly poetic; more so when one was 'stuck inside' it. I heard all of this clearly and yet around us there was only a single thundering tone. In between, the shrill shots of the artillery battery rang out, which I zoomed in on.⁴¹

The passage portrays the soldier/narrator as an acoustically sensitive observer, who, even in the absence of vision, maintains a strong grasp on the dangers which surround and envelope him. Indeed, it is the very fact that he is “stuck inside” the noise that enables him to glimpse the poetry of the situation. While the passage does not contain the same level of experimentation with onomatopoeic forms found elsewhere in the cycle, the narrator's rendering of the command “stop” as “sto-pp (*Ha-hlt*),” like those utterances, again seeks to reproduce sound textually as perceived within space and time. The dash inserted in the middle stretches the word across the line and extends, if only slightly, the time that is required to read it. At the same time, the dash indicates an absence of sound as the command becomes “weaker and weaker,” the filtering out of an extended vowel due to the growing distance between speaker and listener, leaving only the surrounding consonants audible.

Liliencron's onomatopoeic descriptions of sound and his strategic use of punctuation serve as reality effects intended both to recreate the chaotic experiences of

⁴¹ “Hinter uns klang häufig das Kavallerie-Signal Trab. Wir konnten die Schwadronen nicht sehen. Aber es war mir, als hörte ich das Stapfen, Schnaufen, Klirren. Kommandorufe klangen an mein Ohr: Ha-hlt ... Ha-hlt ... und immer schwächer und schwächer werdend: Ha-hlt ... Ha-hlt. Alles das klang her, was die Bewegungen eines Reiterregiments so hoch poetisch macht; erst recht, wenn man »drin steckt.« Ich hörte das Alles deutlich, und doch war um uns ein einziger Donnerton. Dazwischen klangen schrill die Schüsse der Batterie, die ich eben herangeholt hatte”; *ibid.*, p. 152.

war as they ‘really happened’ in time and space, while at the same time authenticating the author’s own first-hand account. Throughout “The Adjutant’s Ride” Liliencron goes to great lengths to show his readers that his poetic depictions of war are not only accurate reproductions of the sensory experiences prevalent on the modern battlefield, but also that the writer himself was there to witness them. The author dedicates the text to a certain “Colonel Schell” and it is to this figure that the narrator of the third prose poem turns amidst the cacophony of war. “Bless you, old man, if this should come before your eyes. Though you rarely read poems (neither do I), it is still possible.”⁴² The sudden and surprising aside functions to authenticate the ‘poem’ as an accurate portrayal of real events that might be corroborated by other parties who witnessed them firsthand. But it simultaneously exposes Liliencron’s broader conception of poetry and the motivation behind an aesthetic program based on onomatopoeia and the privileging of the prose poem. His parenthetical assertion that, like the colonel, he too dislikes reading poetry implies the literary art’s growing irrelevance and the author’s distance from it. The claim is surprising on a number of levels. First, it is unexpected that the text readers have before them would be considered a ‘poem,’ when it bears almost no similarity to the formal features constitutive of that literary art. Second, it is confusing that, after specifically labeling the text a poem, the author would openly admit to his own disinterest in poetry. The author of what can only by a stretch of the imagination be considered poetry simultaneously writes off the literary art as no longer of interest to himself and to others like the colonel.

⁴² “Grüß Dich Gott, alter Kerl, wenn Dir dies vor Augen kommen sollte. Zwar liest Du selten Gedichte (ich auch), aber es ist immerhin doch möglich”; *ibid.*, p. 153.

In the end, the dismissive gesture serves only to validate Liliencron's call for formal innovation and his promotion of the prose poem as a genre. The prose poem can be regarded as something of a compromise for Liliencron between the demands of the market and aesthetic commitments, a formal development set in motion by declining public interest in poetry as well as the transformation of prose into a highly marketable commodity. On the one hand, the problem was that poetry was simply no longer a financially lucrative product, something that was especially problematic for Liliencron who struggled with debt most of his life and was only rarely financially independent.⁴³ In a letter dated March 1889, his editor urged Liliencron to write more prose, calling it "the poetry of money (*Poesie des Geldes*)" and a "marketable commodity for the current times (*verkäufliche Waare für die jetzige Zeit*)."⁴⁴ Liliencron, in turn, alleged that newspapers and journals asked him to write prose texts on a daily basis.⁴⁵

On the other hand, as Wolfgang Bunzel has shown, by the early 1880s Liliencron was committed to an aesthetic program critical of the contemporary state of poetry and aimed at rejuvenating the poetic form by incorporating elements from prose.⁴⁶ He specifically wanted to do away with poetry's hollow pathos, its set phrases and obsolete gestures from the past. What was required was a way to 'prose-ify' poetry and Liliencron concluded that one of the ways to do this would be through the introduction of colloquial

⁴³ See Detlev W. Schumann, "Detlev von Liliencron (1844-1909): An Attempt at an Interpretation and Evaluation" in *Monatshefte für deutschen Unterricht*, Vol. 36, No. 8 (Dec. 1944): 385-408, especially pp. 391-97.

⁴⁴ *Dichter und Verleger. Briefe von Wilhelm Friedrich an Detlev von Liliencron. Mit einer Einleitung, Faksimiles und mehreren unveröffentlichten Photographien*, ed. Walter Hasenclever (Munich/Berlin: Georg Müller, 1914), p. 92.

⁴⁵ Detlev von Liliencron, *Ausgewählte Briefe*, Bd. 2, ed. Richard Dehmel (Berlin: Schuster & Loeffler, 1910), p. 63.

⁴⁶ See Bunzel, *Das deutschsprachige Prosagedicht*, pp. 125, 126.

language and dialect. Although not explicitly mentioned in his account, it is not difficult to see how onomatopoeia and other non-lexical utterances would also fall under the same category of colloquial speech—a connection made even clearer by subsequent Naturalist authors who popularized both practices and were deeply influenced by Liliencron’s writings.⁴⁷

But, as we have already seen, unlike the Naturalists and more in line with later Futurists like Marinetti, Liliencron linked formal experimentation to the jarring experience of the battlefield. The faith that Liliencron placed in military noise to stimulate the stagnating art of poetry is perhaps best illustrated in the way in which he chose to end “The Adjutant’s Ride.” Following the fourth and final piece, which describes a symphony of infantry signals and the “hellish noise (*Höllennlärm*)” of battle, the reader finds an unusual addition to the words on the printed page. Directly beneath the poem’s concluding lines we see several bars of music that transcribe the notes of an infantry call to charge (fig.1.1). In a letter to his editor from April 1883, Liliencron defended his decision to include the musical notation as a “sober blow of the bugle (*nüchterner Hornstoß*)” that would effectively “paralyze (*paralysieren*)” what he saw as the “lyrical wish-wash (*lyrisches Wischwasch*)” of his age.⁴⁸

The musical appendage to the concluding lines of the text, in other words, is intended as a way to force a confrontation between the stale, unimaginative poetry of the time and a poetics grounded in the sensory experiences of modern war. Not satisfied

⁴⁷ On Naturalism’s indebtedness to Liliencron, see, for example, the contributions by Arno Holz and Johannes Schlaf in *Detlev von Liliencron im Urteil zeitgenössischer Dichter*, pp. 73, 129, 130. It should be noted that Liliencron, while enthusiastic about their aesthetic ambitions, found the Naturalists’ political positions despicable, himself a self-proclaimed royalist. See Schumann, “Detlev von Liliencron: An Attempt at and Interpretation and Evaluation,” p. 394.

⁴⁸ *Neue Kunde von Liliencron. Des Dichters Briefe an seinen ersten Verleger*, ed. Heinrich Spiero (Leipzig: Xenien-Verlag, 1911), p. 32.

— 156 —

Zum Sturm, zum Sturm! Die Hörner schreien! Drauß!
 Es sprang mein Degen zischend aus dem Gatter.
 Und rechts und links, wo nur ein Flintenlauf,
 Ich riß ihn mit ins feindliche Gefnatter.
 Kerman, Kerman! Durch Blut, Gewehrgefnatter,
 Durch Schutt und Qualm! Schon stiehn die Kugelsprigen.
 Der Wolf brach ein, und matter wird und matter
 Der Widerstand, wo seine Zähne bligen.
 Und Siegesband umflattert unsre Fahnenspigen.



Fig. 1.1. Liliencron's infantry call notation. From: Detlev von Liliencron, *Adjutantenritte und andere Gedichte* (Leipzig: Wilhelm Friedrich, 1883), p. 156.

with merely describing the sounds of war through language, examples of which pervade the four pieces that precede the musical notation, Liliencron once again explores non-linguistic modes of communicating aural experience on the printed page. He expresses an ongoing commitment to producing literary works that, despite the inherent silence of the printed page, enable readers to assume the role of listeners and occupy a position inside the cacophony of war, where its true poetry can be heard. His attempts to render the battlefield audible are accompanied by formal innovations such as the inclusion of musical notation or the use of onomatopoeic modes of description, as well as the intermingling of elements from poetry and prose, which aim at both the auralization of written language as well as a broader upheaval of poetic conventions. The musical notation with which “The Adjutant’s Ride” concludes marks a non-textual transcription of sound that invokes the specific sounds of war for readers in a manner thought to be inaccessible to the written word. But it is also a call-to-arms against the tired norms of

contemporary poetry, a disruption to the dominant poetic ‘wish-wash’ by means of a glorification and aesthetization of the violent sounds of modern warfare.⁴⁹

Altenberg and the Rise of the Anti-Noise Movement

Diverging from Liliencron’s glorification of war and his characterization of the sounds of battle as ‘poetic,’ Altenberg’s “The Drummer Belin” emphasizes the listener’s corporeal encounter with sound. While the ear is still presented as a ‘gateway to the soul,’ thereby resonating with earlier Romantic theories of hearing, this destination can only be reached in Altenberg’s prose poem through an abuse of the listener’s body. On the way to its incorporeal, metaphysical destination of the soul, the ear must first be beaten, broken, and bloodied, the nerves slashed and torn apart. Sound’s ability to penetrate to the depths of the soul leads not to a religious experience of illumination, but instead provokes a feeling of terror in the listener (*dringt in die Seele ein und macht erschauern*). The terror expressed in the narrator’s response marks a revelation concerning the vulnerability of the ear and its relationship to the external world. No longer merely a recipient of melodic tones and the beauty of spoken language, the perpetually open ear becomes the target of abrasive noises. Altenberg’s use of onomatopoeia underscores the physical damage inflicted on the listener and presents the ear’s inherent openness as a dangerous deficiency in need of correction.

⁴⁹ Perhaps not surprisingly, in 1896 Liliencron became the first known German poet to read his own work aloud into the phonograph. Shortly thereafter, commercial *Hörbilder*—two or three minute long phonograph recordings—attempted to render audible the same soundscape Liliencron had conjured up so vividly through the medium of writing. The commercial *Hörbild*, “The Battle of Sedan (*Die Schlacht bei Sedan*),” for example, portrayed heroic events from the Franco-Prussian War. Unfortunately, a thorough study of the interaction between late nineteenth-century literary aesthetics and early phonographic sketches outside the scope of the current project. See Heinz Hiebler, “Weltbild »Hörbild«” in *Die Medien und ihre Technik. Theorien—Modelle—Geschichte*, ed. Harro Segeberg (Marburg: Schüren, 2004), pp. 166-82, here p. 173; *Tondokumente*, p. 40.

In a manner analogous to the sound's physical infiltration of the ear, the textual noise of the onomatopoeic "ratata" invades and periodically interrupts more standard modes of literary language. In attempting to reproduce the temporal flow of sounds as they emerge in real-time, the narrator succeeds in evoking a sense of simultaneity between the act of narration and the physical impressions of the sounds on his own body. But he is forced to do so by constantly oscillating between a more distant and stable perspective, on the one hand, and a more immediate recording of the real, on the other. The text's real-time narration therefore both registers and competes with these sonic disruptions, as the coherent details of the performance described in the text are repeatedly broken apart by onomatopoeic clusters of sound not yet fully translated into traditional literary language.

In its emphasis on sound's violent and corporeal effects, Altenberg's prose poem radicalizes the intensity conveyed in Liliencron's glorified scenes of war. But Altenberg's text also appears at a time in which depictions of war were converging with representations of the modern metropolis. Substituting the sensitive intellectual for the heroic soldier, philosophers and cultural critics in the second half of the nineteenth century used a strikingly similar set of violent images to communicate the physically destructive din of the city and the vulnerability of a certain class of its inhabitants. Rather than celebrate this acoustic violence as Liliencron had done in his prose poems, writers like Altenberg condemned it as physically and psychologically dangerous and called for its eradication.⁵⁰

⁵⁰ See Peter Altenberg, "Sanatorien für Nervenranke" from *Bilderbogen des kleinen Lebens* (Berlin-Westend: Erich Reiss Verlag, 1909), pp. 23-27; *Das Recht auf Stille*, Jahrgang 1, Nr. 11 (Oktober 1909), p. 213; Peter Altenberg, "Der Nebenmensch" in *Das Recht auf Stille*, 2. Jahrgang, nr. 2 (February 1910): 10.

One of the earliest articulations of these anxieties can be found in an essay by Arthur Schopenhauer entitled “On Noise and Sound (*Ueber Lerm und Geräusch*)” (1851). In the text, Schopenhauer complained about the disruptions to his work caused by noise from the street such as carriage drivers cracking their whips. Similar to Altenberg’s drum, which decimates the ear on its way to the soul, Schopenhauer observed that “one virtually feels the tip of the lash in one’s brain (*man fühlt geradezu die Spitze der Peitschenschnur im Gehirn*).”⁵¹ The noise from the street not only infiltrated the private sphere and distracted the writer from his work. In doing so, it passed into the ear and inflicted damage on the brain. Sound’s effortless move from the street, through the walls of the domestic sphere and the perpetually open doorway of the ear, followed a destructive pathway that ended with a physical attack on the brain.

Schopenhauer’s observations on sound’s ability to infiltrate the home and interrupt (*unterbrechen*), even shatter to pieces (*zerbrechen*), the private life of the mind, resonate with Altenberg’s later literary representation of noise. There, as we have already seen, the drum’s physical infiltration of the ear is depicted textually through the use of onomatopoeic bursts of nonsense syllables, which invade and periodically interrupt more standard modes of literary language. The formal features of the text reenact the “shattering” and “interrupting” stressed by Schopenhauer, depicting the narrator’s physical destruction on the level of content, while at the same time integrating the notion of interruption into the text’s broken sentence structure. Altenberg’s text can in this way be read as a literary appropriation of both experiences of modern warfare as well as the more negative connotations associated with urban noise.

⁵¹ Arthur Schopenhauer, “Ueber Lerm und Geräusch” (1851) in *Arthur Schopenhauer. Zürcher Ausgabe. Werke in zehn Bänden, Band X, Parerga und Paralipomena: kleine philosophische Schriften*, Band II, ed. Arthur Hübscher (Zürich: Diogenes, 1977): 697-701, here p. 698.

However, it would be incorrect to regard Schopenhauer's essay as symptomatic of some broader shift in the experience and representation of sound and noise in the nineteenth century. Despite becoming one of the most frequently quoted texts by later anti-noise advocates like Theodor Lessing, it was something of an anomaly for its time. If one wanted to locate a point of rupture in discourse surrounding the experience of sound in the German-speaking context, I believe it would be more accurately identified as occurring around the time of the first modern mechanized wars of 1866 and 1870/71, and the rapid industrialization and expansion of German cities that immediately followed. Schopenhauer's text is important in that it introduced a particular tone and manner of speaking about noise that would remain influential far into the twentieth century, especially within the circles connected to Lessing's *Antilärmbewegung*. But it is in no way indicative of a broader shift in auditory experience and its formal representation, which would only occur decades later.

Far more revealing of the particular discursive configuration that gave rise to this rupture is an often overlooked, fifty-page treatise on modern noise entitled *The Newest Invention, The Antiphone: An Apparatus for Rendering Tones and Noises Inaudible* (Die neueste Erfindung: Das Antiphon; ein Apparat zum Unhörbarmachen von Tönen und Geräuschen, 1885), written by the retired captain of the Royal Prussian Army, Maximilian Plessner.⁵² The text was intended first and foremost as an advertisement and instruction manual for the 'antiphone,' a crude type of earplug consisting of two cones made of metal, which were kept in place by anchor-shaped discs that fit firmly within the

⁵² Maximilian Plessner, *Das Antiphon: Ein Apparat zum Unhörbarmachen von Tönen und Geräuschen* (Rathenow: Schulze und Bartels, 1885).

folds of the outer ear (fig. 1.2 and 1.3).⁵³ However, as a way of justifying the device and convincing readers to purchase it, Plessner, dedicated a large portion of the text to outlining the pernicious effects of urban noise. If Liliencron had celebrated the cacophony of the Franco-Prussian War as a much-needed stimulus for aesthetic creation, Plessner presumably returned from those same battlefields with plans to render noise inaudible. The inventor's military background pervades the text, which describes urban noise as a constant barrage of "acoustic projectiles (*akustische Projektile*)" and lists soldiers as one group that would especially benefit from using the device.⁵⁴

In a bizarre reversal of this logic of abatement, Plessner simultaneously presents the antiphone as a device that will be beneficial to otologists and other scientists seeking to *produce* subjective noises artificially for their research.⁵⁵ Thus, ironically, the aim of the device was, on the one hand, to provide individuals with a material device that would enable them to "establish silence around them in the midst of noises (*inmitten von*

⁵³ On the cultural history of earplugs and other noise-abatement devices that followed after Plessner's invention, see John Goodyear, "Escaping the Urban Din: A Comparative Study of Theodor Lessing's *Antilärmverein* (1908) and Maximilian Negwer's *Ohropax* (1908)" in *Germany in the Loud Twentieth Century: An Introduction*, ed. Florence Feiereisen and Alexandra Merley Hill (Oxford: Oxford UP, 2012): 19-35; *Lauter Ruhe: 100 Jahre Ohropax: 100 Jahre Luxus für die Ohren* (Wehrheim: Ohropax GmbH, 2007); Hillel Schwartz, "Inner and Outer Sancta: Ear Plugs and Hospitals" in *The Oxford Handbook of Sound Studies*, ed. Trevor Pinch and Karin Bijsterveld (Oxford: Oxford University Press, 2011): pp. 273-97; Paul N. Edwards *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge: MIT Press, 1996), pp. 209-38; Caroline Bassett, "Twittering Machines: Antinoise and Other Tricks of the Ear" in *differences: A Journal of Feminist Cultural Studies*, Volume 22, Numbers 2 & 3 (2011): 276-99.

⁵⁴ Plessner, *Das Antiphon*, p. 12. "During artillery practice, namely during the firing of canons inside a turret with the resonant qualities of a clock, shock to the eardrum occurs with such force that a long period of hardness of hearing or even total deafness can result (*Bei artilleristischen Schießübungen, namentlich beim Abfeuern von Geschützen innerhalb der, eine glockenartige Resonanz besitzenden Panzertürme, treten häufig Erschütterungen des Trommelfells von solcher Heftigkeit ein, dass eine längere Schwerhörigkeit, ja totale Taubheit die Folge sein können*)"; *ibid.*, p. 39.

⁵⁵ See *ibid.*, pp. 39-42.

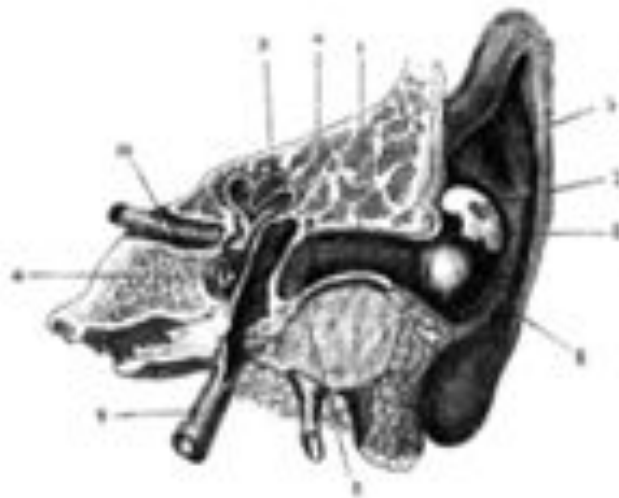
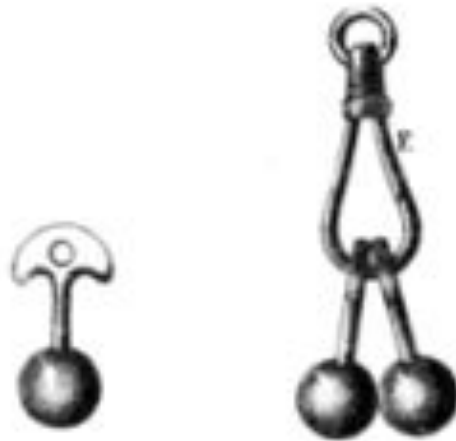


Fig. 1.2 and 1.3. Illustrations of Plessner's antiphone and its position inside the ear. From: Maximillian Plessner, *Die neueste Erfindung: Das Antiphon; ein Apparat zum Unhörbarmachen von Tönen und Geräuschen* (1885).

Geräuschen Stille um sich her zu schaffen).⁵⁶ On the other, Plessner proudly asserted that, by eliminating the noise of the surrounding environment, the internal noises of the body—for example, the “rushing (*Rauschen*)” of the blood as it circulated—could be amplified and made even more intense by firmly closing off the auditory canal, thereby increasing the resonance of the tube-shaped spaces of which the area was composed.⁵⁷

Plessner goes so far as to present the antiphone as a kind of “microphone (*Mikrophon*).”⁵⁸ With the device, he continues, previously inaudible sounds of the external natural world and those inside the body would be amplified to such an extent that they would become as loud and intense as “the continuous blast of cannons, accompanied by rapid fire” (*ein kontinuierliches, von Schnellfeuer begleitetes Krachen von Geschützen*).⁵⁹ Thus, alongside his stated goal of eliminating noise and artificially producing silence, Plessner also celebrated the ability to amplify the sounds of the user’s own body to the volume of mechanized war. In this way, Plessner’s anti-noise device bears surprising affinities with Liliencron’s aesthetics of war, in that both regarded the noise of war as something to be preserved and transferred to ordinary domestic life during peacetime.

By counterbalancing the abatement of urban noise with the production of cacophonous subjective noises, Plessner’s device ironically failed to make the user’s life any quieter. This apparent contradiction can be easily explained away once one comes to understand that the driving principle behind the device was never absolute abatement, but

⁵⁶ Ibid., p. 7.

⁵⁷ Ibid., p. 40, 45, 46. I return to the topic of subjective noises in more detail in Chapters 2 and 3.

⁵⁸ Ibid., p. 45.

⁵⁹ Ibid., p. 46.

rather the *filtering* of noise, the selection and rarefication of a multitude of signals, or what Emily Thompson, in her influential study of the ‘modern soundscape,’ has characterized as the ‘stripping of sound waves’ to their essential parts.⁶⁰ And, indeed, in the opening paragraph of his text, Plessner explicitly appeals to recent developments in electro-acoustics as justification for his device, asking why there have not yet been technologies aimed at eliminating sound in addition to those that communicate it across vast distances. “Teach me how not to have to hear long-range, acoustic effects! (*Lehrt mich, akustische Fernwirkungen nicht hören zu müssen*),” he demands.

The goal of filtering and rarefying modern urban soundscapes was deeply bound up with social and political anxieties, especially those related to the intermingling of the lower and higher classes. As Hillel Schwartz rightly notes, “Noise is never so much a question of the intensity of sound as of the intensity of relationships.”⁶¹ Similarly, Karin Bijsterveld argues that noise has frequently been associated with a “disruption of a particular social order, terrifying at times.”⁶² Both statements productively highlight the extent to which noise is socially constructed, highly subjective, and largely divorced from the physical properties of particular sound waves. Much less important than the actual sounds for designations of ‘noise (*Lärm*)’ were the identities of those producing the

⁶⁰ “The desire for clear, controlled, signal-like sound became pervasive, and anything that interfered with this goal was now engineered out of existence”; Emily Thompson, *The Soundscape of Modernity* (Cambridge: MIT Press, 2002), p. 3. See also Mara Mills, “Deafening: Noise and the Engineering of Communication in the Telephone System” in *Grey Room* 43 (Spring 2011): 118-43.

⁶¹ Hillel Schwartz, *Making Noise: From Babel to the Big Bang & Beyond* (New York: Zone Books, 2011), p. 20.

⁶² Karin Bijsterveld, *Mechanical Sound: Technology, Culture, and Public Problems of Noise in the Twentieth Century* (Cambridge: MIT Press, 2008), p. 37. See also Jacques Attali’s classic study, *Noise: The Political Economy of Music*, trans. Brian Massumi (1977; Minneapolis/London: University of Minnesota Press, 2009).

sounds and the fact that those sounds were now audible within the immediate environment of a particular group of listeners.

Plessner's treatise—which is surprisingly absent in both Schwartz and Bijsterveld's accounts—provides one of the earliest and clearest articulations of the ways in which the stated goal of protecting the vulnerable ear functioned as a covert social critique of changing conditions in Germany and the Austro-Hungarian Empire. An “apparatus to render tones and noises inaudible” emerged at a particular historical moment not only because the world had gotten louder after industrialization, but also because, by the end of the nineteenth century, with the expansion and rapid development of urban centers like Vienna and Berlin, traditional spatial boundaries like the walls and doors of the private sphere no longer secured the sensorial division between the social classes. “The true despot of our times is the rabble,” Plessner stated unambiguously, “who possess unlimited power over the well-being and and woes of educated people (*der Gebildeten*).”⁶³ At the end of the nineteenth century, Plessner continued, “educated people are not even in the position to protect their property against the arbitrary damage from a distance (*die Gebildeten [sind] nicht einmal im Stande, ihr Eigentum gegen willkürliches Beschädigen aus der Ferne zu schützen*),” an accusation directed at the invasion of the private sphere by the noise of the lower classes, or what he describes elsewhere as, “the reigning unprotectedness of the higher social classes under the despotism of street tyrants (*der herrschenden Schutzlosigkeit der höheren Gesellschaftsklassen unter der Despotie der Strassentyrannen*).”⁶⁴

⁶³ “Der wahre Despot unserer Zeit, der über Wohl oder Wehe der Gebildeten mit unumschränkter Macht gebietet, ist der Pöbel”; Plessner, *Das Antiphon*, p. 10.

⁶⁴ *Ibid.*, p. 10.

This distinctly modern breakdown of auditory boundaries between the various classes resulted in nothing less than “the most degrading slavery,” with the educated terrorized by the uneducated, the civilized by the barbarous, and “the most useful in general by the most expendable to humanity.”⁶⁵ In an increasingly violent and militaristic language, Plessner went on to lament the fact that, although the poor were permitted to wage their acoustic assaults with no repercussions, the law prevented the higher classes from seeking “retaliation (*Wiedervergeltung*)” by beating on parts of the body other than the ear (*dem Verbote, auf anderen Stellen ihres Felles herumzutrommeln*).⁶⁶ Here, Plessner imports a military vocabulary to describe changing social relations, calling for “retaliation” by one party against the other and, in the process, rendering the idea of ‘class warfare’ quite literal. In addition, he singles out the eardrum as the specific location where this battle will be fought and sarcastically remarks on the aptness of this anatomical term for what he considers the least protected part of the body.

Similar to Altenberg’s “The Drummer Belin,” which capitalized on an ambiguity between the actual drum onstage and the eardrums of audience members, Plessner portrays the eardrum as the site of a violent confrontation between the classes and, in doing so, highlights the distinctly corporeal nature of listening to noise. While the lower classes are alleged to beat on the eardrums of the educated through their persistent noise in the streets, the educated fantasize of “beating on (*herumtrommeln*)” all parts of their enemies’ bodies in a bloody retaliation not legally permitted. The figure of the eardrum as both body part and musical instrument allows the two authors to depict experiences of

⁶⁵ “Und zwar einer Misshandlung der Gebildeten durch die Ungebildeten, der Gesitteten durch die Rohen, der Erwachsenen durch die Unmündigen, der der Gesamtheit Nützlichsten durch die der Menschheit Entbehrlichsten”; *ibid.*, p. 8.

⁶⁶ *Ibid.*, p. 12.

noise as an infiltration and battering of the body. While Altenberg capitalized on the terminological overlap as a means to explore the breakdown of conventional language amidst an increasingly hostile acoustic environment, Plessner draws on the figure in order to thematize class conflict and market his noise-cancelling device. For, as Plessner argued, the antiphone, although not always capable of abating all external sounds, could at the very least prevent the eardrum in particular from being struck violently by sound (*Berühren des Trommelfells ausgeschlossen ist*).⁶⁷

In his history of modern auditory culture, Jonathan Sterne identifies a significant transformation in models of sound reproduction dominant in the late eighteenth and early twentieth centuries.⁶⁸ Whereas in the past, Sterne argues, the goal had been to reproduce speech and mechanisms of the mouth and throat, by the middle of the nineteenth century the focus had shifted to emulating the ear and, more specifically, the tympanum or eardrum. Rather than producing automata capable of artificial speech, figures like Alexander Graham Bell, Leon Scott, and Hermann von Helmholtz integrated real and mechanical ears into technological devices like the phonograph and telephone. This later ‘tympanic’ model of hearing and sound would circulate across a wide range of discursive fields and material practices—from the pages of otology studies, through the technical implementation of tympanic diaphragms in the telephone and phonograph, to late nineteenth-century impressionist literature.⁶⁹

⁶⁷ Ibid., p. 16.

⁶⁸ See Sterne, *The Audible Past*, pp. 31-38.

⁶⁹ On the tympanic principle within otology, see Oskar Wolf, *Sprache und Ohr. Akustisch-physiologische und pathologische Studien* (Braunschweig: Verlag von Friedrich Vieweg und Sohn, 1871), pp. 234-36; on the role of the tympanum within late-nineteenth century technological discourse, see Comte Th. Du Moncel, *The Telephone, the Microphone, and the Phonograph* (London: C. Kegan Paul & Co., 1879), pp. 310, 331.

As we saw in the context of Altenberg's "The Drummer Belin," the tympanic model of hearing was also operative within late nineteenth-century poetics, with the destruction and violent abuse of the eardrum linked to textual experiments with onomatopoeia and non-conventional language. Somewhat more ironically, the tympanic model informed Plessner's diatribe against modern noise. Although unable to block out all sound—and even celebrated as a means for producing subjective noises—Plessner's device succeeded in doing one very important thing: protecting the eardrum from being struck or damaged in any way. A closer look at Plessner's obscure treatise therefore reveals the ways in which early discussions of urban noise overlapped with contemporaneous medical research and technological developments, in that each, albeit in different ways and with different goals in mind, singled out the tympanum as the privileged object of inquiry and understood processes of auditory perception as inherently tympanic. By additionally turning to Altenberg's "The Drummer Belin," we see the ways in which formal literary innovation was inextricably bound up with an emerging anatomical imagination that conceived of hearing not only in Romantic terms of a 'gateway to the soul,' but as a distinctly corporeal experience dependent on physiological processes internal to the ear.

Anti-Noise Aesthetics

In the decades following the invention of Plessner's antiphone and the publication of his cultural-critical treatise, the debate surrounding urban noise intensified in urban centers like Berlin and Vienna. In Germany, the discussion was led by Theodor Lessing, a philosopher and cultural critic, socialist and feminist, who in 1908 published his

influential text, *Noise: A Polemic Against the Sounds of our Time* (Der Lärm: Eine Kampfschrift gegen die Geräusche unseres Lebens).⁷⁰ At the end of the same year Lessing founded the German Association for Noise Protection (*Deutscher Lärmschutzverband*), an interdisciplinary group aimed at transforming the urban soundscape to fit the needs of the sensitive intellectual. In conjunction with the founding of the group, he began publishing the journal, *The Right to Quiet* (Das Recht auf Stille), which provided a forum for polemical rants against modern noise, as well as detailed reports on recent legal decisions, new anti-noise technologies like Maximilian Plessner's antiphone, and medical studies related to acoustical reform. At its peak the anti-noise organization included over a thousand members, mainly professors, artists, literary authors, lawyers, and medical doctors.

Similar to Plessner, whose antiphone he derided in his published writings,⁷¹ Lessing drew clear connections between the rise of urban noise and the growing presence of the lower classes in spaces occupied by male bourgeois intellectuals. In his polemic, Lessing observed that, "The noisy rabble interrupt every intellectual and theoretical

⁷⁰ For Lessing's writings on noise, see Theodor Lessing, *Der Lärm: Eine Kampfschrift gegen die Geräusche unseres Lebens* (Wiesbaden: J.F. Bergmann, 1908); Lessing, "Über den Lärm" in *Nord und Süd* 97 (1901): 71-84; Lessing, "Noch einiges über den Lärm" in *Nord und Süd* 103 (1902): 330-39; Lessing, "Die Lärmschutzbewegung" in *Dokumente des Fortschritts* 1 (1908): 954-61; Lessing, "Der Verein gegen Lärm" in *Die Zukunft* 51 (September, 1908): 427-42; Lessing, "Über Psychologie des Lärms" in *Zeitschrift für Psychotherapie und medizinische Psychologie, mit Einschluss des Hypnotismus, der Suggestion und der Psychoanalyse* 1 (1909): 77-87.

⁷¹ "A song of praise must be sung for the inventor of the Antiphone earplug, but only if these devices were actually of any use! After experiencing the most unpleasant effects of all kinds of antiphones, I now use small plugs made out of hard rubber which are the best sound absorbers and real human comforts (*Ein wahres Loblied müßten wir bei diesem Ueberfluß an Geräusch dem Erfinder der Antiphone singen, wenn diese Apparate nur brauchbarer wären. Ich verwende, nachdem ich von Antiphonen aller Art die unangenehmsten Wirkungen gesehen habe, kurze Zäpfchen aus Hartgummi, welche die relative besten Schalldämpfer und wahre Menschheitströster sind*"); Lessing, "Über den Lärm," p. 80.

creation (*In jede geistige, jede theoretische Schöpfung bricht lärmender Pöbel ein*).⁷²

Once again, the site of class conflict was the eardrum. Pointing out that factory workers refused to wear Plessner's antiphone—an observation corroborated by numerous contemporaneous sources⁷³—Lessing invoked the figure of the sensitive eardrum to draw physical distinctions between the classes, which were subsequently mapped onto intellectual ability and aesthetic sensitivity. “The eardrum thickens through exposure to noise (*Das Trommelfell verdickt sich unter Einwirkung des Lärms*),” Lessing explained, citing medical evidence as justification for excluding the lower classes from his anti-noise movement.⁷⁴ Elsewhere, he asserted that, “The receptivity to noise and sound increases proportionally with intellectuality. It is virtually a gauge for the refinement of the nerves and the agility of the brain.”⁷⁵ Not surprisingly then, the logo that was adopted for the movement showed an ear superimposed over the brain, thereby highlighting the interconnectedness of the two physically vulnerable bodily organs as well the relationship between hearing and intellectual activity (fig. 1.4). Sensitivity to sound and the physical qualities of the ear were easily transferred to a precarious social order, which took the lower and middle classes to be in a state of perpetual war.

⁷² Lessing, *Der Lärm*, p. 15.

⁷³ As many first-hand accounts stress, factory workers viewed earplugs as ‘unmanly’ and regarded noise as a positive indication of productivity and job stability. The thickening of the eardrum was something to be proud of, the inevitable outcome of productive labor. See Hans-Joachim Braun, “Turning a Deaf Ear? Industrial Noise and Noise Control in Germany Since the 1920s,” in *The Oxford Handbook of Sound Studies*, ed. Trevor Pinch and Karin Bijsterveld (Oxford: Oxford UP, 2012): 58-78, especially p. 66; Saul, “Wider die ‘Lärmpest,’” p. 153. For Marx’s related discussion of industrial labor and the historical development of the senses, see Karl Marx, “Historizität der menschlichen Sinne” from *Ökonomisch-philosophische Manuskripte* (1844), reprinted in *Texte zur Medientheorie*, ed. Günter Helmes and Werner Köster (Stuttgart: Philipp Reclam, 2002), pp. 102-105.

⁷⁴ Lessing, *Der Lärm*, p. 33.

⁷⁵ “Die Empfänglichkeit für Lärm und Geräusch nimmt proportional mit der Geistigkeit zu, ja sie ist geradezu ein Gradmesser für die Feinheit der Nerven und die Beweglichkeit des Gehirns”; Lessing, “Über den Lärm,” p. 77.

While the accounts given by Plessner and Lessing overlap in their common emphasis on class conflict and the corporeal effects of noise, one of the most obvious points of contrast lies in the assumption articulated within the later anti-noise movement that aesthetics and language would benefit enormously from acoustical reform. According to Lessing, those insensitive to noise were also insensitive to thought, poetry, and works of art.⁷⁶ Others described noise as not only “boorish” and “lacking sense,” but also “unaesthetic (*unästhetisch*).”⁷⁷ No doubt alarmed by the attack on language and art as well as their exceptional vulnerability to the physical and psychological effects of noise, Lessing’s movement received strong support from literary authors and cultural critics such as Hugo von Hofmannsthal, Peter Altenberg, Alfred Kerr, Franz Blei, and Kurt Tucholsky, who would have surely recognized continuities between their own



Fig. 1.4. Logo for the anti-noise group highlighting the deep entanglement between the brain and ear. From: *Der Lärmschutz*, 4. Jahrgang, Nr. 6 (June 1912), p. 86.

⁷⁶ Lessing, “Über den Lärm,” p. 71.

⁷⁷ Dr. Erwin Silber, “Ein Brief” in *Das Recht auf Stille*, Jahrgang 1, Nr. 5 (March 1909): pp. 82-3. See also Dr. Pudor, “Die unterirdische Verkehrsstrasse” in *Das Recht auf Stille*, Jahrgang II, Nr. 1 (January 1910): 2-3, here p. 2.

aesthetic preoccupations and the group's condemnation of noise and celebration of silence.⁷⁸

On the most basic level, noise was perceived as a danger to aesthetics because it interrupted the reception of art and prevented readers or viewers from immersing themselves in aesthetic experience. "Noise protection is cleanliness for our ear," one critic wrote in 1912, "and if every encyclopedia tells us that 'the attenuation of impeding influences is one of the basic requirements for aesthetics,' then noise protection is the most neglected domain of aesthetics to date."⁷⁹ The more aggressive soundscape that served as the target of Lessing's campaign inflicted damage on the body. But it also disrupted the very conditions necessary for the reception of art. In order to ensure progress in the realm of aesthetics both the eye and ear "must be continually trained, and the precondition for their cultivation is defense against crude disruptions (*müssen immer weiter ausgebildet werden, und Vorbedingung ihrer Verfeinerung ist die Abwehr roher Störungen*)."⁸⁰ Aesthetics required a perpetual training and education of the senses that, in turn, required the isolation of the viewer/reader from disruptions in the external

⁷⁸ See "'Antilärmriten'" in *Das Recht auf Stille*, Jahrgang 1, Nr. 4 (February 1909): 53-7, here p. 53; "Antilärm-Umfrage" in *Das Recht auf Stille*, Jahrgang 1, Nr. 6 (April 1909): 105-8, here p. 105; Lessing, "Der Verein gegen Lärm," p. 440; Lessing, "Die Lärmschutzbewegung," p. 958; *Der Lärmschutz*, 6. Jahrgang, Nr. 53 (Februar 1914).

⁷⁹ "Lärmschutz ist Reinlichkeit für unser Gehör, und wenn uns jedes Konversationslexikon berichtet, dass 'die Dämpfung der hindernden Einwirkungen eine der Grundbedingungen der Ästetik [sic]' sei, so ist der Lärmschutz das bisher am meisten vernachlässigte Gebiet der Ästetik [sic]"; K.R., "Der Ausbau unserer Ästetik [sic]" in *Der Lärmschutz*, 4. Jahrgang, Nr. 8 (Oktober 1912): 99.

⁸⁰ *Ibid.*, p. 99.

environment. “If a work of art is to communicate a feeling of the sublime,” another critic remarked, “then noble quiet is indispensable for it.”⁸¹

More specifically, the noise of the modern world threatened to disrupt literary aesthetics by introducing the chaotic, nonsensical sounds of technological modernity into the very fabric of written and spoken language. If these sonic transformations were presented by Liliencron as imbued with the potential to reinvigorate language through formal experimentation, culturally conservative anti-noise activists took it to signal new dangers for both readers and writers. The negative effects of noise on language, they argued, took two related forms. First, neurasthenic authors suffering from sensory overload could no longer maintain a safe distance from the world they were attempting to represent and this immediacy had subsequent effects on readers. The historian and anti-noise activist Karl Lamprecht, for example, highlighted connections between literary impressionism and an overwhelming fascination with “primitive sensation and processes of nervous stimulation (*primitive Empfindung, nervöse Reizvorgänge*).”⁸² The defining tendency of these more recent trends within literature, Lamprecht contended, lay in their efforts, “to reproduce through language certain sounds, colors, and tactile impressions entirely independently of sense so that certain sensations that the writer had are

⁸¹ “Soll ein Kunstwerk uns das Gefühl des Erhabenen vermitteln, so ist die vornehme Ruhe dazu unentbehrlich.”; Jo. H. Rösler, “Lärmende Kunst” in *Der Lärmschutz*, 8. Jahrgang, Nr. 66 (September 1919): 651.

⁸² Karl Lamprecht, *Zur jüngsten deutschen Vergangenheit*, 1. Band (1902/3; Berlin: Weidmannsche Buchhandlung, 1912), p. 257. Similarly, Max Nordau criticized the impressionist for bypassing “higher comprehension” and avoiding “the elaboration of perception into concepts,” thereby functioning more like a “phonographist” than an artist. See Max Simon Nordau, *Degeneration* (1892/93; New York: Appleton and Company, 1895), p. 487.

transmitted to the listener just through their arrangement.”⁸³ According to Lamprecht, the problem was not only the emergence of a more primitive form of literary expression devoid of depth, and therefore indicative of cultural decline, but also the dangerous transfer of immediate sensations to readers. The author’s inability to distance himself from the world resulted in literary texts that, like noise, threatened to affect readers physically.

Second, language itself was at risk of being contaminated by modern noise due to the surreptitious influence of sound on linguistic form. In his polemic rant against modern noise, Lessing appealed to various forms of onomatopoeia as the clearest example of the deep entanglement between language, the body, and the immediate acoustic environment, emphasizing “how large the unnoticed influence is, which sensations of tones, sounds, and noises exert on our experience (*wie gross der unbermerkte Einfluss ist, den viele Empfindungen von Tönen, Lauten, Klängen und Geräuschen auf unser Erleben ausüben*).”⁸⁴ When Lessing refers to the “unconscious onomatopoeic word formations (*die unbewussten onomatopoetischen Wortbildungen*)” he is drawing on a traditional theory of language, which since Herder saw the development of certain words as directly related to the sounds of the natural environment.⁸⁵ According to this theory, it was no coincidence that the acoustic qualities of verbs like “peep

⁸³ “Gewisse Klänge, Farben, Eindrücke des Tastgefühls ganz unabhängig vom Sinne in der Sprache so wiederzugeben, dass gewisse Empfindungen, die der Dichter hatte, eben durch ihre Zusammenstellung auf den Hörer übertragen wurden”; Lamprecht, *Zur jüngsten deutschen Vergangenheit*, p. 259.

⁸⁴ Lessing, *Der Lärm*, p. 37.

⁸⁵ On Herder’s theory of language, see Jürgen Trabant, “Herder’s Discovery of the Ear” in *Herder Today: Contributions from the International Herder Conference*, ed. Kurt Mueller-Vollmer (Berlin & New York: de Gruyter, 1990), pp. 345-66. For subsequent theories of onomatopoeia produced around the turn of the century, see Hermann Hilmer, *Schallnachahmung, Wortschöpfung und Bedeutungswandel: Auf Grundlage der Wahrnehmungen von Schlag, Fall, Bruch und derartigen Vorgängen dargestellt an einigen Lautwurzeln der deutschen und der englischen Sprache* (Halle: Max Niemeyer, 1914).

(*piepsen*),” “thunder (*donnern*),” and “clatter (*poltern*)” overlapped with the auditory phenomena they served to signify. Language developed, Lessing and others contended, as a response to preexisting sounds in the natural world; verbs and nouns emerged directly from attempts to imitate the chirping of birds or the roar of a waterfall.

These same correlations revealed the broader “unnoticed influence” of sounds on the human body. “It is known,” he continued, “that through noise and sounds secretory and excretory functions are increased, decreased, or changed in other ways.”⁸⁶ So Lessing’s reference to linguist processes also served to confirm his theory of the ways in which the acoustic environment affected the body physically, or what he called the “somatic correspondences of tones, sounds, or noises (*somatischen Korrespondenzen von Tönen, Klängen oder Geräuschen*).” Thus, while he recognized onomatopoeia as central to the development of language, he simultaneously drew attention to what happened when the immediate environment from which language drew changed in dramatic ways. Onomatopoeia served as a more general indication of the subconscious influence of sounds on both our bodies and linguistic conventions. If in the past this process had helped to establish positive connections between language and the natural world, it now threatened to contaminate language and damage the body. The anti-noise activist, Lamprecht, condemned literary impressionists for remaining at the level of immediate sensation and for failing to translate their impressions into higher order concepts. Lessing highlighted the ways in which this passive attitude to the acoustic environment stood at the center of the evolution of language itself. Both saw the physical and

⁸⁶ “Man weiss, dass durch Lärm und Geräusche sekretorische wie exkretorische Funktionen gesteigert, gemindert oder sonstwie verändert werden”; Lessing, *Der Lärm*, p. 37.

linguistic dangers of an inherently passive attitude to new soundscapes taking shape at the time.

It is therefore both surprising and perfectly logical that, like Liliencron and Altenberg, contributors to Lessing's anti-noise journal employed onomatopoeia as a strategy for textually representing the chaos of modern urban soundscapes. On the one hand, such contributions contradicted the aims of the movement, which included, first and foremost, the protection of culture from the formless, boorish, and proletariat noise of the modern world. On the other, they were simply giving voice to a conception of linguistic development according to which the sounds of the surrounding environment exerted an enormous influence on language. More radically, onomatopoeia could be used to demonstrate the physical toll of noise on the body, a violence that, on a textual level, resulted in incoherent strings of consonants and vowels.

In contrast to Liliencron and Altenberg, who employed onomatopoeia to represent both the natural and the technological, anti-noise advocates were consistent in their use of the literary device. In every case I encountered in *Das Recht auf Stille*, the sounds that were represented using onomatopoeia corresponded to sounds that anti-noise activists singled out as especially irritating sources of noise—subways, trains, and gramophone recordings. One contributor, for example, choose to represent the noise of a Berlin subway through a series of repetitive and seemingly random letters, “Quietschiii—ihi—ihi, quietschiii—ihi—ihi,” while another described a pedestrian subway in the same city as “Brrr-bumbum—trab trab-trab—tuuh—s sz s sz s sz—klingklingkling—tjätjä,” before going on to comment on the “unaesthetic” qualities of noise and its ability to cause

“physical pain (*einen physischen Schmerz*).”⁸⁷ Finally, another writer described the odious sound of a gramophone recording through nonsensical exclamations and nearly unintelligible words stretched across the page by repeating vowels and consonants.⁸⁸

The numerous instances of onomatopoeia found on the pages of Lessing’s anti-noise journal illustrate that, in seeking to classify what counted as noise, critics borrowed from the formal experiments developed within the realm of literature during the same historical period. The introduction of ‘textual noise’ through onomatopoeia, which eschewed most linguistic conventions, emerged alongside and helped to support the classification and analysis of soundscapes according to social and cultural categories. But if literary authors like Peter Altenberg vividly depicted violent encounters with sound, it would take Lessing’s anti-noise movement to flesh out the ways in which such violent auditory experiences were tied to social and cultural conditions, as well as the extent to which, in both its poetic and everyday uses, language was shaped by the acoustic environment in which it was spoken and written.

Altenberg, Silence, and the *kleine Form*

As we have seen, onomatopoeic modes of description rose to prominence within the German-speaking literature of the late nineteenth century, not as an unavoidable consequence of some generalized notion of technology, but rather as the historically contingent effect of a complex interaction of social, cultural, and aesthetic discourses surrounding noise, war, technology, and class conflict. In the writings of Detlev

⁸⁷ Ella Asumfix, “Auf dem Stadtperron” in *Recht auf Stelle*, Jahrgang 1, Nr. 9 (Juli 1909): 167-8; Dr. Pudor, “Die unterirdische Verkehrsstrasse,” p. 2.

⁸⁸ Hermann Heijermans, “Caruso” in *Das Recht auf Stille*, Jahrgang 2, Nr. 10 (October 1910): 51.

Liliencron, a celebration of mechanized warfare was coupled with efforts to naturalize and aestheticize experiences on the battlefield, resulting in a blow to poetic conventions and the rejuvenation of literary writing through linguistic forms that eschewed the elaboration of sensations into concepts and grammatical utterances.

Transferred to life during peacetime, noise retained its militaristic connotations, but was now adopted to fit analyses of class tensions and helped to articulate anxieties surrounding social change within urban centers like Berlin and Vienna. While figures involved in the anti-noise movement that followed came to identify modern acoustic environments as dangerous for both language and the body, they continued to employ the same onomatopoeic modes of representation that had served to glorify the cacophony of battle. Accommodating onomatopoeia to their fight against noise, authors and critics employed the literary device in order to lend credibility to their subjective categorizations of noise, as well as to highlight the corporeal impact of noise on passive, neurasthenic members of the bourgeoisie, who, amidst more hostile soundscapes, were no longer able to process perceptions into conventional linguistic utterances.

Peter Altenberg's "The Drummer Belin" gives voice to the representational difficulties associated with noise, presenting an aggressive drum performance in a Viennese nightclub as both the traumatic repetition of the Franco-Prussian War as well as a breakdown of narrative control and the disintegration of language into nonsense. The eardrum that is beaten bloody in the text overlaps with documented medical case studies of returning soldiers from the war, but also resonates with more contemporaneous accounts of urban noise as physically and psychologically destructive. Indeed, by the turn of the century the soundscape of Vienna, where Altenberg lived and worked, was

undergoing enormous sonic transformations related to new sources of noise, an increase in population, and ambitious architectural renovations and changes to the layout of the city. In 1899, after being away for five years, one resident of Vienna commented that, before he had a chance to see the sights, he “became acquainted with the city by way of [his] auditory nerves.”⁸⁹ By 1910 numerous contemporary observers, who were also members of Lessing’s anti-noise group, identified Vienna as one of the loudest cities in Europe.⁹⁰ Yet, as early as 1879, residents of the city had claimed that the overwhelming noise “shakes our eardrums unnaturally (*unser Trommelfell unnatürlich erschüttert*).”⁹¹

Altenberg’s onomatopoeic rendering of the violent drum performance therefore emerged at a particular historical moment, in which the overwhelming auditory experiences once confined to the battlefield were now recognized as essential components of modern urban life. One would perhaps assume then that an author, who was characterized by Friedell as a human gramophone able to capture “all the noises of the modern world,” would register such enormous changes in his literary works. However, after surveying Altenberg’s entire oeuvre one is struck by just how thoroughly the din of modernity has been exorcised from his writings and just how unique the violent encounter with sound is in “The Drummer Belin.” In *As I See It*, nearly every appearance of onomatopoeia other than the chaotic crack of the drum refers not to moments of sensory overload but rather the peaceful sounds of the natural world—from the song of

⁸⁹ Quoted in Payer, “The Age of Noise,” p. 780.

⁹⁰ See Hans Haenel, “Die Wohnung und der Lärm” in *Bericht über den III. Internationalen Kongreß für Wohnungshygiene in Dresden vom 2. bis 7. Oktober 1911*, ed. Friedrich Eugen Hopf (Dresden: Buchdruckerei der Dr. Güntzsch Stiftung, 1911): 256-266, here p. 258; “Es gibt nur a Kaiserstadt...” in *Das Recht auf Stille* Jahrgang III, Nr. 5 (May 1911): 23.

⁹¹ Quoted in Peter Payer, “Vom Geräusch zum Lärm: Zur Geschichte des Hörens im 19. und frühen 20. Jahrhundert,” <http://www.stadt-forschung.at/downloads/Vom%20Geraeusich%20zum%20Laerm.pdf>, accessed September 2012, here p. 6.

birds in the trees, through the sound of leaves blowing in the wind, to the splash of water beside a boat lazily adrift along the coast. Characters stand on the shore and “listen out into an empty world (*hinaushorchte in die leere Welt*),”⁹² while at the concert hall they focus their ears on the sweet tones of a violin.⁹³ Upon entering the city they are greeted not by physically harmful noises that ravage the ear, but rather the joyful murmur of a crowd on the streets.⁹⁴ “The city also has its poetry (*Die Stadt hat auch ihre Poesie*),” one protagonist remarks as he listens to the “lovely (*lieblich*)” sounds of distant streetcar bells.

These tendencies were by no means confined to Altenberg’s literary debut. A 1908 text entitled “Sounds (*Geräusche*)” is perhaps one of the most representative examples of his proclivity for combining a heightened sensitivity to sound with a provincial, sentimental, almost anti-modern, choice of subject material. “Sounds” is made up entirely of observations on the slight sonic differences between trees rustling in the wind, the screech of an owl and the howling of dogs. It concludes with the “inaudible (*unhörbar*)” sound of a baby breathing in its cradle.⁹⁵ In sharp contrast to the experience of sensory overload and acoustic violence communicated in “The Drummer Belin,” nearly all of Altenberg’s others short texts foreground the subtleties of natural sounds, the hushed nuances of the wind or a birdsong, even going so far as to portray silence as an object of close listening. Throughout his career, Altenberg’s literary works conjure up an idyllic world rapidly vanishing before its author’s ears, one in which the forces of

⁹² *Ws* 37.

⁹³ *Ibid.*, p. 119.

⁹⁴ *Ibid.*, p. 227.

⁹⁵ Peter Altenberg, *Märchen des Lebens* (Berlin: S. Fischer, 1908), p. 102.

industrialization can be effectively subdued, slowed down, exorcised from the text, with the aesthetic ideal of silence winning out over the cacophonous social reality increasingly difficult to avoid at the turn of the twentieth century.

Both formally and thematically, Altenberg's texts are shaped less by a preoccupation with noise than by the ideal of abating noise, praising the virtues of silence and its related linguistic counterpart, brevity. The ideal of silence found expression across a wide range of discursive fields around 1900—from Wittgenstein's early philosophy of language, through Maurice Maeterlinck's mystical notion of 'active silence,'⁹⁶ to the linguistic quagmire faced by the protagonist of Hofmannthal's "Chandos Letter"—and it was embedded within a complex configuration of social, cultural, and aesthetic anxieties, including the rise of mass media and the expansion of the reading public. Yet, the many metaphorical elaborations of silence, its grounding in theology and the ideals of monastic life, should not blind us to the fact that it was also a response to real auditory phenomena and modes of listening, to the emergence of a more obstreperous auditory environment, and to changes in how that environment was represented.

Perhaps no other figure more clearly embodies the interrelations between an aesthetic commitment to silence and material practices of noise abatement than Peter Altenberg, who praised silence in his literary works at the same time that he advocated the use the antiphone to readers and contributed to Theodor Lessing's anti-noise

⁹⁶ "From the moment that we have something to say to each other," Maeterlinck wrote, "we are compelled to hold our peace: and if at such times we do not listen to the urgent commands of silence, invisible though they are, we shall have suffered an eternal loss that all the treasures of human wisdom cannot make good; for we shall have let slip the opportunity of listening to another soul, and of giving existence, but it only for an instant, to our own"; "Silence" in *The Treasure of the Humble*, trans. Alfred Sutro (1896; New York: Dodd, Mead & Company, 1899): 1-22, here p. 5.

movement. While critics such as Dirk Göttsche and Andreas Huyssen have linked the prominence of short prose forms around 1900 to an interest in the phenomenology and epistemology of vision and new visual media, Altenberg's preference for the *kleine Form* was explicitly articulated in terms of sound, or, more specifically, with reference to silence and the abatement of sound.⁹⁷ "What one 'prudently keeps silent about,'" he observed, "is more artistic than what one 'loquaciously speaks aloud' [...] I love the 'abbreviated method,' the telegram style of the soul!"⁹⁸ Already in his introduction to the second edition of *As I See It* from 1898, Altenberg characterized the prose poem as "garrulousness reduced to sober silence (*die geschwätzige Kunst reduziert auf ein zurückhaltendes Schweigen*)."⁹⁹ The passage is taken from a fictional conversation on the virtues of the prose poem from J.K. Huysmans's classic decadent novel, *À rebours* (1884). Huysmans's novel makes frequent references to the sickly protagonist's acoustic sensitivity and his efforts to construct soundproof rooms to protect himself against noise. Interestingly enough, however, the original passage about the prose poem makes no mention of silence.¹⁰⁰ It is one of the few changes that Altenberg makes in his

⁹⁷ Huyssen, "Modernist Miniatures"; Dirk Göttsche, "'Geschichte, die kleine sind': Minimalisierung und Funktionalisierung des Erzählens in der Kleinen Prosa um 1900" in *Kafka und die kleine Prosa der Moderne*, pp. 17-33, here p. 26.

⁹⁸ Altenberg, *Was der Tag mir zuträgt*, p. 2.

⁹⁹ *Ws* 8.

¹⁰⁰ The opening pages of the novel present the protagonist as someone dreaming of becoming a recluse, "of living in some hushed retreat where the turmoil of life would be muffled – as in those streets covered with straw to prevent any sound from reaching invalids"; Joris-Karl Huysman, *À Rebours*, trans. John Howard (Voasha Publishing LLC, 2008), p. 12. He forces his servants "to wear heavy felt coverings over their shoes, put sound mufflers along the well-oiled doors and covered their floor with heavy rugs so that he would never hear their footsteps overhead" (19). His meals are served "on a table in the middle of a small room separated from his study by a padded corridor, hermetically sealed so as to permit neither sound nor odor to filter into either of the two rooms it joined" (20).

borrowing, but a revealing one, in that it demonstrates a preoccupation with silence embodied in the genre of the prose poem at the end of nineteenth century.

The insertion of silence into the quotation, which serves as a programmatic introduction to the short texts that follow, not only challenges conceptions of the modern prose poem as connected exclusively with vision. It also represents a significant shift from Liliencron's early experiments with the genre. There, as we have seen, the combination of prose and poetry allowed for a loosening of linguistic conventions that was accompanied by the integration of onomatopoeia and more colloquial modes of speech into what Liliencron regarded as calcified poetic forms and turns of phrase. The acknowledged catalyst for these changes was the cacophony of mechanized warfare, the 'poetics' of the battlefield as gleaned through practices of close listening.

Nothing could be farther from Altenberg's conception of the prose poem as "extracts of my holy silence (*Extrakte meines Heiligen Schweigens*)!"¹⁰¹ Whereas Liliencron regarded the disorienting auditory dimension of war as an impetus for formal innovation and the gesture of dismantling clear distinctions between genres, Altenberg understood the *kleine Form* as a celebration of silence and narrative succinctness amidst an increasingly loquacious culture. He admonished new pedagogical strategies aimed at getting children to produce longer texts in school, to turn single sentences into lengthy articles. "It is the terrible ability to hold conversations for hours instead of being able to remain silent for hours."¹⁰² By contrast, Altenberg strove to "describe a person in one

¹⁰¹ Peter Altenberg, *Nachfechtung* (1916; Berlin: S. Fischer, 1919), p. 113.

¹⁰² "Es ist die schreckliche Fähigkeit, stundenlang Konversation zu führen, statt stundenlang schweigen zu können und in einer Minute das Erschöpfende sanft mitzuteilen!"; Altenberg, *Prodromos* (Berlin: S. Fischer, 1906), p. 73. Altenberg is specifically criticizing what was known as the "German Essay (*Der deutsche Aufsatz*)."¹⁰² For more on the German Essay, see Kittler, *Discourse Networks*, p. 180.

sentence, an experience of the soul in one page, a landscape in one word.”¹⁰³ Ideally, he stated near the end of his life, “I will no longer say anything at all. That will be the best.”¹⁰⁴

In extolling the virtues of silence and narrative brevity, Altenberg’s programmatic statements on the prose poem resonate with Theodor Lessing’s polemic against modern noise. Lessing’s assertion that “culture is the development toward silence (*Kultur ist Entwicklung zum Schweigen*)” could have also been taken from any number of Altenberg’s literary works.¹⁰⁵ Moreover, just as his colleagues at *Das Recht auf Stille* regarded language as a potential site for acoustical reform, Lessing himself praised linguistic precision as a sign of cultural progress. In a section from *Der Lärm*, he contrasted what he saw as the primitive Polynesians and sophisticated British intellectuals, noting that, “The parlance of a Polynesian island tribe includes more words, images, tropes, and metaphors on a daily basis than the concise and unadorned language that the great modern English thinkers possess.”¹⁰⁶ Both Lessing and Altenberg linked silence to shorter, more stripped-down forms of narration, and both regarded such modes of writing as clear signs of cultural progress. Once again, conceptions of noise were stretched and extended to the realm of print and textual representation, with the social

¹⁰³ “Ich möchte einen Menschen in einem Satze schildern, ein Erlebnis der Seele auf einer Seite, eine Landschaft in einem Worte!”; Altenberg, *Was der Tag mir zuträgt*, p. 2.

¹⁰⁴ “Zum Schluß werde ich gar nichts mehr sagen. Das wird das beste sein”; Altenberg, *Nachfechtung*, p. 104.

¹⁰⁵ Lessing, *Der Lärm*, p. 20.

¹⁰⁶ “Der Sprachgebrauch eines polynesischen Inselstammes verwendet im täglichen Umgang mehr Worte, Bilder, Tropen und Metaphern als die konzise und schmucklose Sprache der grossen, modernen englischen Denker besitzt”; *ibid.*, p. 22.

and legal movement against noise sharing considerable rhetorical ground with an aesthetic program of silence and mystical inexpressibility.

‘Textual noise’ was therefore not only embodied in onomatopoeic modes of description—the allegedly immediate rendering of pure sensory impressions using non-lexical combinations of letters devoid of semantic value—but also in more loquacious and ornate narrative styles, which still adhered to linguistic conventions. Diverging radically from Liliencron’s earlier notion of the prose poem, which took its cues from the cacophony of the modern battlefield, by the turn of the twentieth century the *kleine Form* came to symbolize a resistance to noise and a celebration of silence, functioning as the textual correlate of acoustical reform. If, as Altenberg’s “The Drummer Belin” indicated, noise was capable of infiltrating the literary text as a disruptive force, it could also be exorcised from it. In doing so, Altenberg’s impressionist sketches can be said to have participated in the organized fight against modern noise around 1900, which cut across multiple social, cultural, and aesthetic fields.

By promoting the *kleine Form* as a genre predicated on the need for brevity and silence, Altenberg’s writings demonstrate the close proximity between the emergence of modern urban soundscapes and specific formal literary developments around 1900. But it was not only in his programmatic writings on the *kleine Form* that Altenberg enacted a kind of textual-acoustical reform. His short narrative sketches also contain an overabundance of explicit references to silence between characters and attempts to mark out the duration of periods spent without dialogue or background noise. Take, for example, the following passage from a text in *As I See It*, in which the narrator repeatedly inserts silent pauses between statements made by two figures in the story:

Quiet. She heaves a sigh. Quiet - - -.

‘You are fine people. Like silk. I’m very sorry - - - -.’
 Quiet.
 ‘One can’t do anything - - -. Speak to Max - - -.’
 ‘What?!’
 ‘Nothing - - - -.’
 Quiet.¹⁰⁷

The repetitive use of the word “quiet (*Stille*),” which we already saw employed in the context of “The Drummer Belin” as a point of contrast with the abrasive drum performance, evokes a highly sentimental atmosphere loaded with unspoken thoughts and emotions, one in which a simple sigh now gains extraordinary significance. Altenberg’s insistence on communicating to the reader even these breaks in conversation serves both to invest what is said with greater meaning and to foreground the auditory dimension of the surrounding environment, which, in this case, consists in the tranquil inaudibility of an idyllic landscape.

Altenberg’s textual representation of silence is enacted in a more complex manner through his frequent use of dashes, which typically come at the end of statements but also function as interruptions or pauses within individual sentences. Again, it was a strategy already glimpsed in “The Drummer Belin,” where the onomatopoeic repetition and variation of “ratata” was periodically interrupted by clusters of dashes of varying lengths, sometimes only two, but other times numbering as many as six in a row. The dashes are decidedly multivalent and occupy an ambiguous, position within the broader economy of sound at work in Altenberg’s texts.¹⁰⁸ At times they point to something that has been left

¹⁰⁷ “Stille. Sie seufzt auf. Stille - - -. ‘Ihr seid feine Menschen. Wie Seide. Es thut mir sehr leid - - - -.’ Stille. ‘Man kann Nichts machen - - -. Sage dem Max - - -.’ ‘Was denn?!’ ‘Nichts - - - -.’ Stille”; *WS* 247.

¹⁰⁸ Andrew Barker interprets the marks as an invitation for the reader “to fill in the gaps, to finish off the work of the writer in an individual way and ultimately to become a poet,” while Per Simfors sees them as a reiteration of a skepticism towards language: “There always seems to be something more to give, something not spoken aloud, which language might not want to express. See Andrew Barker, *Telegrams*

unspoken, in other cases they serve to mark time, while in the example cited above they act more as atmospheric nuances underscoring an ostensibly tender, sentimental exchange between two characters. In all cases, they express an effort to open up a space and make room for silence within the textual soundscape, to give voice not only to the sounds of the surrounding environment but also the pregnant pauses which emerge in the absence of sound. Altenberg's texts are not only short and his characters laconic, but the textual descriptions we do find are always embedded within typographic reminders of what has remained unspoken, still hidden within an inaccessible interiority or rushed along by the pace of the modern world.

The dashes and other textual representations of silence point to an active repression of language and sound, a gesture that aligns his work with Lessing's call for new laws and restrictions on the acoustic environment. What might at first glance appear to be a purely linguistic concern—typographic experiments divorced from the broader cultural and social context—is in fact closely bound up with the emergence of more aggressive soundscapes and attempts to control and contain it around 1900. In refraining from speaking, and marking such an action on the printed page, the literary text enacts a critique of the omnipresence of language and noise in the modern era. But it also signifies a desire to reform modern soundscapes, to refuse to contribute further to the noise of the modern world, and to listen away from this omnipresent cacophony.¹⁰⁹

from the Soul, p. 46; Per Simfors, *Extrakte des Schweigens: Zu Sprache und Stil bei Peter Altenberg* (Tübingen: Stauffenburg Verlag, 2009), p. 169.

¹⁰⁹ Altenberg's representation of silence as uniform dashes must also be viewed as a response to the scripts that accompanied the introduction of new media such as the telegraph. If Altenberg described his writing as the "telegram-style of the soul," his frequent use of dashes only reinforced this medial connection. The dashes that serve to represent periods of silence in his literary texts are also a technical way of communicating the absence of speech, or, breaks between individual statements, which was developed specifically for new technologies of writing.

Altenberg's commitment to silence would take an increasingly aggressive and antisocial tone in the writings that followed *As I See It*. It is also in these writings that he renders visible the interrelation between an aesthetics of inexpressibility and narrative precision, on the one hand, and material practices aimed at the abatement of noise, on the other. Already in his 1905 publication, *Prodromos*, a collection of short literary sketches and aphoristic reflections on hygiene, Altenberg praised Plessner's antiphone as providing users with the ability to "close your ear and give your nerves the peace of conscious safety."¹¹⁰ References to the antiphone and other rudimentary noise-abatement devices are found throughout his oeuvre and it was something that he enthusiastically recommended to his readers.¹¹¹ In conjunction with the antiphone, Altenberg sought out spaces that were designed in a way such that inhabitants were isolated from the sounds of the surrounding environment, most commonly in hotels. Immediately after applauding the virtues of the antiphone, he quotes longingly from an advertisement for a hotel whose rooms had been specially constructed with various noise-abating materials such as oakum and insulated with double doors in order to ensure quiet for all guests.¹¹² In a text from his 1915 collection, *Fechsung*, Altenberg provided a firsthand account of another hotel

¹¹⁰ "Das Ohr verschliessest du und den Nerven gibst du den Frieden bewusster Sicherheiten"; Altenberg, *Prodromos*, p. 78. On Altenberg and contemporaneous discourse on hygiene, see Petra Leutner, "Über den Körper der Künstler und Schriftsteller: Eine aktuelle Ökonomie des Körperlichen in den diätischen und die Hygiene betreffenden Notizen von Pontormo, Charles Baudelaire und Peter Altenberg" in *Macht, Text, Geschichte: Lektüren am Rande der Akademie*, ed. Markus Heilmann (Würzburg: Königshausen & Neumann, 1997): 60-71; Viktor Zmegac, "Die Geburt der Gesundheit aus dem Geist der Dekadenz: Somatische Utopien bei Peter Altenberg" in *Ideologie und Utopie in der deutschen Literatur der Neuzeit*, ed. Bernhard Spies (Würzburg: Königshausen & Neumann, 1995): 88-99.

¹¹¹ See *Prodromos*, pp. 79, 84, 141; *Fechsung* (1915; Berlin: S. Fischer, 1921), pp. 21, 66; *Vita Ipsa* (Berlin: S. Fischer, 1918): 306-308.

¹¹² Altenberg, *Prodromos*, p. 79.

that was similarly built using sound insulation and that provided earplugs for all of its guests.¹¹³

Far from passively recording “all the noises of the modern world” like a gramophone as Friedell had claimed in his account of Altenberg’s writing, the author actively sought out means to block out the sounds of the world, plugging his ears with the antiphone and isolating himself in the insulated rooms of various hotels and sanatoria. Not only did Altenberg highlight new methods for freeing his own ears from their natural limitations, he also enthusiastically recommended that his readers use them as well, thereby signaling a shift from merely describing the world as it was to suggesting new ways to experience it.¹¹⁴ While a text like “The Drummer Belin” depicts noise as dangerously violent and the eardrum as perpetually open to attack, these later works portray modern soundscapes as at least partially malleable and open to manipulation by human intervention. For a price, commercial products could be purchased to protect the ear. Acoustically insulated hotel rooms could be rented to dampen the cacophony of urban centers like Vienna.

At the center of Altenberg’s comments on modern noise is a form of anti-sociality that, whether drawing on economic, cultural, or national differences, insists on radical alterity in conceiving of intersubjective relations. In another piece published in Lessing’s *Das Recht auf Stille*, for example, Altenberg blatantly condemns his neighbor as the source of his various physical and psychological ailments: “Ninety percent of our life

¹¹³ Altenberg, *Fechsung*, p. 66. See also Peter Altenberg, “Sanatorien für Nervenranke” from *Bilderbogen des kleinen Lebens* (Berlin-Westend: Erich Reiss Verlag, 1909), pp. 23-27, reprinted in abbreviated form in *Das Recht auf Stille*, October 1909.

¹¹⁴ On Altenberg and the language of advertising, see Burkhard Spinnen, “Idyllen in der Warenwelt: Peter Altenberg’s *Prodromos* und die Sprache der Werbung” in *Zeitschrift für Literaturwissenschaft und Linguistik* 22, nos. 87-88 (1992): 133-50.

energy is robbed from us by the rudeness and impropriety of the person beside us (*Nebenmensch*). Every inappropriate word destroys our tender and sensitive nervous systems.”¹¹⁵ The unsophisticated behavior of his neighbors, the author continues, subjects Altenberg to an inescapable attack on the nerves: “The inability to distance oneself from the world of the other, whom one cannot comprehend, murders the nerves.”¹¹⁶ Noise is unavoidable, but it is the otherness inscribed onto these sounds that provokes pain in the listener, the incapacity to relate to the figure producing the noise across social, cultural, and economic boundaries. Once again, the unrefined characteristics inherent to the neighbor are contrasted with the harmless, unobtrusive silence of the cultured intellectual: “To do no one any harm, unless it is absolutely necessary, is the natural effect of spiritual culture.”¹¹⁷ Here Altenberg reiterates arguments propagated by Plessner and later advocates of the anti-noise campaign, who equated cultural progress with the gradual silencing of the external world. “Culture,”

¹¹⁵ “Neunzig Prozent unserer Lebensenergien raubt uns die Ungezogenheit, die Taktlosigkeit unseres Nebenmenschen. Jedes falsch angebrachte Wort zerstört unser zart empfindliches Nervensystem”; Altenberg, “Der Nebenmensch,” p. 10. Published three months later, Rainer Maria Rilke’s novel, *The Notebooks of Malte Laurids Brigge* (1910), echoes Altenberg’s characterization of the neighbor as an unwanted, pernicious influence: “There is a being that is completely harmless if it passes before your eyes, you hardly notice it and immediately forget it again. But as soon as it gets into your hearing in some invisible fashion it develops there, it creeps out, as it were, and one has seen cases where it penetrated the brain and thrived devastatingly in that organ, like the canine pneumococcus that enters through the nose. This being is the neighbor (*Es giebt ein Wesen, das vollkommen unschädlich ist, wenn es dir in die Augen kommt, du merkst es kaum und hast es gleich wieder vergessen. Sobald es dir aber unisichtbar auf irgendeine Weise ins Gehör gerät, so entwickelt es sich dort, es kriecht gleichsam aus, und man hat Fälle gesehen, wo es bin ins Gehirn vordrang un diesem Organ verheerend gedieh, ähnlich den Pneumokokken des Hundes, die durch die Nase eindringen. Dieses Wesen ist der Nachbar*); Rainer Maria Rilke, *The Notebooks of Malte Laurids Brigge*, trans. Burton Pike (Champaign and London: Dalkey Archive Press, 2008), p. 124; *Die Aufzeichnungen des Malte Laurids Brigge*, ed. Manfred Engel (Stuttgart: Reclam, 1997), p. 141. On noise in Rilke’s novel, see Michael Cowan, “Imagining Modernity through the Ear: Rilke’s *Aufzeichnungen des Malte Laurids Brigge* and the Noise of Modern Life” in *Arcadia* 41, no. 1 (2006): 124-46.

¹¹⁶ “Nicht Distanzhalten von der Welt des andern, die man ja doch nicht begreifen kann, mordet die Nerven”; Altenberg, “Der Nebenmensch,” p. 10.

¹¹⁷ “Niemandem wehe tun, falls es nicht unbedingt notwendig wäre, ist die natürliche Wirkung geistiger Kultur”; *ibid.*, p. 10.

Lessing stated unambiguously two years earlier, “is the development toward silence (*Kultur ist Entwicklung zum Schweigen*).”¹¹⁸

Dispatches from the Headquarters of Noise: Kafka’s Acoustic Relations

As I have attempted to show over the course of this chapter, the proliferation of mechanical sound and the emergence of the more aggressive soundscapes of the metropolis and battlefield—in conjunction with popular conceptions of the modern listener as unhealthy, open to physical attack, and passively receptive to sense impressions like a recording medium—set in motion formal literary innovations in works by Liliencron and Altenberg. On the one hand, sound came to be represented textually through repetitive, non-lexical units of letters. On the other, modern auditory experience was implicated in a reconceptualization of the relations between poetry and prose according to models of sound, listening, and silence. At the same time, these aesthetic concerns were deeply bound up with social anxieties regarding the rise of the lower classes and what was perceived as the corresponding degradation of culture. Acoustically sensitive literary authors like Altenberg interlaced their short literary works with social polemics that rested on distrust and the disregard of one’s neighbor. As a testament to the affinities between early twentieth century impressionism and non-literary discourse on urban noise, Altenberg’s text circulated with only minor adjustments between his literary collections and the pages of Lessing’s journal, *Das Recht auf Stille*.

In concluding this chapter I would like to examine the resonances of Altenberg’s literary representation of noise with Franz Kafka’s autobiographical account of the cacophony of his family’s apartment entitled “Great Noise” (1912). That Kafka was

¹¹⁸ Lessing, *Der Lärm*, p. 20.

familiar with Altenberg's writings is evidenced by the fact that his library contains both a 1910 edition of *As I See It* and a 1911 edition of *Märchen des Lebens*.¹¹⁹ Early reviews of Kafka's *Betrachtung* (1913)—a collection of eighteen short prose pieces—frequently contained comparisons between the author's use of the miniature prose form and Altenberg's writings.¹²⁰ Andrew Barker dates Kafka's first encounter with Altenberg's work somewhere between 1910 and 1912, a period that corresponds to the writing and publication of "Great Noise."¹²¹ As we will see, "Great Noise" is a text that both appropriates and subverts the thematic and formal figurations of noise found in Altenberg's writings as well as in the numerous non-literary domains of knowledge traced out in this chapter.

The publication history of "Great Noise" bears recounting at the outset, as the topic of publication will play a significant role in the analysis that follows. The text originally appeared with no title in a diary entry dated November 5, 1911.¹²² As Kafka anxiously prepared the manuscript for *Betrachtung* the following year, the editor of the journal *Herder-Blätter*, Willy Haas, wrote to him to ask if he would be willing to submit a short piece for publication. Kafka hesitated to give Haas any of the texts he was considering including in *Betrachtung* because the collection was already under contract

¹¹⁹ See Jürgen Born, *Kafkas Bibliothek. Ein beschreibendes Verzeichnis* (Frankfurt am Main: S. Fischer, Verlag, 1990).

¹²⁰ See Barker, *Telegrams from the Soul*, p. 177.

¹²¹ See *ibid.*

¹²² Franz Kafka, *Tagebücher 1909-1912*, ed. Hans-Gerd Koch (Frankfurt a.M.: Fischer Taschenbuch Verlag, 2008), p. 176.

with Rowohlts.¹²³ Instead, Kafka sent him a slightly revised version of his diary entry, which, in reference to its unambiguously autobiographical nature, he now described as “the enclosed little piece with which I would like to beat my family publicly (*das beiliegende kleine Stückchen, mit dem ich gerne öffentlich meine Familie züchtigen möchte*).”¹²⁴ In October 1912, the text was published under the title “Great Noise” in the back pages of the *Herder-Blätter* (fig. 1.5).

In a letter to Felice Bauer written shortly after the piece appeared in Haas’s journal, Kafka described it as “a depiction of the acoustic relations of our apartment (*[eine] Darstellung der akustischen Verhältnisse unserer Wohnung*).”¹²⁵ The text is, on one level, simply a written inventory of the various noises made by his family members during their morning routines. Ashes are scraped out of the oven, the doors are opened and closed, footsteps scamper across the floor, his sister’s voice calls down the hallway, the canaries sing. Situated in what, with militaristic overtones, the narrator calls “the headquarters of noise of the entire apartment (*Hauptquartier des Lärms der ganzen Wohnung*),” he is forced to listen to this disruptive domestic cacophony and suffer the further humiliation of having his father storm through his room on his way to another part of the apartment.

Despite the narrator’s position within the headquarters of noise—a reference that conjures up the violent connotations of modern noise found in texts by Plessner, Liliencron, and Altenberg—the representation of sound in Kafka’s text differs

¹²³ Kafka, To Willy Haas, September 26, 1912, *Briefe 1900-1912*, ed. Hans-Gerd Koch (Frankfurt a.M.: S. Fischer, 1999), p. 173.

¹²⁴ *Ibid.*

¹²⁵ Franz Kafka, To Felice Bauer, November 11, 1912, *Briefe an Felice und andere Korrespondenz aus der Verlobungszeit*, ed. Erich Heller and Jürgen Born (Frankfurt a.M.: Fischer, 2003), p. 87.

significantly from the formal experimentation contained in those earlier works. Whereas in “The Drummer Belin” Altenberg had figured noise as random bursts of onomatopoeic nonsense that disrupted the coherence of more traditional modes of narration, Kafka’s concise text is surprisingly stable throughout and remains firmly within the confines of linguistic conventions and lexically defined expressions. Rather than functioning as intermittent disruptions to the narration, each sound is singled out, clearly identified, and offered up to the reader in a coherent series of sentences. We are given a comprehensive inventory of various sounds formulated in terms of an active “I hear (*ich höre*),” suggesting a mode of listening that does not bypass the conceptual faculties or conscious reflection, unlike Altenberg’s onomatopoeic rendering of the violent drum.

While the text lacks any clear reference to the ear or nerves, the noise of the family is registered on the protagonist’s body in more subtle ways. Interestingly enough, one of the few revisions that Kafka made to his original diary entry in preparing it for publication was the deletion of the first line, which reads: “I want to write with a constant trembling on my brow.”¹²⁶ The introductory statement depicts the narrator as nervous and physically affected by the noises around him. In this sense, it comes close to the celebration of neurasthenia as a form of cultural superiority so common in Altenberg’s writings and others connected to Lessing’s anti-noise campaign.¹²⁷ At the same time, it figures the act of writing as occurring amidst a cacophony of sound. Somewhat ironically, of course, the narrator explains that he “wants” to write under these noisy

¹²⁶ “Ich will schreiben mit einem ständigen Zittern auf der Stirn”; Kafka, *Tagebücher 1909-1912*, p. 176.

¹²⁷ In response to criticism of his account of modern noise as too subjective and too oriented towards the sensitive and nervously ill, Lessing proudly asserted that the anti-noise movement was in fact “the rebellion of neurasthenics” (*der Aufstand der Neurastheniker*); Lessing, “Auf die Mensur!” in *Das Recht auf Stille*, Jahrgang II, Nr. 2 (February 1910), pp. 12-13, here p. 13.

heit, Gemüchlichkeit, Humor. Und gleichzeitig erscheint, an den launig hingestrichelten Möbeln gemessen, die Zerstörungswucht des sinkenden Turmes umso furchtbarer, eine Wirkung verstärkt die andere und schliesslich verspart man das echteste Gefühl des wahren, mit ein wenig Lächeln und Ungläubigkeit gemischten Grauens.

Immer belebter werden Kubins Bäder, Festzüge, Strassenaufmärsche stellt er dar. Irgendwo liegt eine neue Welt, zwar irdisch noch, aber seinen Blicken unendlich Neues und Seltsames bietend. In seinem Meisterwerk: „Samsara“ (Ein Zyklus ohne Ende in einer Auswahl von vierzig Blättern, München und Leipzig bei Georg Müller) ist diese „andere Seite“ des allgemeinen Lebens gestaltet. Nichts hat sich verändert, die Dinge behalten ihre Wesenheit, nur die Art der Betrachtung zeigt sie notwendig in veränderter Gestalt. Eine Strasse, die ein durchgebrochener Sber unsicher macht, wird zum Hohlweg, aus dem ein Klumpen von schreienden Gestalten bricht, Heugabeln und Polizeiermäkel erschrecken dem Wirrwarr, Hunde fallen das Ufer an, Männer waden sich im Kafe, Zuckerbäcker und Kaminleger in kriegerischer Eutracht heben sich grotesk vom Haderbug des Sberes ab. Und im Hintergrunde die Häuschen mit sorglosen Kindern am Geländer vor dem Tore, mit schauenden Dargern in den Fenstern steigern die Wirkung dieser Darstellung eines in Verwirrung gebrachtten lauten Durchschnittslebens.

Die unbewusste Art des Sehens, die uns einen Platz, wo jemand verfolgt und angetastet wird, in Bewegung versetzt erscheinen lässt, wird festgehalten, Zwangsvorstellungen werden gemacht, als von einem im Graum Echosprechern, verkörperlicht. Rosenkorellen hüpfen aus sanften Gewässern raus, nackte Menschen bevölkern eine Stadt, eine Sonnenuhr wird lebendig, im Einspänner fährt ein Herr mit Zylinderhut vom Dach aus in den Himmel hinein, Schlangen erobern eine Stadt. Ersetzen und Komik vereinigen sich zu durchaus neuen Wirkungen. Und vor- und rückwärts schwebt Kubins Phantasie: das Tierreichsgewimmel um die Arche Noahs, Holzschnitten, Festzüge, Wanderungen durch die Wüste, einen unverzerrt doch unheimlich wackenden Dalkaal zeichnet er, Massen sendet er gegeneinander alle Möglichkeiten der grossen und der kleinen Welt werden schier erschöpft; Häuslichkeit, Schönheit, Widerniss und buntester Wirbel betauschen den Betrachtenden. Was Kubin in diesem Werke bietet, steht einzig da in der Geschichte der Kunst.

Und schon hört man von einem Zyklus „Herzogshöfen“. Neue Grössen stehen um bevor!
Otto Fick

Grosser Lärm

Ich sitze in meinem Zimmer im Hauptquartier des Lärms der ganzen Wohnung. Alle Türen höre ich schlagen, durch ihren Lärm blinzen mir nur die Schritte der zwischen ihnen Laufenden erspart, noch das Zuklappen der Herdtüre in der Küche höre ich. Der Vater durchbeugt die Türen meines Zimmers und zielt im nachschleppenden Schlüpfack durch, aus dem Ofen im Nebenzimmer wird die Asche gekratzt. Vati fragt, durch das Vorzimmer Wort für Wort hörend, ob des Vaters Hül schon geputzt ist, ein Zischen, das mir befreundet sein will, erhebt noch das Geschrei einer anwesenden Stimme. Die Wohnungstüre wird aufgeklinkt und lüftet, wie aus katarthalschem Hals, öffnet sich dann weiterhin mit dem Singen einer Frauenstimme und schliesslich mit einem dumpfen, männlichen Ruck, der sich am rücksichtslosesten anhielt. Der Vater ist weg, jetzt beginnt der zartere, zersäufelere, hoffungslosere Lärm, von den Stimmen der zwei Kanarienvögel angeführt. Schon früher dachte ich daran, bei den Kanarienvögeln läst es mir von neuem ein, ob ich nicht die Türe bis zu einer kleinen Spalte öffnen, schlangengleich ins Nebenzimmer kriechen und so auf dem Boden meine Schwesterlein und ihr Fräulein um Ruhe bitten sollte. Franz Kafka

Fig. 1.5. In the original issue of *Herder-Blätter*, “Great Noise” appears as a tiny, insulated block of text situated at the bottommost edge of the page. From: *Herder-Blätter: Faksimile-Ausgabe zum 70. Geburtstag von Willy Haas* (Hamburg: Freie Akademie der Künste, 1962), p. 44.

conditions. In doing so, he invokes the same sense of simultaneity communicated by Altenberg's narrator in "The Drummer Belin," who, much less successfully, attempted to retain narrative control amidst a disruptive and linguistically disorienting auditory experience.

In removing the opening line from the final published version, Kafka distances himself from the discourse on nervous sensitivity that frames Altenberg and Theodor Lessing's accounts of modern noise. However, far from keeping the body wholly intact, the sounds that permeate the protagonist's room in the final version lead to fantasies of transforming the human body into that of an animal. Although ostensibly undamaged physically by the sounds that invade his room, the unstable barrier between inside and outside provokes fantasies of altering the human form. In the closing lines he envisions crawling on the ground "like a snake (*schlangengleich*)" to beg his sister for quiet. Sounds from external spaces reduce his behavior to that of an animal, which must shed its upright human form in order to stop the barrage of noise. The breakdown of clear distinctions between the rooms of the apartment—the fact that the noise cannot be contained within a single room, but instead flows effortlessly between them—is therefore mapped onto a disintegrating division between humans and animals, a connection, which as we will see in Chapter 3, also informs Kafka's later exploration of sound and subjective noises in "The Burrow" (1923/24).

The protagonist's fantasy of metamorphosis also marks one of the few instances of real communication between family members, albeit one that is merely imagined and never actualized. The human voice and exchanges of dialogue are sounds that are largely absent from the apartment, lending it a solemn tone that underscores the family's

emotional distance from one another. In one of the few real instances of conversation between family members, Kafka's sister calls down the hallway to ask if their father's hat has been cleaned. However, rather than clearly marking out the exchange as spoken dialogue by placing it inside quotation marks, the narrator uses a curious formulation difficult to capture in its full complexity in English translation: "Calling word for word through the anteroom, Valli asks whether father's hat has already been cleaned (*ob des Vaters Hut schon geputzt ist*), a hissing sound that wants to befriend me."¹²⁸ The original German, "ob des Vaters Hut schon geputzt ist," employs an unusual genitive construction associated with old-fashioned *literary* language. Rather than using the more common construction, in which the thing that is being possessed precedes a genitive article and the one possessing it (ex. "der Hut des Vaters"), the syntax is changed to the more antiquated written form, in which the genitive article precedes two consecutive nouns whose order is reversed (ex. "des Vaters Hut"). This seemingly insignificant choice of syntax presents the only real exchange of dialogue as stilted, from another time, written not spoken. It is an irony that Kafka seeks to emphasize by introducing it with the phrase, "word for word," thereby suggesting that what follows records precisely what is spoken. But, ironically, what is spoken is articulated in a manner that more closely resembles written language. Thus, the only two instances of verbal communication in the text are, one, an imaginary exchange that is never carried out and whose goal is to silence one party and, two, a documentary retelling of a verbal communication that takes the form of written language.

¹²⁸ "Valli fragt, durch das Vorzimmer Wort für Wort rufend, ob des Vaters Hut schon geputzt ist, ein Zischen, das mir befreundet sein will"; Franz Kafka, *Die Erzählungen und andere ausgewählte Prosa*, ed. Roger Hermes (Frankfurt a.M.: Fischer, 2006), p. 42. Because the text is only a single page, future references to final published version will be given without page numbers.

On the one hand, Valli's conversation underscores the proximity of noise to textuality, a figurative coding of text *as* noise, which pervades the work itself as well as its paratextual framing in Kafka's letters and diary entries. On the other hand, it signals a breakdown of communication within the family, the inability of family members to speak to one another conversationally, to express themselves naturally and without horrible awkwardness. This sense of alienation is epitomized in the narrator's peculiar observation that the hissing noise (*Zischen*) of his father's hat being cleaned, "wants to befriend me." So while his father barges through his son's room without speaking a word, disrupting his privacy and exhibiting a clear lack of interest in communicating with him, it is the *sound* of the hat that, according to the narrator, expresses interest in establishing a relationship with him. If, in the absence of verbal communication, the sounds heard within the apartment help shed light on the strained, detached nature of relations between family members, it is, in turn, in sound itself that the narrator sees a possibility for intimacy. Abandoning any hope in relating to his father, in other words, the narrator turns to the non-verbal noises associated with him as a potential source of friendship. The "great noise" of the apartment therefore serves as a disruption to the narrator's privacy and concentration. But it is also provides surrogate, purely acoustical relations of intimacy that stand in for the alienated members of the family.

Kafka's narrative maps the discourse surrounding urban noise onto the acoustic relations between his family members. Indeed, it is revealing that, in a diary entry made only months before the publication of "Great Noise," Kafka would use that same title phrase to describe the overwhelming noise of the city of Leipzig. "Great noise," he writes, "According to the ear, one wagon pulls the other behind it. Because of the

asphalt, the horses sound like galloping racehorses. The departing bells of the electric streetcar, which, through their intermissions, indicate alleyways and squares.”¹²⁹ Thus, Kafka uses the same formulation to describe the domestic noises of his family’s apartment as he does to describe the thundering gallop of horse-drawn carriages and the chiming of streetcars in an urban center. This blurring of boundaries between the domestic sphere and the streets of the metropolis was made visible in Kafka’s original draft of “Great Noise,” in which his sister calls down the hallway to ask about her father’s hat, “as if through a Parisian street (*wie durch eine Pariser Gasse*).”¹³⁰ Thus, in the original diary entry on which the text was based, Kafka made explicit reference to the affinities between the domestic soundscape outside his room and the soundscape of the modern metropolis. Yet, even in its final published version it would have been difficult for readers to overlook the various points of overlap between internal and external spaces, the home and the city street. Already in its opening line, by referring to his room as a “headquarters” of noise, the text draws on militaristic language that was central to contemporaneous characterizations of urban spaces. Moreover, through the specific designation of the domestic sounds as “noise (*Lärm*)” in his title, and the use of the verb “to make noise (*lärm*)” within the body of the text, Kafka invokes a category of sound that would have been much closely connected to the metropolis at that time. Indeed, it is precisely the exaggerated manner in which the narrator superimposes experiences of the

¹²⁹ “Großer Lärm. Dem Gehör nach zieht ein Wagen den andern hinter sich. Die Pferde wegen des Asphalt wie laufende Reitpferde anzuhören. Das sich entfernende durch seine Unterbrechungen Gassen und Plätze andeutende Läuten der Elektrischen“; Franz Kafka, “Reise Weimar-Jungborn vom 28 Juni 1912-29 Juli” in *Tagebücher*, ed. Hans-Gerd Koch, Michael Müller and Malcolm Pasley (Frankfurt a.M.: S. Fischer, 1990), p.1021. In an account of the Leipzig soundscape published in Lessing’s journal in 1909, one resident complained of the “great noise (*großer Lärm*)” caused by vendors hawking their wares on the street. See *Das Recht auf Stille*, Jahrgang I, Nr. 10 (September 1909), p. 191.

¹³⁰ Kafka, *Tagebücher 1909-1912*, p. 176.

city onto the domestic sphere that makes the text so successful and that drives its ironic humor.

At the same time, Kafka enacts a striking reversal of contemporaneous anti-noise rhetoric, which often emphasized close connections between noise and alterity. If Altenberg's contribution to *Das Recht auf Stille* had portrayed his neighbors as enemies intent on destroying his sanity and well-being through noise, Kafka locates the enemy at home. It is his family rather than the lower classes that is responsible for the irritating sounds permeating his room and reducing him to the state of a desperate animal. By characterizing his family in a language more closely connected with the noise of the rabble and alterity, Kafka underscores his sense of alienation from his family. What is typically the most familiar—the family—is represented according to tropes of difference and alterity. Similar to Altenberg, Kafka suggests that the inability to distance oneself from that which one cannot understand, inflicts a physical and psychological toll on the listener. But, here, ironically, “that which one cannot understand” is the group of people to whom the narrator is most closely related and with whom he has lived his entire life. “The neighbor is the enemy (*der Nebenmensch ist der Gegenmensch*),” Altenberg asserted. Kafka's “Great Noise” takes this statement to the extreme, showing how those in the next room, even if they are family—or, especially because they are family—inevitably come to represent an oppositional force that remains obscure and impenetrable, one capable of disruption and harm.

The act of publishing the intimate details of his family's domestic life in the form of a short prose piece can be seen as a reversal of the attack waged on the protagonist by his family. While the noise created by the family pours through the walls of his room and

disrupts his concentration and sense of privacy, Kafka, in turn, enacts a similar breakdown of inside and outside by transporting the text from the privacy of his room to the pages of a published journal. By describing the text as “a little piece with which I would like to beat my family publicly,” Kafka transfers the acoustic violence experienced on the battlefield and in the city to the act of publication and a form of public humiliation that presents the family, their habits and interactions, in a decidedly negative way. The published work, which uses his sister’s name in unaltered form, is, in other words, a kind of retaliation launched from the headquarters of noise, one that deflects “the great noise” inflicted upon him back into the public sphere.

In publishing the intimate account of his family’s life, Kafka not only drags them into the public sphere for an unapologetic flogging, but he does so via a medium characterized at the time as aggressive noise. As we have seen, the rise of mass media and the expansion of the reading public played a considerable role in the emergence of silence as an aesthetic paradigm. The noise/silence binary was seen to correspond to the distinction between modern mass media, on the one hand, and an earlier, now bygone era, on the other, in which the author was not tied to the market and poetry occupied an unrivaled position as the dominant mode of communication.¹³¹ But the ideal of silence

¹³¹ “Even with our quietest friend, the book, it is no different. Authors now write on the open market, no longer in the secluded sitting room. For that reason one finds so much noise, so much dust, so many realities of the country road in their works; but as a result the mysterious depth and clarity that lived in the books of the ancients—a beautiful wonder—disappears more and more (*Selbst mit unseren stillsten Freunden, den Büchern, ist es nicht anders. Unsere Schriftsteller schreiben auf dem offenen Markte, nicht mehr in der einsamen Stube. Darum findet sich so viel Lärm, so viel Staub, so viel Landstraßenwirklichkeit in ihren Werken; aber es verschwindet daraus immer mehr die geheimnisvolle Tiefe und Klarheit, die—ein schönes Wunder—in den Büchern unserer Alten lebt*); “Lärm und Buch” in *Das Recht auf Stille*, Jahrgang III, Nr. 1 (January 1911): 2. The loss of the “secluded sitting room” resonates with the lament voiced by the protagonist of Rilke’s 1910 novel, *The Notebooks of Malte Laurids Brigge*: “Oh, what a happy fate to sit among quiet, sedentary things in the still sitting room of an inherited house (*O was für ein glückliches Schicksal, in der stillen Stube eines ererbten Hauses zu sitzen unter lauter ruhigen, seßhaften Dingen*)”; Rilke, *Die Aufzeichnungen des Malte Laurids Brigge*, p. 39.

was also a response to the sheer number of published material flooding the market around 1900. As Joachim Unseld explains, “From the turn of the century until the outbreak of World War I, new literary periodicals were announced almost weekly. Many German critics bemoaned not only the impenetrable flood of books but especially the unfathomable state of the contemporary periodical market.”¹³² The frequent intermingling of discourse on urban noise and the overabundance of published materials, of textual and acoustical fields, made possible characterizations of the published text as a kind of noise. But, as we have also seen, these same correspondences also enabled language and the text to become legitimate targets of acoustical reform.

According to Lessing, modern periodicals and daily publications represented a kind of printed noise, which burdened society with an aggressive, polemical tone and the need to cover even the most insignificant of topics. “One shouts in magazines, newspapers, and journals,” Lessing argued, “for these are nothing more than the continuous, public beating of carpets and beds (*man schreit in Zeitschriften, Zeitungen, Journalen, denn diese sind nicht anderes als fortgesetztes, unaufhörliches öffentliches Betten- und Teppichklopfen*)”—activities, it should be noted, which were frequently listed as some of the more irritating and invasive noises within the metropolis.¹³³

¹³² Joachim Unseld, *Franz Kafka: A Writer's Life*, trans. Paul F. Dvorak (Riverside, CA: Ariadne Press, 1994), p. 15.

¹³³ Theodor Lessing, *Der Lärm*, p. 16. See also the text by Mark Twain published in Lessing's journal entitled “Knipst, Brüder, knipst” in *Das Recht auf Stille*, Jahrgang 2, Nr. 7 (Juli 1910): 37-8. The story recounts the effects of an infectious rhyme published in a daily newspaper. After reading the silly verse Twain is distracted from his task of writing a eulogy for his friend's funeral, as the rhyme leaves room for no other thoughts. The situation worsens after Twain boards a train and begins to listen to the repetitive rattling of the wheels on the track, which the author presents as the onomatopoeic “klack-klack-klack-klack-klack!” (37). Twain is ultimately unable to give his eulogy, which increasingly follows the rhythm of the verse and the sound of the train, and the piece concludes with the author warning his readers to stay away from the verse at all costs. The repetitive noise of the train, rendered using onomatopoeia, is therefore connected to the medium of print and the publication of contagious, frivolous writings, which overpower the reader's conscious thoughts and pressure all modes of writing to adhere to the uniform pulse of mechanical sound.

It is no coincidence that, in exploring the interrelations between noise and print, intimacy and alterity, Kafka should choose the genre of the *kleine Form* popularized by Altenberg in Austrian literature. In his autobiographical writings, as we encountered above, Altenberg had explained his preference for shorter texts through an appeal to silence. For Altenberg, a more precise form of writing both mirrored the concise communicative potential of new media like the telegraph, but it also served as an antidote to a culture increasingly plagued by urban noise as well as the more metaphorical ‘noise’ of newspapers and public discourse. To write shorter, more concise texts was both a sign of actively restraining oneself from further corrupting a language in decline as well as to provide readers with an alternative to sensory and information overload.

In an analogous manner, Kafka draws connections between the short form and the roar of his family, giving the narrator the task of salvaging a tiny slice of textual coherence in the face of an environment overwhelmed by noise. Already in its title, which suggests both a substantial and spatially large noise, Kafka draws attention to the contrast between the miniature size of his text and the massive noise, which consumes the protagonist and permeates the entirety of the family’s apartment. Indeed, beginning with the opening line, “I’m sitting in my room in the headquarters of noise of the entire apartment,” the text identifies noise as a transgressive force capable of flowing

Within the American context from which Twain was writing, the newspaper was perhaps even more explicitly linked with an invasion of private life, one that relied on defaming and injuring the parties involved. In their 1890 paper, “The Right to Privacy,” Samuel D. Warren and Louis D. Brandeis discussed laws related to “the evil invasion of privacy by the newspapers” (195). “These considerations,” they wrote, “lead to the conclusion that the protection afforded to thoughts, sentiments, and emotions, expressed through the medium of writing or of the arts, so far as it consists in preventing publication, is merely an instance of the enforcement of the more general right of the individual to be let alone. It is like the right not to be assaulted or beaten, the right not to be imprisoned, the right not to be maliciously prosecuted, the right not to be defamed.” In addition, the authors invoke the specific modality of hearing in describing the modern breakdown of boundaries between public and private, observing that “numerous mechanical devices threaten to make good the prediction that ‘what is whispered in the closet shall be proclaimed from the house-tops’”; Warren and Brandeis, “The Right to Privacy” in *Harvard Law Review*, Vol. IV, No. 5 (December 15, 1890): 193-220, here p. 205.

effortlessly through the walls and closed doors intended to separate individual rooms.

Situated in his central room, the protagonist is exposed to the noise “of the entire apartment,” from every room, hallway, and family member. According to the text, there exists no space independent of, or untouched by, the noises produced by his family.

This expansive and permeable noise stands in stark opposition to the tiny text on the page, neatly framed and contained within the white border of the blank page. The contrast established through the text’s title therefore exposes an inconsistency in Kafka’s treatment of noise and print. On the one hand, he explains the aim of his published text by appealing to the violent imagery associated with urban noise. It is a retaliation that pits the sonic noise of his family against the published noise of the author. On the other hand, through the choice of his title, Kafka immediately alerts his readers to the differences between his miniature text and the enormous noise he describes within it. In doing so, he implies a distinction between the “great noise” alluded to in the title and the piece of writing that renders it textually. The act of publication, however, understood by the author himself as a violent attack, renders such distinctions unstable and, in the end, untenable.

Chapter 2

Listening to the Law:

Auditory Interruptions, Industrial Space, and Kafka's *Trial*

In this silence there arose a buzzing.
Franz Kafka, *The Trial*

Altenberg's literary appropriation of contemporaneous discussions surrounding urban noise foregrounds the perceptual effects of abrasive auditory phenomena through the notion of *interruption*. Just as cultural critics characterized the sounds of the rabble on the streets as interfering with their intellectual activities (*In jede geistige, jede theoretische Schöpfung bricht lärmender Pöbel ein*), Altenberg's literary text portrays the breakdown of conventional literary language amidst the overwhelming noise of the drum/gun. Between detailed descriptions of images conjured up by the violent acoustic experience, the author inserts dashes and onomatopoeic bursts of nonsense, or, what I termed 'textual noise.' In doing so, the text depicts the disturbance of narrative structure as the effect of auditory interruptions, the intrusion of nonsensical clusters of vowels and consonants into more traditional, representational language.

Kafka's "Great Noise," by contrast, while still emphasizing the disruptive power of noise within the porous walls of the family's apartment, avoids such experimentation on the level of representation, instead presenting the vivid description of the protagonist's noisy environment by means of a continuous and coherent narrative. Devoid of onomatopoeic utterances, the text's formal innovations are instead to be located in the tension between the "great noise" of the apartment and the text's miniscule size, the

contrast between the expansive sounds permeating the protagonist's room and the author's use of the genre of the *kleine Form*. Altenberg's experiments with non-lexical textual noise are replaced in Kafka by an exploration of the spatiality of sound on the printed page. Indeed, as we will, the onomatopoeic bursts of noise employed by Altenberg in "The Drummer Belin" are virtually nonexistent within canonical modernist works by authors such as Kafka and Musil, in contrast to concurrent formal developments within Dadaism, Futurism, and Expressionism. This is not to suggest, however, that features of modern auditory experience vanish entirely from the formal dimension of modernist texts. As I show in the chapters that follow, new acoustic experiences, coupled with new techniques of listening, were given expression through a range of formal narrative strategies—from the disruption of syntax by sudden bursts of noise, to notions of narrative 'self-auscultation,' and the elaboration of narrative as a kind of acoustical experiment.

This chapter continues to explore the notion of auditory interruption as thematized in Altenberg's 1896 prose poem, now turning to the Kafka's unfinished novel *The Trial* (1914/17), a book populated by eavesdroppers and attentive listeners, but one also interrupted by random blasts of noise and the "murderous (*mörderisch*)" melody of a distant gramophone, by the subjective sounds of damaged ears and the screams of the legal system's countless victims.¹ I examine what I take to be the critically overlooked 'auditory logic' of the legal system as described in Kafka's novel, paying careful

¹ "Eben began ein in bessern Stadtvierteln ausgedientes Grammophon mörderisch zu spielen"; Franz Kafka, *Der Proceß* (Frankfurt am Main: S. Fischer, 2007), p. 10. All citations from this edition hereafter in parentheses with the abbreviation *P*. The acoustic dimension of Kafka's novel has received almost no critical attention. One exception is Uwe C. Steiner's brief discussion in his essay, "Signalverarbeitung und letzte Dinge: Tinnitus als Epochenkrankheit in der Literatur von Kafka bis zur Gegenwart" in *Epochen/Krankheiten: Konstellationen von Literatur und Pathologie*, ed. Frank Degler and Christian Kohlroß (St. Ingbert: Röhrig, 2006): 213-31.

attention to two interrelated phenomena. On the one hand, I analyze how the court's intervention into Josef K.'s personal life takes the form of auditory interruptions and sudden acoustic shocks, which initiate a kind of sonic training that results in a more self-reflective mode of listening attentive to potential dangers in the surrounding environment. If the novel begins by describing the 'interruption' of the protagonist's daily routine by the unexpected ringing of the doorbell and infiltration of his apartment by the court, by the end such interruptions have now entered the body and take the form of a perceptual disorder. In this way, the novel plays with the multiple meanings of the German term *Störung*, which denotes not only an 'interruption' but also 'disturbance' or medical 'disorder' in the sense of *Hörstörung*.²

In describing the gradual transformation from 'interruption' to perceptual 'disturbance,' Kafka's novel borrows from contemporaneous discourse surrounding auditory accidents and ear diseases within the modern industrial soundscape. In a key scene in which the protagonist begins to suspect that his body wants to "revolutionize and prepare a new trial for him (*sein Körper revolutionieren und ihm einen neuen Proceß bereiten*)," he simultaneously experiences a case of vertigo, which occurs alongside the eruption of subjective sounds and a "noise that filled everything, throughout which there seemed to resound an unchanging, high tone like from a siren (*den Lärm der alles erfüllte und durch den hindurch ein unveränderlicher hoher Ton wie von einer Sirene zu klingen schien*)" (P 84/85). The shift from auditory *interruptions* to otological *disturbances* runs parallel to the gradual embodiment of the trial. An indication of the emergence of this "new trial," in other words, is signaled by the court's infiltration of the listener's body in

² On the media-historical significance of *Störung* and its use within information theory, see the collection *Signale der Störung*, ed. Albert Kümmel and Erhard Schüttpelz (München: Fink, 2002).

the form of traumatic injuries to the ear, producing spatial disorientation and auditory hallucinations.

Kafka's representation of the corporeal effects of legal power draws on contemporaneous medical discussions of illnesses and injuries common to factory workers. While the novel links spatial disorientation with the unexpected appearance of a deafening "noise (*Lärm*)" and "an unchanging, high tone," medical scientists studying the effects of industrial labor on the listener's body drew connections between the "high sound-character (*hohen Klangcharakter*)" of subjective noises of the ear (*Ohrgeräusche*) and damage to auditory nerves, simultaneously connecting this physiological destruction to symptoms of vertigo and disturbances in the perception of space.³ Similar to the roar of machines, which caused subjective sounds and near deafness in the ears of workers at the time, or the dust that filled the factory and infected workers' ears, the power of the court ultimately reaches into Josef K.'s body and inflicts damage on the ear. The court's full control over the defendant, his submission to the legal system as a lifeless, docile body, coincides with the sudden appearance of subjective noises prevalent among factory workers. In Kafka's novel, juridical and industrial spaces are superimposed on top of one another, and legal power registered on the body through the physical destruction of the ear.

More broadly, Kafka's interweaving of law and hearing highlights the structural similarities between the distribution of power within the legal system and new sonic

³ Alfred Peyser, "Die gewerblichen Erkrankungen und Verletzungen des Gehörs bei den Industriearbeitern, mit besonderer Berücksichtigung der Schädigungen durch Betriebslärm" in *Archiv für Soziale Hygiene mit besonderer Berücksichtigung der Gewerbehygiene und Medizinalstatistik* 6. Band, 2. Heft (1911): 143-64, here p. 151.

experiences in the early decades of the twentieth century.⁴ As I attempted to show in the first chapter, this period witnessed a radical transformation in the nature of the auditory environment brought on by a wide range of factors including the rapid growth of urban centers, new spatial arrangements and architectural practices, along with technological developments on and off the battlefield. These trends ran parallel to the emergence of discourse on nervous sensitivity and the somatic effects of noise. Kafka's representation of the law in *The Trial*, I argue, draws on these elements of acoustical modernity in order to construct a detailed image of legal power. In listening attentively to the surrounding environment, Kafka learned something about how the modern legal system operated. His protagonists constantly stand in the grip of sounds which are indecipherable, violent, hidden from view, and which tend to undermine the distinctions between public and private, external and internal, objective and subjective.

Critics have long employed an almost identical vocabulary in describing the asymmetrical relationship between the law's expansive power and the helpless legal subject for whom the law remains always hidden from view. According to Gilles Deleuze and Félix Guattari the law in *The Trial* is "always in the office next door, or behind the door."⁵ Rodolphe Gasché has similarly explained Kafka's representation of the law as one not dependent on "listing limits or boundaries. Rather, it becomes

⁴ In an essay from 1901, Theodor Lessing drew attention to the affinities between noise and power more generally, describing the way in which the individual "perceives in his noise the enjoyable activity of himself and the expansion of his sphere of power (*empfindet in seinem Lärme die genußreiche Bethätigung seiner selbst und eine Vergrößerung seiner Machtsphäre*)"; Theodor Lessing, "Über den Lärm" in *Nord and Süd: Eine deutsche Monatsschrift*, Band 97 (1901): 71-84, here p. 76.

⁵ Gilles Deleuze and Félix Guattari, *Kafka: Toward a Minor Literature*, trans. Dana Polan (1975; Minneapolis: University of Minnesota Press, 1986), p. 45.

effective by blurring distinctions and hierarchical order.”⁶ Christine Lubkoll has additionally drawn attention to “the invisibility and simultaneous omnipresence of power.”⁷ “Power appears in the novel not as a localizable instance of authority (*Herrschaft*),” Lubkoll continues, dispensing with any trace of “an accountable nerve center (*einer verantwortlichen Schaltstelle*),” or official building and instead operating within various attics, artist studios, and bedrooms in the private sphere.⁸

This chapter seeks to uncover the particular sensory register and historical conditions operative behind such grand generalizations regarding legal power. Just as the court’s power can never be located at any given moment, it is also able to conjure up mysterious noises in the ears of the accused, which hover ambiguously between auditory hallucinations and indications of a real threat. And just as, on a figurative level, the law remains concealed in the “office next door, or behind the door,” the court mobilizes an extensive network of eavesdroppers to listen through the walls of apartment buildings in order to monitor the protagonist’s every move and collect information. Thus, it is not only on a metaphorical level that legal power intersects with issues of auditory perception. Sound and hearing are not only ways for Kafka to talk about the law, providing something like an inventory of metaphors for his literary works, but are instead portrayed as constitutive elements of the justice system, as crucial tools for law enforcement and the disciplining of subjects trapped within this system. Scenes of close-listening in the novel are also depictions of the actualization of legal power. The ear

⁶ Rodolphe Gasché, “Kafka’s Law: In the Field of Forces between Judaism and Hellenism” in *Modern Language Notes* 117 (2002): 971-1002, here p. 977.

⁷ Christine Lubkoll, “Die Theorie der Macht in Franz Kafkas Roman *Der Proceß*” in *Franz Kafka: Schriftverkehr*, ed. Gerhard Neumann and Wolf Kittler (Freiburg: Rombach, 1990), p. 285.

⁸ Lubkoll, “Die Theorie der Macht in Franz Kafkas Roman *Der Proceß*,” p. 280.

becomes both the target and the agent of legal power, not merely a symbol of how this power operates.

A brief look at the broader historical context from which the novel arose testifies to a growing convergence between law and noise at the same time that Kafka depicted the ear as a constitutive element of the legal process. The early twentieth century not only gave rise to an auditory environment whose spatial characteristics corresponded to certain metaphorical codings of legal power, but one that also witnessed the actual intervention of the legal court into questions of how that environment should sound and to what extent listeners should be protected by law from the cacophony of the modern world.⁹ Kafka's novel, in other words, emerges from a specific historical moment in which the ear became an object of legal discourse. The auditory dimension already inscribed onto key legal terms like "advocate (*Fürsprecher*)," "interrogation (*das Verhör*)," "to interrogate (*verhören*)," "hearing (*Vernehmung*)," and "the right to a hearing (*das rechtliche Gehör*)"—not to mention concepts more broadly related to obedience (*Gehorsam*)—was therefore reactivated and given new significance by efforts to bring the auditory environment under the domain of the legal system.¹⁰

⁹ It is not inconceivable to think that Kafka had come across the 1914 essay "Lärmschutz" by his acquaintance and former publisher Kurt Tucholsky, which dealt with the legal dimension of the anti-noise organization's struggle for acoustical reform and which was published in *Kunstwart*, a journal that left a deep impact on Kafka's early writing. See Kurt Tucholsky, "Lärmschutz" (1914) in *Der Kunstwart*, Nr. 10 (February 1914): 312-14.

¹⁰ On the legal dimension of the debate on noise at this time, see Theodor Lessing, *Der Lärm: Eine Kampfschrift gegen die Geräusche unseres Lebens* (Wiesbaden: Verlag von J.F. Bergmann, 1908), pp. 73-91; Hermann Beuttenmüller, *Der rechtliche Schutz des Gehörs* (Karlsruhe i.B.: G. Braunschen, 1908); Fr. Kittner, "Rechtsschutz gegen Lärm in Oesterreich" in *Recht auf Stille*, Jahr. 1, Nr. 4 (Februar 1909), pp. 61-2; Dr. Seibt, "Der Lärm im neuen Strafgesetzbuch" in *Recht auf Stille*, Jahr. 1, Nr. 12 (November 1909): 230-1; W. Goetze, "Schutz vor Lärm" in *Recht auf Stille*, Jahr. 2, Nr. 2 (Februar 1910): 9-10; Gerichtsassessor Wolpers, "Unser Rechtsarchiv" in *Der Lärmschutz*, 4. Jahrgang, Nr. 9 (November 1912): 105-11 (continued in the next issue), pp. 114-19; Dr. Siegmund Auerbach, "Die gesetzliche Bekämpfung des vermeidbaren Lärms: Eine nervenhygienische Forderung" (1912) in *Transactions of the Fifteenth International Congress on Hygiene and Demography*, Volume V, pp. 46-57; Carl Lange, *Der*

The various procedures and agents of the court, which in their etymology already point to the importance of the ear within the legal process, were now mobilized as part of a concentrated effort to reshape the auditory environment. Ohropax and the antiphone were presented as potential solutions to the problem of noise, but many critics saw an even more promising option in legal reform. When in 1888 the first draft of the *German Civil Code* (Bürgerliches Gesetzbuch) failed to mention noise as a punishable disruption to the private sphere, legal critics were quick to point out the error. “Alongside the other emissions,” one official remarked, “there might also be added the agitation of the ears through noisy activities, musical outpourings, etc.”¹¹

The final version, passed eight years later and put into effect in 1900, officially cited noise—along with gas, steam, and smoke—as a pernicious “emission (*Immission*)” capable of interfering with life in neighboring spaces and therefore subject to legal intervention. Related sections on property law in the *German Civil Code* helped to provide a legal basis for complaints about noise in Germany. Countless cases soon appeared before the court, ranging from grievances about the sound of a neighbor’s gramophone, the incessant rattle of streetcars, or the noises emanating from nearby factories.¹² Thus, at the same time that Kafka describes the legal court as actively intervening in the auditory environment and as initiating a kind of auditory training for

zivilrechtliche Schutz des Hauseigentümers und Mieters gegen ruhestörenden Lärm (Greifswald: J. Abel, 1914); Adolf Busse, *Der Rechtsschutz gegen den ruhestörenden Lärm* (Greifswald: J. Abel, 1915). The anti-noise organization’s official publication, *The Anti-Rowdy* [Der Antirüpel], regularly included a section entitled “New Rulings in the Supreme Court of the German Reich” [*Neue Reichsgerichtssentscheide*]. It should also be remembered that in its first year of publication the journal was called *The Right to Silence*, thus already suggesting a legal basis to the group’s claims.

¹¹ “Es möchte neben den anderen Immissionen auch die Erschütterung der Ohren durch lärmende Betriebe, musikalische Ergüsse usw. angezogen werden”; quoted in Beuttenmüller, *Der rechtliche Schutz des Gehörs*, p. 6.

¹² See Wolpers, “Unser Rechtsarchiv.”

the accused, noise and the ear were brought before the court as legitimate objects of legal debate.

As I indicated above, Kafka's novel describes one particular instance in which the law intervened in the auditory environment around 1900, namely in insurance decisions for factory workers suffering from industrial illnesses of the ear or those injured by auditory accidents at the workplace. With the passing of comprehensive insurance laws in the final decades of the nineteenth century there emerged a new demand for evaluations of the ear in cases of noise-related accidents and complaints about damage to the ear, which were further linked to juridical questions of proper compensation for such injuries and to which Kafka's work in the insurance industry would likely have exposed him.¹³ In contrast to Lessing and various legal officials who called on the law to protect the neurasthenic, middle-class listener, the auditory dimension of *The Trial* draws on

¹³ "Like for the neurologist, accident legislation has acquired a steadily rising significance for the ear specialist, since his expert opinion is needed in many cases for deciding the valence of accidents and, in this way, he appears summoned to cooperate substantially in judicial decisions about the stipulation of possible entitlements to a pension, especially for accidents at work (*Für den Ohrenarzt hat, gleich wie für den Nervenarzt die Unfallgesetzgebung eine stetig sich steigernde Bedeutung erlangt, da sein Gutachten vielfach benötigt ist zur Entscheidung über die Dignität von Unfällen und er auf diese Weise berufen erscheint, wesentlich mitzuwirken bei der richterlichen Entscheidung über die Festsetzung der etwaigen Rentenansprüche, namentlich bei Unfällen in Betrieben*"); B. Baginsky, "Die Unfallbegutachtung in der Ohrenheilkunde" in *Berl. Klin. Wochenschr.* No. 37 (Montag, den 11. September, 1905): 1169-1173, here p. 1169. A. Passow similarly commented on the close connection between law and medical evaluations of the ear following the passage of major insurance reform: "A doctor, who issues expert opinions (*Gutachten*) on those suffering from otological diseases without the necessary knowledge takes on a difficult responsibility. The judge adheres to the statements of the expert. If the statement is false, the ruling is false (*Ein Arzt, der ohne die nötigen Kenntnisse Gutachten über Ohrenkranke ausstellt, übernimmt damit eine schwere Verantwortung. Der Richter hält sich an die Aussage des Sachverständigen. Ist die Aussage falsch, so ist das Urteil falsch*"); A. Passow, *Die Verletzungen des Gehörorgans* (Wiesbaden: Verlag von J.F. Bergmann, 1905), p. 195. Alfred Peyser later drew a distinction between industrial accidents and industrial illnesses, arguing that only the former was of concern to legal experts and the insurance industry: "[In contrast to industrial illnesses of the ear] industrial accidents involving the ear play a larger role in the medical, social-hygienic, and juridical literature, if only because they can become grounds for demanding compensation. They are attended to by the accident insurance industry [...] (*Die gewerblichen Unfälle des Gehörorgans dagegen, schon weil sie entschädigungspflichtig werden können, eine größere Rolle in der fachärztlichen, sozialhygienischen und juristischen Literatur. Ihrer nimmt sich die Unfallversicherung an*"); Peyser, "Die gewerblichen Erkrankungen und Verletzungen des Gehörs bei den Industriearbeitern," p. 143. On Kafka and insurance, see Benno Wagner, "Kafka's Files: Insuring Nietzsche" in *New German Critique* 99 (Fall 2006): 83-119; Eberhard Eichenhofer, *Franz Kafka und die Sozialversicherung* (Stuttgart: R. Boorberg, 1997).

experiences in the factory and the otological issues that emerged there as a result of the overwhelming noise of industrial labor.

Auditory Interruptions: The Court's Formation of an Active Listener

The Trial famously begins by depicting a disruption to Josef K.'s daily routine, one that is coupled with an invasion of the private sphere. As is well known, the novel opens with the protagonist waiting impatiently for his breakfast, which has not been delivered to him at the usual time. Tired of waiting, he rings the bell to his landlady's apartment and is immediately confronted by a strange man, who enters the room uninvited and declares himself an agent of the court sent to inform K. that he has been arrested for an unspecified crime. This physical intrusion into the private sphere is accompanied by a voyeuristic infiltration of the room by K.'s neighbors, who watch the scene through the windows of a nearby apartment. Next, the court agent and his partner eat the food that has been prepared for K. without the slightest trace of guilt or hesitation. Personal items like his nightgown, they also explain, will have to be taken from him and kept elsewhere until the end of the trial.

Josef K.'s arrest coincides with a forceful transgression of the borders circumscribing the private sphere—both physically and visually—as well as an effort to take possession of the items kept within it. In doing so, the court sets in motion a process intent not only on judging the protagonist's guilt or innocence by means of a legal trial, but also on displacing him from the private sphere. As we will see, K.'s expulsion from the home places him in a more precarious and vulnerable position with regard to the immediate environment and, in particular, the acoustic dimension of his surroundings.

What he describes in this opening scene as a “disruption (*Störung*)” to his private life later takes the form of a series of auditory interruptions, each more and more violent, which provoke feelings of fear and anxiety and ultimately suggest that physical damage has been inflicted on the ear.¹⁴

The infiltration of the private sphere in the opening scene is quickly followed by an active policing of the auditory environment and efforts to silence K. The two guards and later their supervisor not only control the protagonist’s movements, commanding him to stay in his room or asking him to come to Fräulein Büstner’s apartment for an interview. They also control the auditory dimension of their interactions, both actively silencing the defendant and feeding off of particular verbal utterances in order to gain further control over him. Upon commenting on the disruption that the two guards have caused him, for example, K. quickly realizes that it was a mistake to say anything at all: “It immediately occurred to him that he *hadn’t needed to say that aloud* and that, in doing so, he had to a certain extent acknowledged the stranger’s right to watch over him.”¹⁵ At the moment K. opens his mouth to defend himself, he is forced to acknowledge the court’s power over him and, indirectly, to submit to their authority. Similarly, the supervisor describes K.’s desperate pleas of innocence as an incoherent noise that must be silenced: “And don’t make any such noise (*keinen solchen Lärm*) with feelings of your innocence. It disrupts (*es stört*) the not completely bad impression that you

¹⁴ “I want to see what kind of people are in the adjoining room and how Mrs. Grubach will answer to me for this disruption (*Ich will doch sehn, was für Leute im Nebenzimmer sind und wie Frau Grubach diese Störung mir gegenüber verantworten wird*)” (P 10).

¹⁵ “Es fiel ihm zwar gleich ein, dass er das *nicht hätte laut sagen müssen* und dass er dadurch gewissermaßen ein Beaufsichtigungsrecht des Fremden anerkannte”; *ibid.*, my emphasis.

otherwise make.”¹⁶ According to the supervisor, K.’s success depends on his ability to remain silent.¹⁷ Talk of the defendant’s innocence has no place within the auditory spaces monitored by the court. To speak of one’s innocence is to produce a disruptive and unwelcome noise that must be kept quiet and ultimately eliminated. At the same time, to speak critically against the court is to provide evidence of one’s guilt and to lend authority to the court’s ostensibly illegitimate infiltration of the private sphere.

K.’s conversation with his neighbor and romantic interest Fräulein Bürstner in the following chapter marks a further materialization of the implicit rules and structures governing the auditory environment. Once again, the sounds made by the protagonist do nothing but confirm his guilt, this time providing evidence for the fact that he has stayed

¹⁶ “Und machen Sie keinen solchen Lärm mit dem Gefühl Ihrer Unschuld, es stört den nicht gerade schlechten Einruck, den Sie im übrigen machen”; *ibid.*, p. 20.

¹⁷ “Don’t scream like that,” the usher later tells K. in the court chambers, “there are offices everywhere here (*Schreien Sie doch nicht so [...] es sind ja hier überall Bureaux*)”; *ibid.*, p. 78. K.’s auditory indiscretion draws the attention of two court officials and marks the beginning of an important episode in which the protagonist submits to the power of the court in the same moment that he experiences an auditory hallucination. Later, in a scene in the cathedral near the end of the novel, K. again attempts to be as silent as possible, but is unable to escape the building unnoticed due to the sound of his footsteps on the stone floor: “What silence now reigned in the cathedral! But K. had to disrupt it, he didn’t have the intention of staying here [...] K. slowly got going, felt his way towards the bench on his tiptoes, came into the wide main hall and also went there undisturbed, only that the stone floor sounded under the most quiet step and the vaults echoed, weak but continuously, in multiple regular progressions (*Was für eine Stille herrschte jetzt im Dom! Aber K. musste sie stören, er hatte nicht die Absicht hierzubleiben [...] Langsam setzte sich also K. in Gang, tastete sich auf den Fußspitzen an der Bank hin, kam dann in den breiten Hauptweg und gieng auch dort ganz ungestört, nur dass der steinerne Boden unter dem leisesten Schritt erklang und die Wölbungen schwach aber ununterbrochen, in vielfachem gesetzmäßigem Fortschreiten davon widerhallten*)”; *ibid.*, p. 220. K.’s effort and ultimate failure to remain silent is then contrasted with the expansive sound of the court chaplain’s voice, who calls out his name in what has been analyzed as a moment of Althusserian interpellation by the court: “He had almost left the area of the benches when for the first time he heard the voice of the priest. A powerful, trained voice. How it permeated the cathedral, which was prepared to absorb it! (*Fast hatte er schon das Gebiet der Bänke verlassen [...] als er zum ersten Mal die Stimme des Geistlichen hörte. Eine mächtige geübte Stimme. Wie durchdrang sie den zu ihrer Aufnahme bereiten Dom!*)”; *ibid.*, p. 221. What is important to note here is how, on the one hand, Josef K. continues to struggle to be quiet as possible in order to avoid the intervention of the court, while, on the other, the representative of the court speaks with a commanding voice that fills the entirety of the surrounding environment. The passage even goes so far as to suggest that the chaplain and the acoustic space of the building work together, that the building is somehow ready to receive and amplify the man’s voice. On the notion of interpellation and the scene staged in the cathedral, see Stefan Andriopoulos, *Possessed: Hypnotic Crimes, Corporate Fiction, and the Invention of Cinema*, trans. Stefan Andriopoulos and Peter Jansen (Chicago: University of Chicago Press, 2008), pp. 150-2.

in his neighbor's room after the appropriate hour for male visitors. Carried away at the height of a theatrical reproduction of the morning's events, K. ignores his companion's request that he speak more quietly so as not to wake the other inhabitants of the building. Unaffected by the warning, however, he continues to tell his story in the same state of excitement, attempting to portray the scene earlier that day in all of its acoustic detail:

‘And now it really got started. The guard called as if he had to wake me, he downright shouted. Unfortunately, if I want to make it understandable to you, I also have to shout, it is by the way only my name that he shouted like that.’ Fräulein Bürstner, who listened laughing, put her forefinger over her mouth in order to stop K. from shouting, but it was too late, K. was too much in the role, he slowly shouted ‘Josef K.!', not as loudly as he had threatened to do, but still in a way that, after it had been let out, the call seemed to spread only gradually throughout the room. Then there were a few knocks on the door of the adjoining room, hard, short, and regular.¹⁸

In his performance, K. draws particular attention to the volume and aggressive nature of the guard's voice, which earlier that morning had caused him to bite down on his glass in a moment of violent shock. “Then a shout from the next room startled him in such a way that his teeth slammed down on the glass,” the narrator reports, “It was only the shouting that had startled him, this short, broken military shouting, which he wouldn't have thought the guard Franz capable of.”¹⁹ The shock comes not so much from the semantic content of the guard's words, but rather the pure sonic quality of the voice. Moreover, K. is not only startled by the unexpected call from the next room, but amidst his surprise he loses control over his own body. So while the guards police K.'s

¹⁸ “‘Und jetzt fängt es also wirklich an. Der Aufseher ruft als ob er mich wecken müßte, er schreit geradezu, ich muss leider, wenn ich Ihnen begreiflich machen will, auch schreien, es ist übrigens nur mein Name, den er so schreit.’ Fräulein Bürstner die lachend zuhörte legte den Zeigefinger an den Mund, um K. am Schreien zu hindern, aber es war zu spät, K. war zu sehr in der Rolle, er rief langsam ‘Josef K.!', übrigens nicht so laut wie er gedroht hatte, aber doch so dass sich der Ruf, nachdem er plötzlich ausgestoßen war, erst allmählich im Zimmer zu verbreiten schien. Da klopfte es an die Tür des Nebenzimmers einigemal, stark, kurz und regelmäßig” (P 37).

¹⁹ “Da erschreckte ihn ein Zuruf aus dem Nebenzimmer derartig, dass er mit den Zähnen ans Glas schlug [...] Es war nur das Schreien, das ihn erschreckte, dieses kurze abgehackte militärische Schreien, das er dem Wächter Franz gar nicht zugetraut hätte”; *ibid.*, p. 17.

utterances and ensure that he remains silent when commanded, they simultaneously exert an influence on his body by means of sudden auditory interruptions, which arouse physical responses in the listener and force the body to act against its will.

In attempting to reproduce the sounds of the morning's events, K. naively assumes to have the same claim to an auditory environment actively policed and controlled by the court. However, in a reversal of the morning's events K.'s theatrical performance produces none of the physical effects aroused in him by Franz's scream. In fact, his listener emphasizes the tranquility and peaceful silence that briefly follows the performance. Instead it is a neighbor's disgruntled response to the performance, which carries the physical power present in the guard's scream. Also echoing the guard's initial knock on K.'s door in the opening scene, the captain in the next room abruptly bangs on Fräulein Bürstner's door to communicate his irritation over the rowdy performance. The knock illustrates first and foremost that K.'s theatrical reproduction has been heard by others, indicating that his presence in Fräulein Bürstner's room cannot be kept secret as originally intended. But it additionally emphasizes the role of sound in undermining feelings of safety and security within the private sphere. "K. was greatly frightened for that reason," the narrator explains, while Fräulein B. remarks: "I was so frightened by the sudden knocking [...] It was so quiet after your scream and then there was a knocking, for that reason I was so scared, I also sat near the door so the knock was almost beside me."²⁰ Just as the unexpected scream of the guard had caused K. to bite down on his glass earlier that morning, the sudden knock at the door provokes feelings of terror in the protagonist and his love interest.

²⁰ "K. erschrak deshalb besonders stark"; *ibid.*, p. 37. "Ich bin durch das plötzliche Klopfen so erschreckt worden [...] Es war so still nach Ihrem Schrei und da klopfte es, deshalb bin ich so erschrocken, ich saß auch in der Nähe der Tür, es klopfte fast neben mir"; *ibid.*, p. 38.

At this point in the novel there appear to be two defining characterizations of the auditory environment. On the one hand, the sounds produced by the court and others in the immediate environment appear suddenly and without warning, arousing physical sensations of fear in the bewildered listener who remains incapable of protecting himself against the shock of these auditory interruptions. On the other, all sounds made by the accused—even within the confines of his own room—may be heard by others and potentially communicated to the court as evidence against him.

Indeed, the sudden knock on the door emphasizes the extent to which K.'s world is populated by clandestine listeners, who exploit the porous walls of the apartment building in order to gather evidence against him. "What do you want," Fräulein Büstner asks after she hears the knock at the door, "[The captain] is eavesdropping at the door, he hears everything [...] Come to the other corner of the room, there he can't hear us."²¹ The captain's knock functions as a terrifying warning to the protagonist and his companion, a message intended to silence the commotion in the next room and restore order to the apartment building. But it is also an indication of ongoing auditory surveillance. Still recovering from the shock of the sudden knock, the two figures must search out a part of the room protected from the eavesdropper on the other side of the door. The sonic interruption to the private sphere therefore signifies both the unpredictability and potentially destructive force of an auditory environment controlled by the court as well as the beginning of its surveillance by the ears of covert listeners concealed behind the walls and doors of the apartment building.

²¹ "Was wollen Sie [...] [Der Hauptmann] horcht, doch an der Tür, er hört alles [...] Kommen Sie in die andere Ecke des Zimmers, dort kann er uns nicht hören"; *ibid.*, p. 38.

Throughout the novel, K. expresses similar anxieties regarding the alleged presence of eavesdroppers, who he believes to be agents of the court sent to collect incriminating information against him. “You’re speaking too loudly, dear uncle,” K. remarks after his relative’s arrival at the office, “the servant is probably standing at the door eavesdropping (*horcht*).”²² Later, out on the street in front of the office, K. urgently leads his uncle away from the building towards the din of the traffic, “since the porter seems to be eavesdropping (*zu horchen schien*).”²³ Finally, in a meeting with the painter, Titorelli, the two figures are forced to whisper in order to hide the content of their conversation from a group of curious children, who listen in from behind the closed door and who ultimately turn out to be members of the court. “[K.] hardly made a movement now as the painter bent down to him and, in order not to be heard outside, whispered in his ear: ‘These girls also belong to the court.’”²⁴

Although the surrounding environment appears to be swarming with covert agents, the threat represented by the eavesdropper remains an unfounded anxiety, one that the novel refuses to confirm or deny. Just as the protagonist merely suspects the presence of covert listeners behind every corner without finding concrete evidence to support such claims, the narrator refuses to provide the reader with a clear view of the activities on the other side of the wall.²⁵ In a particularly striking example of this ambiguity, K.’s uncle

²² Du sprichst aber zu laut, lieber Onkel [...] Der Diener steht wahrscheinlich an der Tür und horcht”; *ibid.*, p. 98.

²³ “[...] da der Portier zu horchen schien”; *ibid.*, p. 100.

²⁴ “[K.] machte auch jetzt kaum eine Bewegung, als sich der Maler zu ihm niederbeugte und ihm, um draußen nicht gehört zu werden ins Ohr flüsterte: ‘Auch diese Mädchen gehören zum Gericht’”; *ibid.*, p. 158.

²⁵ One exception to this trend comes in a statement made early on by Frau Grubach, who, in reference to the protagonist’s initial encounter with the guards, blatantly admits that, “I eavesdropped a bit behind the

suddenly leaps to the door during a meeting at Huld's office, expecting to find the lawyer's caretaker, Leni, listening from outside. "I bet she's listening (*horcht*)" he remarks, jumping up to check the door but finding no one there.²⁶ The ease with which rumors about K.'s trial circulate in the novel as well as the extent to which the protagonist's personal information is known by complete strangers certainly lends credibility to suspicions of auditory surveillance. But, as the scene in Huld's office demonstrates, the court also retains a certain power over the legal subject by evoking such suspicions and refusing to corroborate them. The threat of auditory surveillance remains an unconfirmed anxiety, a suspicion that invests the court with unprecedented auditory powers to hear everything, capable of uncovering valuable secrets and priceless information to be used against Josef K. while always remaining hidden from view on the other side of the wall.

The novel's repeated use of the verb, "horchen," to describe the activities of suspected eavesdroppers points to a more active mode of listening available to the court and its various agents. While in these early passages K. is portrayed as a passive target of unexpected and aggressive noises produced around him, agents of the court actively listen through the walls and doors of the surrounding environment. "Horchen," of course carries connotations of a more engaged listener, one attentive to the details of the acoustic environment and capable of focusing on individual auditory impressions, of willfully listening in rather than merely being assaulted by sound. Over the course of the novel,

door (*dass ich ein wenig hinter der Tür gehorcht habe*"); *ibid.*, p. 28. However, Frau Grubach has frequently been described as K.'s only true ally in the novel, a character with almost no connection to the court. My interest is how eavesdropping, or at least the suspicion of it, serves as an especially productive tool used by the legal court to undermine the subject's sense of security and produce symptoms of nervous sensitivity. The fact that Frau Grubach, the protagonist's only ally, actually admits to her covert listening only reinforces the fact that the court uses the very ambiguity of its own activities to its advantage.

²⁶ "Ich wette dass sich horcht"; *ibid.*, p. 107.

and partially in response to the unexpected auditory shocks he suffers in these early chapters, K. begins to imitate the mode of listening most frequently associated with the court, now assuming a more attentive and cautious attitude towards his surroundings.

In a chapter fragment not included in the body of the published novel—but one that would presumably be situated immediately after K.’s conversation with Fräulein Bürstner—we witness the protagonist’s first attempt to take on the role of a more active listener. The fragment recounts a conversation between K. and Fräulein Montag, a French teacher from upstairs who, when the chapter begins, is in the process of moving her belongings into Fräulein Bürstner’s room. After receiving news from the woman that he has been rejected by Fräulein Bürstner, K. leaves the kitchen in anger and decides, in direct defiance of Fräulein Montag’s instructions, to knock on his love interest’s door in the hope of catching her off guard. Before he does so, however, K. stops a moment in the parlor to assess the situation by means of close listening: “He looked around and listened (*horchte*) to see if a disruption (*Störung*) could be expected from any of the surrounding rooms, it was quiet everywhere, only the conversation from the dining room could be heard and the voice of Frau Grubach from the hallway that led to the kitchen.”²⁷

What appears at first glance to be nothing more than an account of K. pausing before proceeding to Fräulein Bürstner’s door in fact marks an important shift in the protagonist’s listening practices. Not only do we now find him listening more actively in the manner practiced by the court, but this active listening is now directed towards potential threats or disturbances (*Störungen*), which might, like the guard’s scream or the court’s unexpected knock on the door at the beginning of the novel, break out at any

²⁷ “Er sah sich um und horchte, ob aus irgendeinem der umliegenden Zimmer eine Störung zu erwarten wäre, es war überall still, nur die Unterhaltung aus dem Eßzimmer war zu hören und aus dem Gang, der zur Küche führte, die Stimme der Frau Grubach”; *ibid.*, p. 252.

moment. K., in other words, has at this point already become a more active listener able to analyze the minute acoustic details of surrounding spaces, but this heightened sense of hearing emerges primarily as a protective mechanism against the dangers he now recognizes as constitutive elements of the auditory environment.²⁸ Following the intrusion of the court into the protagonist's private life, K. both appropriates a more active mode of listening while at the same time internalizing the perpetual threat of unexpected acoustic disturbances.

It is no coincidence that in a subsequent chapter entitled "The Flogger (*Der Prügler*)," we again find the juxtaposition of K.'s heightened sense of hearing with an incident demonstrating the sheer physical brutality of the court. The chapter, which will go on to depict a clandestine torture scene involving the two guards from the novel's opening chapter, begins with K. listening to the subtle sounds of violence hidden from view behind the door of a junk room. Walking through the corridors of the office, he carefully tunes his ears to minute changes in the acoustic dimension of the building:

When K. passed the corridor on one of the following evenings he heard someone let out a sigh behind a door, where he had always suspected there had only been a junk-room, without himself ever having seen it. Astonished, he came to a standstill and once again pricked up his ears (*horchte auf*) to determine if he had been mistaken,—for a while it was quiet, but then again there was the sighing.²⁹

Once again the novel establishes a connection between hearing and danger, introducing the violence as a purely auditory phenomenon perceptible only with an ear to the door.

²⁸ Later on in the novel we learn: "To be ready at all times appeared to [K.] a basic rule of behavior for the accused, never to let yourself be surprised, not to look right unsuspectingly if the judge stood beside you on the left—and it was precisely this basic rule that he constantly violated (*Als eine Grundregel für das Verhalten eines Angeklagten erschien es [K.], immer vorbereitet zu sein, sich niemals überraschen zu lassen, nicht ahnungslos nach rechts zu schauen, wenn links der Richter neben ihm stand—und gerade gegen diese Grundregel verstieß er immer wieder*"); *ibid.*, p. 173.

²⁹ "Als K. an einem der nächsten Abende den Korridor passierte [...] hörte er hinter einer Tür, hinter der er immer nur eine Rumpelkammer vermutet hatte, ohne sie jemals selbst gesehen zu haben, Seufzer ausstoßen. Er blieb erstaunt stehn und horchte noch einmal auf um festzustellen ob er sich nicht irrte,—es wurde ein Weilchen still, dann waren es aber doch wieder Seufzer"; *ibid.*, p. 87.

K., the passage indicates, is no longer the purely naïve and helpless figure portrayed in the novel's first chapter, disturbed by a late breakfast or caught off guard by the sudden appearance of court officials. Instead he is presented as a more confident listener capable of detecting nearly inaudible sounds from behind closed doors, an auditory detective able to identify and locate the source of suspicious noises.

The passage shows K. not simply walking away without putting an end to the beating, but instead commanding Franz to be quiet and finally pushing him to the ground where his flogging can continue without further interruption. What we witness in the scene is K.'s simultaneous appropriation of more active forms of listening associated with court officials, as well as his active participation in quelling any interference to the dubious legal actions mandated by the court. In commanding Franz to be quiet, K. draws on the techniques used by the guards and their supervisor in the opening chapter where he was told not to make "any such noise with the feeling of your innocence." Moreover, his successful redirection of his colleagues' attention away from the sounds of the junk room enables the machinery of the court to run smoothly and the violence to continue unnoticed. K.'s development into a more active listener coincides with his more active participation in the court's violence.

The protagonist's more active sense of hearing therefore functions primarily as a window into the violent potential of the court. What K. finds behind the closed door is not some new piece of evidence that will free him from the clutches of the court, nor does he necessarily learn something about how to better navigate the coercive system in which he has been inserted. He in fact remains powerless in preventing the continuation of the violence—violence for which he is, moreover, partly to blame, since it was his complaint

to the examining magistrate (*Untersuchungsrichter*) that allegedly provoked the beating in the first place. Instead, the protagonist simply turns his back and walks away from the room, as the sound of Franz's inhuman scream fills the corridor.³⁰

The legal system's power to coerce and control its victims takes the form of an expansive sound, which pervades the building. If the court deploys a network of eavesdroppers to maintain auditory surveillance over both the public and domestic sphere, it also aims to permeate these same spaces with noise as a testament to its violent potential. This link between legal power and spatially unrestrained noises would be made even clearer in a subsequent representation of the legal system posthumously titled, "Advocates."³¹ There, Kafka again depicts the power and reach of the court as a ubiquitous noise, one that now coincides with a radical transformation in the subject's relationship to his spatial surroundings. In a telling passage the narrator explicitly comments on the overlap between the structure of legal power and the nature of auditory space:

Above all other details a court reminded me mostly of a roar that could be heard continuously in the distance. One couldn't say from which direction it came. It filled all spaces to such an extent that one could assume it came from everywhere, or, what

³⁰ "Then the scream that Franz let out rose undivided and unchangeable, it seemed to come not from a person but rather from a tortured instrument, the whole corridor resounded with it, the whole house must have heard it (*Da erhob sich der Schrei, den Franz ausstieß, ungeteilt und unveränderlich, er schien nicht von einem Menschen, sondern von einem gemarterten Instrument zu stammen, der ganze Korridor tönte von ihm, das ganze Haus mußte es hören*"); *ibid.*, p. 91. This description of the tortured guard, along with K.'s subsequent explanation to his colleagues that, "it's only a dog howling in the courtyard (*es schreit nur ein Hund auf dem Hof*)," foreshadows the protagonist's own demise "like a dog (*wie ein Hund*)" in the concluding lines of the novel.

³¹ Left unnamed during Kafka's own lifetime, Max Brod retrospectively gave the text the title "Advocates (*Fürsprecher*)" and determined that it was written somewhere around 1922. For the sake of simplicity I will use Brod's title to refer to the text throughout this chapter. There has been surprisingly little scholarly attention paid to "Advocates." The most insightful and thorough reading is Rüdiger Campe's recent contribution, "Kafkas Fürsprache" in *Kafkas Institutionen*, ed. Arne Höcker and Oliver Simons (Bielefeld: Transcript, 2007): 189-212. See also the more cursory accounts by Hartmut Mahden, "Die Rolle des Fürsprechers bei Kafka" in *Der Deutschunterricht* 15 (1963): 9-31; Hans Helmut Hiebel, *Die Zeichen des Gesetzes: Recht und Macht bei Franz Kafka* (München: Fink, 1983), pp. 176-79.

seemed more correct, precisely the place where one happened to be standing was the actual place of the roar. But of course that was an illusion, for it came from the distance.³²

Similar to Franz's inhuman scream in *The Trial*, the menacing sound of the court fills all surrounding spaces and obliterates demarcations between individual rooms, eluding traditional spatial categories such as near and far, left and right, here and there. At the very moment the listener believes to have located the sound in his or her immediate proximity it retreats to the background and becomes an ominous threat in the distance, while at the same time continuing to permeate all spaces and maintaining a certain presence in the surrounding environment.

This perpetual inability to locate the noise corresponds to an even more radical sense of spatial disorientation, according to which the protagonist fails to determine where the court begins and ends, never fully sure if he has found the building he is looking for. "I couldn't even tell if we were in a court building," he laments later, "Some things spoke for it, many things spoke against it."³³ While the threat posed by the court permeates all surrounding spaces, determining whether an individual stands inside or outside the legal system remains impossible.³⁴ As we will see, the spatial confusion at

³² "Über alle Einzelheiten hinweg erinnerte mich am meisten an ein Gericht ein Dröhnen, das unaufhörlich aus der Ferne zu hören war, man konnte nicht sagen aus welcher Richtung es kam, es erfüllte so sehr alle Räume, dass man annehmen konnte, es komme von überall oder, was noch richtiger schien, gerade der Ort, wo man zufällig stand, sei der eigentliche Ort dieses Dröhnens, aber gewiss war das eine Täuschung, denn es kam aus der Ferne"; Franz Kafka, "Fürsprecher" in *Die Erzählungen und andere ausgewählte Prosa*, ed. Roger Hermes (Frankfurt am Main: Fischer Taschenbuch Verlag, 2006): 389-91, here p. 389.

³³ "Ich konnte nicht einmal erfahren, ob wir in einem Gerichtsgebäude waren. Manches sprach dafür, vieles dagegen"; *ibid.*, p. 389.

³⁴ Campe analyzes the expansive nature of the court in terms of visual inversion, or two oscillating viewpoints, between the realm of the institution and of the social world. While I find his interpretation helpful in unpacking Kafka's extremely complex literary fragment, my interest here lies primarily in the auditory nature attributed to the court and its ability to transgress conventional spatial boundaries, which receives only a passing reference in a footnote in Campe's essay. For a more general analysis of early twentieth century representations of spatial perception according to the model of the "puzzle picture

the center of “Advocates” is replayed in *The Trial* through Josef K.’s gradual displacement from the private sphere and full immersion in the details of his trial. At the same time, “Advocates” indicates the extent to which perceptual illusions occupy a constitutive role in the subject’s experience of the law in *The Trial*. Just as the protagonist of “Advocates” wavers between an interpretation of the sound as far off in the distance and immediately where he stands, Josef K. perceives subjective, unlocalizable sounds linked to the trial’s infiltration of the body.

Listening Inside the Court

So far we have seen the ways in which K.’s arrest initiates a kind of auditory training, while simultaneously encouraging the defendant to remain silent in his dealings with court officials. But how, I now want to ask, do these more active modes of listening translate into the courtroom itself and how, apart from eavesdropping and the use of auditory surveillance, does the court listen to the accused? To what extent does the protagonist’s exposure to the official spaces of the court alter what he hears and what he takes to be legitimate objects of listening?

K.’s first investigation before members of the court is staged as a struggle for attention, as a battle over the ear and over control of sonic territory within the courtroom. In contrast to the attentive “horchen” employed by eavesdroppers outside the spaces of the court, inside the courtroom K. must fight to keep his audience attentive to what he is saying amidst frequent auditory interruptions. After a series of outbursts from both his supporters and detractors, K. asks the audience for their undivided attention, which he

(*Vexierbild*),” see Oliver Simons, *Raumgeschichten: Topographien der Moderne in Philosophie, Wissenschaft und Literatur* (München: Fink, 2007).

describes in terms of a more concentrated mode of listening.³⁵ Up until this point what has been termed an “examination (*Verhör*)” has involved very little listening on the part of the audience, which instead oscillates somewhere between unmotivated applause, rowdy whistling, and silent detachment. According to the protagonist, however, a fair evaluation of his case requires both an attentive ear and a mode of hearing more closely attuned to the content of his utterances. The court proceeding is therefore presented as an exercise in close listening as well as a discipline of attention.

It is only after this more attentive attitude has been established that K. continues with his critique of the legal system:

‘There is no doubt,’ K. said very quietly, for he was pleased by the concentrated attentiveness (*angespannte Aufhorchen*) of the whole assembly, in this silence there arose a buzzing (*Sausen*) that was more excited than the most rapturous applause, ‘There is no doubt that behind all the statements of this court, in my case, then, behind the arrest and the present investigation, there exists a large organization.’³⁶

The passage begins with the audience obediently accepting K.’s request that they take on a more attentive mode of listening. The protagonist speaks softly without needing to shout over the aggressive background noise of the crowd, taking great pleasure in their consideration for what he is saying. As the evocation of the noun “*Aufhorchen*” indicates, there exists some overlap between the techniques of close listening used inside the court and those employed by various eavesdroppers within the private sphere. But it is only after a great struggle that this level of close listening can be reached. The norm,

³⁵ “Assuming that this alleged court is of interest to you, it would be to your great advantage to listen to me. I beg you to postpone your mutual discussions of what I say for later, as I have no time and will soon be leaving (*Sie können, vorausgesetzt dass Ihnen an diesem angeblichen Gericht etwas gelegen ist, großen Vorteil davon haben, wenn Sie mir zuhören. Ihre gegenseitigen Besprechungen dessen, was ich vorbringe, bitte ich Sie für späterhin zu verschieben, denn ich habe keine Zeit und werde bald weggehen*)” (P 55).

³⁶ “‘Es ist kein Zweifel,’ sagte K. sehr leise, denn ihn freute das angespannte Aufhorchen der ganzen Versammlung, in dieser Stille entstand ein Sausen, das aufreizender war als der verzückteste Beifall, ‘es ist kein Zweifel, dass hinter allen Äußerungen dieses Gerichts, in meinem Fall also hinter der Verhaftung und der heutigen Untersuchung eine große Organisation sich befindet’; *ibid.*, p. 56.

by contrast, appears to be a distracted mode of hearing amidst a chorus of shouts and screams. Within the context of the legal hearing, the novel suggests, the defendant is rarely heard at all.

Even this brief moment of captivated attention is not free from disruption. Early on in his speech, still glowing with satisfaction over his attentive audience, a strange noise suddenly emerges from the audience. “In this silence there arose a buzzing,” the narrator remarks. “Buzzing (*Sausen*),” along with “hissing (*Zischen*),” “squeaking (*Pfeifen*)” and “rustling (*Rauschen*),” belongs to a distinct set of noises that appear again and again throughout Kafka’s writings, most notably in “The Burrow.” As we will see in the next chapter, the “hissing” perceived in this labyrinthine, underground burrow occupies an ambiguous position between an auditory hallucination and the objectively real threat of an approaching enemy, which undermines the protagonist’s feeling of security within the confines of the private sphere.

In *The Trial*, the noise functions first and foremost as an interruption to the peace and quiet temporarily established in the courtroom, to the order opened up for the defendant to voice his concerns about the methods employed in his trial and to attempt to protect himself against the various accusations launched against him. But it is also an interruption to Josef K.’s thinking and the expression of his thoughts, which is marked by his need to repeat the phrase “there is no doubt” before and after the sudden noise. Whether produced by the left side of the room in opposition to K.’s claims, or by the right-hand side in enthusiastic support—it is irrelevant, we soon learn, since both sides are connected to the same organization—the noise functions as a defiant reminder of the

court's control over the auditory environment and its spatial extension into, and disruption of, the private sphere enacted in the novel's opening pages.

On a more formal level, the statement regarding the "buzzing" jumps out at as somehow detached from the rest of the sentence in which it appears, as a sentence inside of a sentence with little connection to the phrases immediately before and after it. Where one would expect to find a period, one instead finds a comma linking an expression of K.'s satisfaction over the audience's attentiveness, on the one hand, and, on the other, a description of the mysterious noise, which seems to hang precariously in the middle of a separate thought or is pasted on *ad hoc*. There is a sense of simultaneity communicated here, the suggestion that the noise emerges at the very moment that K. begins to speak. But there is also the sense that the noise originates in a void disconnected from events in the present. The ambiguous status of the sound and its sudden, unexpected eruption inside the courtroom, in other words, is articulated in a way that also draws attention to a formal disturbance to the text's narrative structure.

This implication is further emphasized by the narrator's unwillingness to attribute the sound to a particular member of the audience or even to the audience as a whole. Where does it come from and what is it intended to communicate, both the reader and the protagonist are ultimately forced to ponder. Up until this point the room has been clearly divided between the sounds of K.'s supporters, who applaud and cheer enthusiastically at his comments, and the silence of his critics, which, as K. later suggests, might also take the form of "zischen." In any case, there is no indication anywhere that "buzzing" serves as an appropriate response for either K.'s critics or his supporters, which, coupled with the fact that members of the audience are commanded to respond in one of two

prescribed ways, lends the sound an air of mystery and prevents any easy interpretation of its meaning.

The eruption of “buzzing” within the courtroom foreshadows the appearance of subjective noises during a spontaneous visit that K. makes to the court chambers. It is here that the court’s power expands beyond the walls of the office and the apartment building and now enters the defendant’s body. The episode begins by emphasizing the miserable physical and mental condition of other longtime defendants. Frail, terrified, and eager to conform to the norms of behavior prescribed to them by the court the shadowy figures line the hallways where they work endlessly on their cases and wait in vain to be seen by various court officials. “Most defendants are so sensitive,” the court usher explains to K. after the latter causes one defendant to scream in pain merely by touching his arm.³⁷

The scream subsequently arouses the attention of two court officials, who approach K. with suspicion. The stifling air in the attic, mixed with increasing paranoia and fear regarding the court officials’ motivation for speaking to him, results in K. feeling sick and experiencing a case of vertigo. “You have a little vertigo, don’t you,” one of the officials asks K.³⁸ Here the protagonist shows signs of nervous sensitivity characteristic of other defendants and demonstrated only moments ago by the man’s painful response to K.’s gentle touch. Moving into the acoustic register, the episode culminates in the eruption of a high-pitched siren that seems to come from nowhere:

In reality it would have done him well to sit down; it was like he was seasick. He thought he was on a ship that was on a rough sea. To him it was as if the water fell against the wooden walls, as if a roar (*Brausen*) came from the depths of the hall, like from breaking

³⁷ “Die meisten Angeklagten sind so empfindlich”; *ibid.*, p. 77.

³⁸ “Sie haben ein wenig Schwindel, nicht?”; *ibid.*, p. 79.

water, as if the hall was rocking in the way and as if the awaiting parties sank and rose on both sides. Even more unbelievable was the silence of the girl and man leading him. He was handed over to them, if they let him go he would fall down like a board. From their eyes came sharp glances here and there; K. felt their uniform steps without joining in, for he was carried almost step by step. Finally he noticed that they were talking to him, but he didn't understand them, *he only heard the noise that filled everything, throughout which there seemed to resound an unchanging, high tone like from a siren.* 'Louder,' he whispered with his head down and felt ashamed, for he knew that they had spoken loud enough, even if it was unintelligible to him. Finally a fresh breeze came towards him, as if the wall was torn down in front of him, and he heard someone beside him say: 'First he wants to leave, but then you can tell him a hundred times that the exit is here and he won't move.'³⁹

K.'s spatial disorientation, identified earlier in the scene through feelings of vertigo, coincides with the emergence of a mysterious sound with no obvious external source. That the sound is a purely subjective hallucination heard only by the protagonist is confirmed by the fact that the two court officials continue to speak to him as if nothing has happened. "Louder," he begs of his companions, feeling a sense of embarrassment at his inability to understand them. As K. himself admits, his companions speak in a volume that would otherwise be audible to a listener in his position. Conversely, his companions appear confused about why he has not found the exit considering that they have told him "a hundred times" that "the exit is here." Moreover, no one in the room, including the hypersensitive defendants, reacts to the sound or shows signs of having heard it.

³⁹ "In Wirklichkeit hätte es ihm aber sehr wohlgetan sich niederzusetzen; er war wie seekrank. Er glaubte auf einem Schiff zu sein, das sich in schwerem Seegang befand. Es war ihm als stürze das Wasser gegen die Holzwände, als komme aus der Tiefe des Ganges ein Brausen her, wie von überschlagendem Wasser, als schaukle der Gang in der Quere und als würden die wartenden Parteien zu beiden Seiten gesenkt und gehoben. Desto unbegreiflicher war die Ruhe des Mädchens und des Mannes, die ihn führten. Er war ihnen ausgeliefert, ließen sie ihn los, so mußte er hinfallen wie ein Brett. Aus ihren kleinen Augen giengen scharfe Blicke hin und her; ihre gleichmäßigen Schritte fühlte K. ohne sie mitzumachen, denn er wurde fast von Schritt zu Schritt getragen. Endlich merkte er, daß sie zu ihm sprachen, aber er verstand sie nicht, *er hörte nur den Lärm der alles erfüllte und durch den hindurch ein unveränderlicher hoher Ton wie von einer Sirene zu klingen schien.* 'Lauter,' flüsterte er mit gesenktem Kopf und schämte sich, denn er wußte, dass sie laut genug, wenn auch für ihn unverständlich gesprochen hatten. Da kam endlich, als wäre die Wand vor ihm durchrissen ein frischer Luftzug ihm entgegen und er hörte neben sich sagen: 'Zuerst will er weg, dann aber kann man ihm hundertmal sagen, dass hier der Ausgang ist und er rührt sich nicht''; *ibid.*, p. 84, my emphasis).

A diagnosis of trauma to the interior spaces of K.'s ear is confirmed by his experience of vertigo, which, since the discovery of the balancing function of the semicircular canals in the early nineteenth century, was linked to a disturbance of the anatomical structure of the ear.⁴⁰ Physical damage to the ear, medical scientists realized, was often the main cause for feelings of dizziness and spatial disorientation in patients. Thus, complaints about vertigo were frequently treated as otological problems. K.'s gradual sense of spatial disorientation and the unexpected sound of the siren should therefore be seen as symptoms intimately related to one another, not as two distinct manifestations of his anxiety. Both originate within the inner spaces of the ear, which, as his seasickness and the deafening sound clearly indicate, has suffered some kind of physical trauma.

Auditory Accidents and Industrial Spaces

This coupling of vertigo and the appearance of subjective noises pervades contemporaneous medical reports on industrial accidents and otological illnesses suffered by factory workers. Kafka would have presumably come across such accounts in the more specific context of medical reports produced for insurance purposes.⁴¹ Due to

⁴⁰ See Veit Erlmann, *Reason and Resonance: A History of Modern Aurality* (New York: Zone Books, 2010), pp. 171-74. Drawing on Marcus Herz's *Versuch über den Schwindel* from 1786, Erlmann wants to show how the emergence of Romantic musical aesthetics, along with the onset of political crisis in Western Europe, contributed to significant changes in medical conceptions of vertigo around 1800. "By all appearances," Erlmann states, "vertigo was the downside of the euphoria caused by the newfound freedom of the 'busy' transcendental subject. More troubling still, vertigo also strongly hinted at the possibility that the mind, the crowing achievement of God's creation, no longer ensured a stable correlation between signifier and signified, between physical cause and effect" (174).

⁴¹ On Kafka and the factory, see Majorie E. Rhine, "Manufacturing Discontent: Mapping Traces of Industrial Space in Kafka's Haptic Narrative Landscapes" in *Journal of the Kafka Society of America* 29 (2005): 65-70; *Kafkas Fabriken*, ed. Hans-Gerd Koch and Ulrich Ott (Marbach: Dt. Schillerges., 2003); Klaus Wagenbach, "Kafkas Fabriken" in *Poesie als Auftrag*, ed. Dagmar Ottmann (Würzburg: Königshausen & Neumann, 2001): 163-69.

perpetual exposure to the din of industrial machinery factory workers in particular commonly experienced both symptoms of vertigo and the sudden appearance of subjective noises.⁴² In his essay, “Ear Medicine and the Expert Evaluation of Accidents” (*Die Unfallbegutachtung in der Ohrenheilkunde*)” from 1905, for example, a certain B. Baginsky emphasized the fact that factory workers often complained of “ear noises of the most varied kind, temporary and continuous, buzzing (*Sausen*), roaring, ringing,” as well as “symptoms of vertigo when bending down or looking up.”⁴³ Describing a study on hearing loss in professional boilermakers, another researcher noted that, “subjective noises appear in nearly half the cases. Vertigo appears in advanced cases now and again.”⁴⁴

⁴² Similar to factory workers, many telephone operators filed insurance claims alleging to suffer from cases of subjective noises and vertigo due to sudden sounds on the line, especially during bad weather. Summarizing the literature on the topic, one medical expert noted in 1906: “[A whole group of writers] have observed in telephone operators a decline in hearing ability, feelings of vertigo, buzzing in the ears and nervous symptoms (*[Eine ganze Reihe von Schriftstellern] beobachteten bei Telephonbeamten Abnahme des Gehörvermögens, Schwindelgefühl, Ohrensausen und nervöse Symptome*).“ The author’s own investigation likewise grouped together cases of “auditory illusions and hallucinations (*Gehörstäuschungen und Halluzinationen*)” with “attacks of vertigo (*Schwindelanfälle*)“; M. Bernhardt, *Die Betriebsunfälle der Telephonistinnen* (Berlin: Verlag von August Hirschwald, 1906), pp. 12-14.

In the years immediately preceding his work on *The Trial*, Kafka frequently expressed a fear of the telephone to Felice Bauer. “A coupling of the gramophone and the telephone would also not have such a large, general significance, only it would be a relief for people, who, like me, are afraid of the telephone (*Eine Verbindung zwischen Grammoph. und Telephon hätte ja auch keine so große allgemeine Bedeutung, nur für Leute, die, wie ich, vor dem Telephon Angst haben, wäre eine Erleichtung*)“; Kafka, *Briefe an Felice*, January 22, 1913, p. 266. See also his letter from December 7, 1912 in *Briefe an Felice*, p. 165. On insurance, hysteria, and the telephone see Bernhard Siegert, “Das Amt des Gehorchens” in *Armaturen der Sinne: Literarische und technische Medien 1870 bis 1920*, ed. Hörisch and Wetzell (München: Fink, 1990): 83-106; Andreas Killen, “From Shock to Schreck: Psychiatrists, Telephone Operators and Traumatic Neurosis in Germany, 1900-26” in *Journal of Contemporary History*, Vol. 38, No. 2 (Apr., 2003): 201-22.

⁴³ “Ohrgeräuschen der mannigfachsten Art, zeitweilig und kontinuierlich, Sausen, Rauschen, Klingen“; “Schwindelerscheinungen beim Bücken oder beim Blick in die Höhe“; B. Baginsky, “Die Unfallbegutachtung in der Ohrenheilkunde,” p. 1171.

⁴⁴ “Subjektive Geräusche bestehen in annähernd der Hälfte der Fälle. Schwindel tritt in vorgeschrittenen Fällen zuweilen auf“; Friedrich Röpke, *Die Berufskrankheiten des Ohres und der oberen Luftwege* (Wiesbaden: Bergmann, 1902), p. 23.

A. Passow asserted that, “Symptoms of vertigo and disruptions to balance are the most constant symptoms after injuries to the auditory organ,” later recounting a case in which a mechanic suffered from “attacks of vertigo and persistent subjective noises (*Schwindelanfälle und persistente subjective Geräusche*)” due to spending extended periods of time “in an extremely loud workshop (*in einer sehr geräuschvollen Werkstatt*).”⁴⁵ The industrial researcher, Alfred Peyser, further observed the frequency with which factory workers suffered from “so-called subjective noises of the ear, ringing, buzzing, etc. (*die sog. subjektiven Ohrgeräusche, Klingen, Sausen usw.*),” drawing connections between “long-lasting disturbances to hearing (*langdauernden Hörstörungen*)” and “vertigo and feelings of vertigo (*Schwindelgefühl und Schwindel*).”⁴⁶ In their accounts medical researchers additionally made frequent reference to the subjective “buzzing (*Sausen*)” heard by workers after trauma had been suffered by the ear, invoking the same term in their medical evaluations as the one used to describe the mysterious noise heard by the protagonist during his initial investigation. A closer look at contemporaneous medical discourse therefore reveals the extent to which Kafka depicts the hallways and backrooms of the court as spaces filled with the same auditory dangers that factory workers faced at the beginning of the twentieth century. Kafka’s account of an asbestos factory which he founded with his brother-in-law in 1911 only confirms his firsthand knowledge of conditions that would later be reworked and expanded upon in his novel. “Yesterday in the factory,” begins an entry in his diary from

⁴⁵ “Schwindelerscheinungen und Gleichgewichtsstörungen gehören zu den constantesten Symptomen nach Verletzungen des schallempfindenden Apparates”; Passow, *Die Verletzungen des Gehörganges*, p. 165.

⁴⁶ Alfred Peyser, “Die gewerblichen Erkrankungen und Verletzungen des Gehörs bei den Industriearbeitern,” p. 150. See also Alfred Peyser, “Die Literatur der gewerblichen Ohrenleiden” in *Zentralblatt für Ohrenheilkunde und Rhino-Laryngologie*, Bd. 12 (1914): 317-29.

February of 1912, “The girls in their unbearably dirty and tattered dresses, with messy hair as if they had just woken up, *with the continuous noise of the transmission belts.*”⁴⁷

The overlap between juridical and factory spaces is underscored through allusions to the filth and debris that permeates both the rooms occupied by legal officials and those designated for K.’s hearing. The courtroom where K. first hears the “buzzing” as well as the attic in which he later hears the siren are described as filthy, filled with clouds of dust and dirt which obscure the protagonist’s field of vision, thus corresponding to accounts of working conditions in factories at the time. “The foggy haze in the room was extremely tiresome and even prevented a more precise observation of those standing in the distance,” the narrator observes at the outset of the first investigation before the court, while the air in the court chamber is later described as “barely breathable.”⁴⁸

An account of a sewing factory from Friedrich Röpke’s *Industrial Illnesses of the Ear and Upper Respiratory Tracts* (Die Berufskrankheiten des Ohres und der oberen Luftwege) (1902) similarly cited dust as a serious health concern for employees. Only

⁴⁷ “Gestern in der Fabrik. Die Mädchen in ihren an und für sich unerträglich schmutzigen und gelösten Kleidern, mit den wie beim Erwachen zerworfenen Frisuren, *mit dem unaufhörlichen Lärm der Transmissionen*”; Kafka, *Tagebücher 1912-1914*, ed. Hans-Gerd Koch (Frankfurt a.M.: Fischer Taschenbuch Verlag, 2008), p. 32. While Kafka’s professional writings at the insurance company dealt primarily with eye injuries and fail to mention methods for protecting the ear, they indirectly comment on the acoustic environment of the workplace. More specifically, they draw connections between hearing and danger. In a text from 1910 on new carpentry equipment, for example, Kafka noted: “Because of this [the round shafts] run much quieter and avoid the wail of the old square iron shafts, which formally indicated their danger (*Ihr Gang [runden Welle] wird dadurch auch viel ruhiger und es wird jenes Heulen der alten Vierkantwellen vermieden, welches förmlich ihre Gefahr anzeigte.*)” Later, in a text from 1915 on the dangers inherent to work in a stone quarry, Kafka once again referred to the sound of the workplace as an indication of the risks involved there: “Every layman can recognize the extreme danger of working in these quarries. Pieces of stone continuously roll down, one constantly hears the echo of the stones smashing against each other (*Die Lebensgefährlichkeit der Arbeit in diesem Bruche muss jeder Laie erkennen. Ununterbrochen rollen Steinstücke herunter, ununterbrochen hört man das Echo von dem Aneinanderschlagen der Steine*)”; Kafka, *Amtliche Schriften*, ed. Klaus Hermsdorf (Berlin: Akademie-Verlag, 1984), pp. 140, 261.

⁴⁸ “Der nebelige Dunst im Zimmer war äußerst lästig, er verhinderte sogar eine genauere Beobachtung der Fernerstehenden” (P 55); “kaum mehr atembar”; *ibid.*, p. 80.

sentences before commenting on “the hearing ability of workers (*das Hörvermögen der Arbeiter*)” and the “strong noise (*das starke Geräusch*)” of the factory, Röpke condemned “the air in the workrooms of the spinning mills (*die Luft in Arbeitsräumen der Spinnereien*),” going on to explain that, “the air is contaminated by the dust and vapors of the materials to be processed and finally through the fumes of the lubricating oil of the machines,” all of which resulted in frequent irritations to “the upper respiratory tracts of those working in the spinning mills (*die oberen Luftwege der in den Spinnereien beschäftigten Arbeiter*).”⁴⁹ Röpke criticized air quality in the factory for numerous professions, ranging from steel and textile workers to flax spinners (*Flachswehlern*). The filth that covers the courtroom and the dust that fills the air in Kafka’s novel serve as indications that the protagonist’s trial is taking place within an environment that resembles the interior spaces of industrial labor.

At the same time, texts by Röpke and industrial doctors frequently emphasize the strong interrelation between poor air quality and otological problems. The same medical scientists working on otological disorders in the factory blamed not only the abrasive sound of the machines as the cause of various illnesses, but also the quality of the air and the amount of dust present in these spaces. In a section on iron workers Röpke observed that, “the outer ear is frequently damaged by the fine dust. Infections, primarily of the outer auditory canal, are the result of this.”⁵⁰ In an earlier passage on iron workers, Röpke similarly noted: “At the entrance of the auditory canal, which is often filled with

⁴⁹ “Die Luft [...] durch den Staub und die Ausdünstungen des zu verarbeitenden Materiales, schliesslich noch durch die Dünste des Schmieröles der Maschinen verdorben [wird]”; Röpke, *Die Berufskrankheiten des Ohres und der oberen Luftwege*, p. 92.

⁵⁰ “Das äussere Ohr wird durch den spitzigen Staub häufig verletzt, Entzündungen, namentlich des äusseren Gehörganges, sind die Folge davon”; *ibid.*, p. 28.

dust, infections commonly develop and on various occasions I have observed persistent perichondritis of the external ear.”⁵¹ Thus, it would be incorrect to regard the dust in the courtroom of Kafka’s novel as a purely visual phenomenon or one that affects only the lungs. Through descriptions of both the quality of the air as well as the emergence of subjective noises, Kafka’s novel superimposes the spaces of the factory onto the courtroom. In leaving his home and office and entering into the spaces of the court, K. is exposed to the conditions experienced by early twentieth century factory workers. In doing so, his hearing is permanently altered, either destroyed by the noise or infected by the dust and grime emanating from his surroundings.

Kafka’s novel draws on reports of auditory accidents and industrial illnesses of the ear as a way to describe the nature of legal power and, more specifically, its ability to physically affect the body of subjects held under its jurisdiction. Indeed, the court’s ability to conjure up subjective sounds in the ears of the defendant coincides with K.’s submission to the court. “He was handed over to them,” the narrator remarks as the two court officials help him to the exit, “If they let him go he would fall down like a board.” He does not even have to exert his own energy to put one foot in front of the other, “for he was carried almost step by step.” The scene therefore presents a striking image of obedience and powerlessness, of a docile body thrown fully into the hands of an organization that has attempted to assert its control over the protagonist since the opening pages of the novel.

The court’s ability to wear down the accused and instill symptoms of nervous sensitivity ends with the obliteration of boundaries separating objective and subjective

⁵¹ “Am Eingange des oft voll Staub liegenden Gehörganges entwickeln sich nicht selten umschriebene Entzündungen, auch hartnäckige Perichondritiden der Ohrmichel habe ich verschiedentlich beobachtet”; *ibid.*, p. 18.

perceptions of the world. His submissive gesture coincides with the emergence of a hallucinatory sound, a siren warning him of what is to come, but also testifying to the damage already inflicted on the ear. What the passage suggests is that the real danger posed by the court lies in its ability to both undermine the subject's spatial orientation in the world as well as obliterate the distinction between the objective sound of a real threat and the subjective sounds of the body. The creation of subjective noises functions as a tool of the court and an extension of its power. Rather than 'hearing' the defendant's case as the etymology of legal terminology would have us expect, the court instead focuses its efforts on programming the content of the protagonist's acoustic experiences, injuring the ear as a means of conjuring up auditory hallucinations with no objective grounding in reality. In *The Trial*, the court listens, but only covertly from the next room, simultaneously manipulating the interior spaces of the defendant's ear and rewiring the auditory apparatus for perceptual illusions.

It is worth returning to Kafka's representation of the legal system in his literary fragment, "Advocates." There, as we have seen, the expansive reach of the court was described as a sound capable of transgressing all spatial boundaries and filling the empty spaces of the immediate environment. The siren that resounds in *The Trial* bears many of the same spatial characteristics attributed to the drone of the court in Kafka's subsequent reflection on the modern legal system, most notably in its expansive nature "that filled everything." Conversely, the passage in *The Trial* helps to shed light on the disorienting spatial inversions depicted in "Advocates," the sound's oscillation between near and far, left and right. As the narrator explains in his metaphorical account of legal power, one might initially believe that, "[the roar] came from everywhere, or, what seemed more

correct, precisely the place where one happened to be standing was the actual place of the roar,” yet in the end one must conclude that, “of course that was an illusion, for it came from the distance.” Situated alongside the subjective noises portrayed in *The Trial*, this oscillation between “the distance (*der Ferne*)” and “precisely the place where one happened to be standing (*gerade der Ort, wo man zufällig stand*)” can be read as an indeterminable back-and-forth between competing perceptions of the surrounding environment. Similar to the sound of the siren, which emerges from the listener’s own body as the byproduct of physical damage to the ear, the metaphorical drone of the court shifts from a nebulous threat in the distance to a sound located at precisely the spot where the listener stands. In other words, the threat represented by the court fluctuates between a non-localizable, all-encompassing noise hidden from view and the subjective noises of the body, which emanate from the location occupied by the listener. In both cases the threat posed by the court lies not in its omnipresence or its effort to monitor all spaces. The real danger lies in the epistemological uncertainty that it arouses in the defendant, who by the end of the trial can no longer distinguish between sounds emanating from the world and those produced subjectively by the body.

Not surprisingly then the spatial disorientation and confusion over the source of the siren ultimately provoke suspicions of a new trial located within the body. At the conclusion of the siren episode, K. revealingly asks himself: “Did his body want to revolutionize and prepare a new trial for him, since he bore the old one so effortlessly?”⁵² What the protagonist is suggesting here is not only that his body has become complicit in surrendering to the court, falling helplessly into the hands of legal officials like an

⁵² “Wollte etwa sein Körper revolutionieren und ihm einen neuen Proceß bereiten, da er den alten so mühelos ertrug?” (*P* 85).

inanimate object, but also that the legal process now involves distinguishing between the subjective projections of his own body and the unlocalizable threats external to it. The episode in other words marks the moment at which the trial becomes an embodied experience, the next stage of a journey from the living room of his landlady's apartment, through the corridors of the bank, to the interior spaces of the body.

This ambiguity between external and internal spaces corresponds to a traditional reading of K.'s own role in bringing about his demise at the hands of the court at the end of the novel. According to Ulf Abraham, for example, the protagonist's downfall comes from a combination of the court's intervention into his life *as well as* an internal feeling of guilt, which is "conversely projected outward onto an environment that always portrays itself exactly like the hero wants to or needs to see it."⁵³ Thus the outcome of the illegitimate legal process is the result of both the court's manipulation of the external world as well as K.'s projection of his own subjective feelings of guilt onto the external world. Just as the auditory effects of the court oscillate between an ambiguous point in the distance and the internal spaces of the body, the guilt that ultimately condemns the protagonist to death emerges both from the invisible mechanisms of the court and preexisting feelings of guilt from within.

K.'s suspicions of a second, corporeal trial express anxieties regarding that body's ability to withstand the coercive power of the court and its sudden, unexpected intrusion into his life. "His otherwise secure state of health had never prepared him for such

⁵³ Ulf Abraham, "Rechtsspruch und Machtwort" in *Franz Kafka: Schriftverkehr*, p. 271. See also Joseph Vogl, *Ort der Gewalt: Kafkas literarische Ethik* (München: Wilhelm Fink, 1990), p. 156.

surprises,” the narrator observes.⁵⁴ The overpowering noise represents perhaps the most extreme and debilitating ‘interruption’ thus far, indicating a shift from the merely inconvenient and irritating disruption of the protagonist’s daily routine in the novel’s opening pages (*Störung*) to a medical disorder situated inside the ear (*Hörstörung*). As we have seen, this sonic outburst and corresponding spatial disorientation are part of a series of shocks and disruptions, which the protagonist has had to face since the opening pages of the novel. Similar to the scream of the guard from the next room which causes K. to bite down on his glass in terror, or the captain’s knock on the wall in response to K.’s performance for Fräulein Büstner, the “surprises (*Überraschungen*)” awaiting him in the court chambers provoke feelings of fear and anxiety with physical consequences.

K.’s shift to a more active form of listening following the first two chapters of the novel functions at least in part as a protective measure against these surprises and disturbances. Rather than waiting passively to be attacked by the court, he mobilizes the ear as a means to survey the surrounding environment and evaluate potential threats. Yet, the scene in the court chambers illustrates the futility of such efforts. Whereas the auditory shocks portrayed in the early stages of the novel produced physical manifestations of fear in the listener, the auditory surprise that awaits K. in the court chamber also emerges partially from within. Surveying the surrounding environment, in other words, will only get K. so far, as the “disturbances” and “surprises” also erupt from inside his own body. With one ear aimed inward and other towards potential threats in the external world, K. occupies an untenable position, torn in both directions and exposed to danger from both sides.

⁵⁴ “Solche Überraschungen hatte ihm sein sonst ganz gefestigter Gesundheitszustand noch nie bereitet” (*P* 85).

Attention, Second-Order Listening, and the Vanishing Domestic Sphere

The obliteration of distinctions between subjective and objective phenomena corresponds to the trial's infiltration of the body. But it also points to the growing convergence of the private sphere and the spaces of the legal system. In the second half of the novel we see K.'s attitude towards his trial change dramatically. If in the first half of the text he had perceived his legal problems as merely an annoyance based on unfounded accusations or a bother not to be taken too seriously, by the second half of the novel we see him preoccupied with the details of various legal documents, meetings with lawyers and other legal officials, and possible ways to steer the case in his favor. And while the first two chapters take place almost exclusively within the private sphere, there is hardly any mention of it in the chapters that follow.⁵⁵ What begins in *The Trial* as the infiltration of the domestic sphere by the court concludes with the domestic sphere being completely replaced by the spaces of the court. By the end of the novel, K. admits that “for a long time now he hadn't concerned himself in the slightest with the affairs of the boarding house.”⁵⁶

Soon after making this comment, in a mental state somewhere between dream and waking consciousness, he begins to fantasize about strolling through the hallways of a court building. In a passage that evokes the labyrinthine architecture of the court in “Advocates,” the narrator recounts K.'s imaginative wanderings: “So now he hurried with long steps crisscrossing through the court building. He always knew his way around

⁵⁵ Block, a longtime defendant whom K. meets at one of his meetings with the lawyer Huld, has abandoned his former home and instead sleeps in the maid's room at the lawyer's office.

⁵⁶ “Kümmerte sich schon seit langem um die Angelegenheiten der Pension nicht im Geringsten”; *ibid.*, p. 270.

very well in all of the rooms, lost passageways which he could have never seen appeared familiar to him *as if they had always been his apartment.*⁵⁷ The appearance of subjective sounds with no external source—the collapsing of distinctions between internal and external space—corresponds to a blurring of the distinctions between the architecture of the court and the spaces of the private sphere. While this overlap is already apparent in the court’s refusal to conduct business in an official building, preferring instead to use attics, an artist’s studio, or a living room, the collapsing of these two spatial realms has now been internalized by the protagonist. In contrast to the main figure in “Advocates,” however, who remains perpetually disoriented and aimless in his search for legal representation, K. confidently marches through the hallways of the building as if they were part of his own home. Thus, the antidote to disorientation appears to rest on the false belief that the court is in fact K.’s home. To navigate the hallways of the court, the passage suggests, the accused must conceive of the court as a surrogate home.

K.’s sudden interest and active participation in his trial, combined with the merging of the private sphere with the spaces of the court, coincides with a shift in the way in which he listens to the world around him. In the second half of the novel, his hearing is plagued by perceptual errors and an inability to pay attention to specific sounds in the broader auditory field.⁵⁸ The mysterious, subjective noise of the siren appears to have permanently affected K.’s confidence in distinguishing the nature and location of

⁵⁷ “So durcheilte er nun mit langen Schritten das Gerichtsgebäude kreuz und quer. Er kannte sich immer sehr gut in allen Räumen aus, verlorene Gänge, die er nie gesehen haben konnte, erschienen ihm vertraut, *als wären sie seine Wohnung seit jeher*”; *ibid.*, p. 271, my emphasis.

⁵⁸ On attention and distraction in *The Trial*, see Andriopoulos, *Possessed*, pp. 152-3.

individual sounds. In a scene at the office after a meeting with an industrialist who claims to know about his case, the anxiety of potential disruptions from without leads to a state of confusion and the inability to determine whether a sound he hears at the door is real or merely an auditory hallucination. “For a long time he sat like this,” the narrator explains, “without knowing what exactly was worrying him, only from time to time he looked over his shoulder in a state of fear towards the door of the outer office, *where he mistakenly believed to have heard a noise.*”⁵⁹

The passage underscores K.’s understanding of the surrounding environment as a space pervaded by constant dangers and invested with the potential for unexpected disruptions from without. Isolated alone in his office, the anxieties over his trial continue to haunt his mind. More importantly, these fears are accompanied by a series of auditory hallucinations and the false belief that a real danger is approaching from the other side of the door, when in reality there is nothing there at all. Rather than expressing fears concerning eavesdroppers, or portraying a violent physical reaction to sound as we saw earlier in the novel, this later passage locates the problem in a perpetual fear of an objectively non-existent threat. Unlike the episode in the court chamber, however, the subjective sound arises not as part of a dramatic display of physical weakness and submission to the court, but is now woven into his everyday dealings with the world. What we see is not a debilitating case of vertigo coupled with an ominous siren, but rather the perpetual inability to determine whether a threat is real and where it can be located in space. The moment alone in his office is therefore an echo of the traumatic

⁵⁹ “Lange saß er so ohne zu wissen, was ihm eigentlich Sorgen machte, nur von Zeit zu Zeit blickte er ein wenig erschreckt über die Schulter hinweg zur Vorzimmertür, *wo er irrtümlicher Weise ein Geräusch zu hören geglaubt hatte*” (P 138, my emphasis).

episode in the attic, but it is one that shows how such auditory experiences have been normalized and integrated as everyday occurrences.

The period following the siren episode portrays a gradual decline in K.'s ability to focus on individual sounds in the surrounding environment. If, by the middle of the novel, "the thought of the trial no longer left him (*der Gedanke an den Proceß verließ ihn nicht mehr*)," this later period is also marked by K.'s perpetual distraction with regard to anything other than the trial. Only pages after describing his preoccupation with the trial the narrator comments on the extent to which the accused "is self-conscious and has all possible worries that distract him."⁶⁰ In a fragment not included in the main body of the published text, we see a defiant K. ignore the court's request that he come immediately to another interrogation. But the joy he takes in blatantly rejecting the court's orders soon gives way to state of confusion and disorientation: "Undeterred by the court he went where he wanted to. For a moment he wasn't sure if out of distraction he had given the driver the address of the court."⁶¹

The contrast between the attitudes expressed in the two consecutive sentences is striking. While K. initially asserts his autonomy and rejects the wishes of the court with great confidence, he subsequently believes to have unconsciously submitted to their demands in a moment of distraction, asking the driver to take him to the court rather than to his intended destination. His constant preoccupation with the trial therefore brings him closer to carrying out the court's demands than it might originally appear, as the coercive power to manipulate his actions travels below the radar, so to speak, escaping conscious

⁶⁰ "Doch befangen ist und alle möglichen Sorgen hat, die ihn zerstreuen"; *ibid.*, p. 121.

⁶¹ "Unbeirrt durch das Gericht fuhr er dorthin wohin er wollte. Einen Augenblick lang war er nicht sicher, ob er nicht aus Zerstretheit dem Kutscher die Gerichtsadresse angegeben hatte"; *ibid.*, p. 262.

thought. Distraction functions as an extension of the court's power, obscuring from view the motivations and desires of the accused subject while unconsciously pushing him towards consenting to those offered by the court.

K.'s preoccupation with the trial subsequently enters the acoustic register as a distracted mode of listening, one that concludes with a self-awareness of his own position as a listener. In conversation with the industrialist, he struggles to remain focused:

At the beginning K. had actually followed the words of the industrialist closely, thoughts of the important business had also gripped him, only unfortunately not for long, *he soon strayed from listening*, had then nodded with his head for a while to the industrialist's louder proclamations, but ultimately also refrained from doing that and limited himself to looking at the bald head bent down towards the papers and to asking himself when the industrialist would finally notice that his whole speech was pointless. As he now fell silent K. really believed at first that *this had occurred in order to give him the opportunity to confess that he was not capable of listening*.⁶²

On the one hand, the passage merely reinforces what can already be gathered from earlier accounts of the protagonist's gradual inability to focus on anything other than the trial, emphasizing in this case the specific modality of hearing. In contrast to the "horchen" of previous chapters, which the protagonist mobilized as a mode of hearing to protect himself against sudden auditory interruptions unleashed by the court, in this scene K.'s ear drifts aimlessly from the content of the conversation to a nebulous state of distraction with no object. A focused ear directed at nuances in the auditory environment has been replaced by an ear too distracted to hear anything at all.

⁶² "K. hatte auch tatsächlich im Anfang die Rede des Fabrikanten gut verfolgt, der Gedanke an das wichtige Geschäft hatte dann auch ihn ergriffen, nur leider nicht für die Dauer, *er war bald vom Zuhören abgekommen*, hatte dann noch ein Weilchen zu den lauterem Ausrufen des Fabrikanten mit dem Kopf genickt, hatte aber schließlich auch das unterlassen und sich darauf eingeschränkt, den kahlen auf die Papiere hinabeugebungen Kopf anzusehn und sich zu fragen, wann der Fabrikant endlich erkenne werde, dass seine ganze Rede nutzlos sei. Als er nun verstummte, glaubte K. zuerst wirklich, *es geschehe dies deshalb, um ihm Gelegenheit zu dem Eingeständnis zu geben, dass er nicht fähig sei zuzuhören*"; *ibid.*, p. 135, my emphasis.

On the other hand, the passage highlights the subjective nature of K.'s listening practices already alluded to in the episode at the court chambers. There, the high-pitched siren served to emphasize the fact that the distinction between objective and subjective sounds had been dismantled, placing K. in a vulnerable position in which he could no longer be sure if what he heard corresponded to external reality. In this later passage a description of his inability to properly pay attention to the words of his interlocutor ends with the suspicion that he is being asked to listen to the way in which he is listening. At the same moment that the industrialist pauses and allows for silence between them, K. begins to believe that, "this had happened in order to give him the opportunity to confess that he was not capable of listening." According to his own suspicions, the pause serves as an encouragement for the protagonist to reflect on his inability to listen, to reflect on the modes of hearing available to him as well as his own failures as an attentive listener.

As we will see in the next chapter, this is a self-reflective gesture that appears in a more pronounced form in Kafka's "The Burrow," where the mole-like protagonist exhibits obsessive tendencies of self-observation. The invasion of the private sphere in that later text coincides not only with the breakdown of clear distinctions between objective noises in the external environment and the subjective sounds of the body, but also with a mode of listening which takes as its object either an externalized, metaphorical image of the listener's own body (represented by a domestic sphere shaped like the ear) or the ambiguous, interior spaces of the body. In both cases there is a shift from prolonged and careful attention to the noises of the external environment to questions about how the protagonist hears and whether or not what he hears comes from outside or inside his own body.

And yet, similarly, in *The Trial* we observe a kind of auditory training that begins by encouraging an active and attentive mode of hearing directed outward, but concludes with a distracted subject capable of listening only to himself and his perceptual errors or limitations. This focus on the listener's own role in acts of auditory perception is accompanied by a lack of confidence in distinguishing between auditory hallucinations and objectively real sounds in the external world. The sound of the siren, which emanates from the protagonist's damaged ears in *The Trial*, draws attention to the subjectivity of listening and the role of the listener's body in structuring the perception of the world. In doing so, the court successfully grounds a new trial in the body, one that renders the defendant incapable of action, while at the same time shifting the focus from the judgment of his guilt or innocence by others to his own evaluation of his perceptual abilities.

Insuring the Ear

As we have seen, Kafka portrays the legal court as an invisible and omnipresent entity capable of exciting symptoms of nervous sensitivity in the accused. This sensitivity initially provokes efforts to cultivate a more active mode of listening responsive to the dangers of the surrounding environment, but concludes with the obliteration of stable boundaries between subjective auditory hallucinations and objectively real sounds in the external world. In doing so, the court draws attention to the subject's perceptual limitations, producing lingering feelings of indecisiveness, self-doubt, and powerlessness. In both "Advocates" and *The Trial* the calculated effect of the court lies in the perceptual ambiguity that arises once these distinctions have been

dissolved. The power of the court hovers somewhere between the other side of a closed door and the internal spaces of the subject's own body, and it is this combination of perpetual non-localizability and a gradual process of embodiment that proves most debilitating to the protagonist.

As I have shown over the course of this chapter, the din of industrialized labor gave rise to a wide range of subjective noises and auditory hallucinations, which Kafka's novel appropriates in order to portray the court's infiltration of the body and its destabilization of the protagonist's perceptual abilities. But these historically specific otological disorders also raised questions for medical scientists about how to locate the source of perceptual disturbances in the ear and how to identify cases of simulation. Far from occupying a privileged position from which to evaluate the existence or non-existence of the same auditory problems that plague the protagonist of Kafka's novel, medical scientists also grappled with the ear's tendency towards perceptual errors and the unique difficulties presented by its anatomical structure.

Just as the protagonist of *The Trial* struggles to distinguish between the subjective sound of the body and an external threat, or, differences between paranoid anxieties and the real presence of an eavesdropper, medical scientists and insurance officials attempted to navigate the interior spaces of the ear for objective proof of claims made by individuals allegedly suffering from otological problems. "The existence of subjective sounds cannot be determined through the examination," one researcher lamented, "we are therefore reliant on the information given by patients."⁶³ As a solution to the problem the

⁶³ "Das Vorhandensein subjectiver Geräusche können wir durch die Untersuchung nicht feststellen. Wir sind dabei auf die Angaben der Patienten angewiesen"; Passow, *Die Verletzungen des Gehörorganes*, p. 165.

same medical expert proposed a combination of rudimentary hearing tests and the use of special mirrors, as well as a standardized evaluation form intended to draw the investigator's attention to accompanying symptoms of "feelings of vertigo (*Schwindelgefühl*)" or "hypersensitivity to noise (*Überempfindlichkeit gegen Geräusche*)."⁶⁴ By compiling a list of physical signs of damage internal to the ear and cross-checking the patient's own explanation of his symptoms, the medical scientist was better able to discover possible contradictions or inconsistencies, thereby successfully unmasking cases of simulation and insurance fraud.

Throughout these medical discussions, the problem of simulation was understood as a problem of navigating the dark and cavernous spaces of the ear. The obstructed view into the ear presented insurmountable challenges for medical scientists, but it is precisely this image of the ear's inaccessibility, due its labyrinthine structure, which Kafka draws on in depicting the architectural spaces housing the legal system. The ear, just like the court, consists in a series of obscure interlocking spaces not fully open to the rationalized eye of medical science. In his study, *Juridical Otology* (*Gerichtliche Ohrenheilkunde*) (1920), one medical professor at the German University in Prague explicitly evoked a series of spatial metaphors to describe the difficulties experienced by experts asked to evaluate the ear for legal purposes:

The main difficulty that stands in the way of examinations related to expert opinions [for insurance purposes] is the unreliability of the patient's information, which was already emphasized at the beginning of this chapter. If this is already a very disruptive moment (*störendes Moment*) in other specialized fields, in otology, where there are often not the slightest objective symptoms for auditory disturbances of labyrinthine nature (*Hörstörungen labyrinthärer Natur*), it is like an iron wall that separates us from the truth.⁶⁵

⁶⁴ Ibid., p. 200.

⁶⁵ "Die Hauptschwierigkeit, die sich der Untersuchung zu Begutachtungszwecken in den Weg stellt, ist die schon eingangs dieses Kapitels hervorgehobene Unzuverlässigkeit der Angaben des Untersuchten. Ist diese

According to the author of *Juridical Otology*, a glimpse into the ear presents the observer with a scene not wholly unlike the labyrinthine spaces of the court portrayed in Kafka's literary texts, spaces filled with the non-localizable drone of legal power, which appears to come from both within the listener's own body and from external spaces. For the medical researcher, complaints voiced by patients involved unanswerable questions regarding the objective nature of their disorders, taking the form of a labyrinth that hides from view any definitive physical evidence that might shed light on the source of the problem.

Similar to Josef K., who suspects the clandestine tinkering of the court behind closed doors and the walls of neighboring spaces, the threat of simulation and the anatomical structure of the ear positioned medical scientists somewhere behind "an iron wall," which prevented them from ever catching a glimpse of the truth on the other side. According to concurrent medical discourse, to look into the ear of a patient allegedly suffering from subjective noises was to enter a space reminiscent of Kafka's metaphorical coding of the court as a kind of acoustic space. Thus, the labyrinthine structure of the ear served as a figure that circulated from insurance evaluations of subjective noises, through complex and highly contested juridical deliberations, to literary representations of legal power.

The medical scientist's confused glimpse into the cavernous auditory organ leads us into the underground home of Kafka's later text, "The Burrow." With its tunnels and listening posts built in the shape of an ear and its ability to conjure up auditory

bei anderen Spezialfächern schon ein sehr störendes Moment, so ist sie in der Otologie, wo für Hörstörungen labyrinthärer Natur oft nicht die geringsten objektiven Symptome zu finden sind, *eine eherne Mauer, die uns von der Wahrheit trennt*"; Richard Imhofer, *Gerichtliche Ohrenheilkunde* (Leipzig: Carl Kabitzsch, 1920), p. 55.

hallucinations, the architectural structure once again foregrounds the physiological dimension of sound and the often inscrutable nature of modern auditory experience.

Chapter 3

Inside the Ear:

Silence, Self-Observation, and Kafka's Corporeal Spaces

It's really nothing, I sometimes think, no one other than me would hear it. Admittedly, I now hear it more and more distinctly, as my ear has been sharpened through practice.

Franz Kafka, "The Burrow"

Modernity begins when the human being begins to exist within his organism, inside the shell of his head, inside the armature of his limbs, and in the whole structure of his physiology.

Michel Foucault, *The Order of Things*

As we saw in the last chapter, *The Trial* portrays the eruption of subjective noises as an effect of the modern legal process, one that threatens to eradicate any trace of the subject's epistemic stability and replace it with ongoing perceptual confusion. Along with the violent, physical destruction of the defendant's ear, which renders the body audible and blurs the boundaries between inside and outside, we watch as the legal subject's attention is gradually redirected away from the sounds of objects in the external world to the act of listening itself. The appearance of subjective noises therefore marks a twofold attack on perceptual stability. First, the defendant begins to hear sounds with no material grounding in the external world. Second, the audibility of these sounds is implicated in the emergence of a paralyzing self-reflexivity, which takes as its object of inquiry the subject's own body rather than his surrounding environment.

The interrelations between subjective noises and self-reflexive listening practices was something that Kafka would return to and explore in even greater detail in one of his

final literary works, “The Burrow” (1923/24).¹ Moving from the spaces of the legal court to those of an underground domestic sphere, the text tells the story of a mole-like creature determined to build an impenetrable and perfectly silent burrow. Over the course of the narrative, it becomes obsessed with locating the only disruption to this tranquility: a repetitive, almost inaudible hissing sound with no obvious external source. The protagonist’s failure to find the source of the noise is complicated by suggestions that, similar to Josef K. in *The Trial*, what the creature hears may be nothing more than the product of its own body, or the sound of blood “pounding all too loudly in one’s ears (*allzu sehr klopft das eigene Blut im Ohr*).”²

The ambiguity surrounding the sound’s true source, which is exacerbated and rendered nearly irresolvable by the text’s contradictory and unreliable first-person narration, has been widely discussed and assessed by critics. Hermann J. Weigand labels the noise a “hallucination” and interprets its sudden appearance as evidence for the protagonist’s descent into mental illness.³ Henry Sussman acknowledges that the sound

¹ Corporeal noises, auditory hallucinations, and the perceptual effects of silence are topics that preoccupied Kafka at the end of his life. Along with “The Burrow,” they also stand at the center of texts such as “Investigations of a Dog” (1922) and “Josephine the Singer, or the Mouse Folk” (1924). For a brief overview of Kafka’s treatment of subjective noises, see Uwe C. Steiner, “Signalverarbeitung und letzte Dinge: Tinnitus als Epochenkrankheit in der Literatur von Kafka bis zur Gegenwart” in *Epochen/Krankheiten: Konstellationen von Literatur und Pathologie*, ed. Frank Degler and Christian Kohlroß (St. Ingbert: Röhrig, 2006): 213-31. Already in a 1916 letter to Felice, Kafka expressed concern over the impossibility of silence due to the sounds of his own body: “Yesterday, how I longed for silence, for total, impenetrable silence. Do you think I will ever have it, as long as I have ears to hear and a head that *itself creates an overabundance of the unavoidable noise of life* (*Wie habe ich mich gestern nach Stille gesehnt, nach vollkommener, undurchdringlicher Stille. Glaubst du, dass ich sie jemals haben werde, solange ich Ohren zum Hören und einen Kopf habe, der den unentbehrlichen Lärm des Lebens selbst vollführt*)”; Franz Kafka, To Felice Bauer, September 8, 1916, *Briefe an Felice und andere Korrespondenz aus der Verlobungszeit*, ed. Erich Heller and Jürgen Born (Frankfurt a.M.: Fischer, 2003), p. 691, my emphasis.

² Franz Kafka, “Der Bau” in *Die Erzählungen und andere ausgewählte Prosa*, ed. Roger Hermes (Frankfurt a.M.: Fischer, 2006), pp. 465-507, here p. 497; hereafter abbreviated as *B*.

³ Hermann J. Weigand, “Franz Kafka’s ‘The Burrow’ (‘Der Bau’): An Analytical Essay” in *PMLA* 87 (1972): 152-66, here p. 155.

“might be imaginary” and that the creature “might be ‘hearing something,’”⁴ while Wolf Kittler reiterates that the noise may spring from an objectively verifiable source or from “the mad reality of a hallucination.”⁵ Finally, Mladen Dolar reads the protagonist’s growing fear of a malevolent intruder—an anxiety based almost exclusively on the audibility of the noise in the burrow—as a form of “spatialized paranoia, entirely shaped by the scenario of the Other.”⁶

While this chapter does not claim to settle the question of the sound’s source once and for all, it does seek to revise and shed new light on the ‘hallucination thesis’ posited by most critics. Situating Kafka’s literary narrative alongside concurrent anatomical and physiological studies of the ear and analyzing both with an emphasis on what Veit Erlmann has recently termed the “materiality of perception,”⁷ I challenge critical interpretations that portray the creature as simply paranoid or mentally ill. By contrast, I read the disruptive hissing noise not as a sign of madness but as an unintended and unidentified byproduct of the listener’s own body, which in turn encourages the creature’s paranoid delusions and leads to its gradual unraveling.⁸ In short, what I intend

⁴ Henry Sussman, “The All-Embracing Metaphor: Reflections on ‘The Burrow’” in *Critical Essays on Franz Kafka*, ed. Ruth V. Gross (Boston: G.K. Hall & Co., 1990): 130-52, here p. 137.

⁵ Wolf Kittler, “Grabenkrieg - Nervenkrieg - Medienkrieg: Franz Kafka und der 1. Weltkrieg” in *Armaturen der Sinne: Literarische und technische Medien 1870 bis 1920*, ed. Jochen Hörisch and Michael Wetzel (München: Fink, 1990): 289-309, here p. 292.

⁶ Mladen Dolar, “The Burrow of Sound” in *differences: A Journal of Feminist Cultural Studies*, Volume 22, Numbers 2 & 3 (2011): 112-39, here p. 114.

⁷ Although there has recently been a great deal of scholarly interest in the modality of hearing, Erlmann observes, “the physical ear has maintained a strangely elusive, incorporeal presence.” While I agree with his call for a closer examination of the ear’s corporeal presence, unlike Erlmann I do not choose to foreground its physicality, “independent of the signs and meanings that the organ may mediate”; Veit Erlmann, *Reason and Resonance: A History of Modern Aurality* (New York: Zone Books, 2010), pp. 17, 18.

⁸ During at least the late nineteenth and early twentieth centuries, ‘subjective’ or ‘corporeal sounds’ were divided into three categories: entotic, periotic, and subjective. The first referred to noises created as the

to show is that these hallucinations are significantly dependent on acoustic aspects of embodiment.

Such a claim finds support in the text's neglected thematization of self-observations of the body as both an element of the creature's various scientific endeavors as well as the trigger for suspicions of an audible but invisible enemy. Over the course of the narrative we not only witness the protagonist listening to the pulsating sound of his own blood in its ears, thereby recalling Josef K.'s self-reflexive attentiveness to the noises produced by his damaged body in *The Trial*. The creature simultaneously invokes organic terms to describe the inorganic structure of the burrow, observing what it mistakenly identifies as its own body from a detached third-person perspective.

The burrow's corporeal dimension and its function as a site for experimental self-observations is underscored through structural similarities between the labyrinthine passages of the underground home and the anatomical structure of the ear. So while the text ultimately leaves open the true source of the noise, it goes to great lengths in incorporating the anatomy of the ear and the sounds of the body into the narrative *mise-en-scène*. The sounds that the protagonist hears originate both inside his own ears and in the winding corridors of a domestic sphere modeled after the ear, an architectural replica of the auditory organ that is detached from, yet inhabited by, a listener haunted by mysterious, unlocalizable noises. "Modernity begins," Michel Foucault writes, "when the human being begins to exist within his organism, inside the shell of his head, inside

result of vibrations internal to the ear, the second to those created as the result of vibrations in other parts of the body, and the last as the result of no identifiable vibrations whatsoever. Another way of stating my thesis regarding the sound's origin would be to say that the creature is unknowingly hearing entotic or periotic not purely subjective noises. However, throughout this essay I will use the less technical terms 'subjective' and 'corporeal noises' to denote all three and provide qualifiers wherever necessary.

the armature of his limbs, and in the whole structure of his physiology.”⁹ By placing the protagonist inside a home shaped like a giant ear and filling that space with the sounds of the body, Kafka confirms Foucault’s notion of the “spatiality of the body” as a constitutive element of modernity and gives voice to the discovery that “knowledge has anatomico-physiological conditions.”¹⁰ But “The Burrow” also indicates points of contact between the body’s perceived spatiality and Foucault’s subsequent work on panopticism and surveillance. Through processes of self-experimentation and self-observation, whether knowingly or unknowingly, the subject’s anatomy, physiology, and perceptual abilities become the object of both his scientific studies and his surveillant activities.

Kafka’s depiction of self-reflexive listening practices emerges from a historical moment marked by the proliferation of similar techniques throughout the scientific study of hearing, and it is this convergence of literary and scientific self-observations that will serve as my focus. My motivation to do so emerges from the literary text’s own pervasive use of scientific terminology and its depiction of the mole-like creature as an aspiring scientist, an element of the text that has received almost no attention in the secondary literature.¹¹ Despite Mladen Dolar’s recent characterization of the burrow as a “laboratory of sound,” he overlooks the scientific language that structures Kafka’s literary narrative and fails to consider the details of acoustical research that would have

⁹ Foucault, *The Order of Things*, p. 346. On the literary tradition of fictional journeys through the body and their connection to changing philosophical theories of the subject and scientific practices of dissection, see Jutta Müller-Tamm, “WeltKörperInnenraum: Anmerkungen zur literarischen Anthropologie des Körperinneren” in *Internationales Archiv für Sozialgeschichte der deutschen Literatur* Band 25, Heft 1 (2000): 95-133.

¹⁰ Foucault, *The Order of Things*, p. 347. See also Jonathan Crary, *Techniques of the Observer: On Vision and Modernity* (Cambridge: MIT Press, 1990).

¹¹ See Dolar, “The Burrow of Sound,” p. 130; Sussman, “The All-Embracing Metaphor,” p. 133; Jochen Schmidt, “Am Grenzwert des Denkens: Moderne Rationalitätskritik in Kafkas später Erzählung *Der Bau*” in *Figurationen der literarischen Moderne: Helmuth Kiesel zum 60. Geburtstag*, ed. Carsten Dutt and Roman Luckscheiter (Heidelberg: Universitätsverlag Winter), pp. 331-46.

taken place in such a laboratory during the early decades of the twentieth century.¹² Other critics, while commenting on the burrow's role as an "epistemological instrument," have tended to ascribe the text's invocation of scientific language to a general critique of rationalization without addressing the more specific interrelations between the text's exploration of subjective hearing, on the one hand, and the protagonist's efforts at scientific rigor, on the other.¹³ Even Julia Encke's excellent analysis of the continuities between Kafka's literary narrative and later acoustical research conducted by Erich Waetzmann in the 1930s, ignores Kafka's own treatment of scientific practices and his extensive use of scientific language.¹⁴ Elisabeth Strowick provides perhaps the most thorough analysis of the text's representation of scientific practices, but she does so to the exclusion of issues of sound and hearing.¹⁵

By situating "The Burrow" within a constellation of non-literary discourses on hearing and concurrent scientific studies of the sounds of the body, I am by no means proposing a direct line of influence between Kafka's literary work and such scientific studies. I am not, in other words, suggesting that Kafka had read the specific scientific studies I discuss below. However, it is very likely that his work in the insurance industry had exposed him to medical literature on the growing problem of subjective noises and other hearing disorders among factory workers. Regardless of whether his exposure to scientific literature on modern otological disorders can be said to play a causal role in the

¹² Dolar, "The Burrow of Sound," p. 130.

¹³ See Sussman, "The All-Embracing Metaphor," p. 133; Jochen Schmidt, "Am Grenzwert des Denkens."

¹⁴ Julia Encke, *Augenblicke der Gefahr: Der Krieg und die Sinne, 1914-1934* (München: Fink, 2006), especially pp. 111-51.

¹⁵ Elisabeth Strowick, "Epistemologie des Verdachts. Zu Kafkas 'Bau'" in *The Parallax View: Zur Mediologie der Verschwörung*, ed. Marcus Krause et al. (München: Fink, 2011), pp. 123-35.

composition of “The Burrow,” Kafka’s literary self-observations and contemporaneous scientific self-observations produced strikingly similar results and took as their objects of inquiry strikingly similar acoustic phenomena. Thus, we are compelled to look more closely at the discursive formation that enabled an overlapping set of interests and perceptual techniques across the disparate domains of literature and science and, in both, rendered new aspects of auditory experience worthy of attention.

Histories of Self-Observation

In early 1916 Kafka wrote to his former fiancé Felice Bauer outlining future plans to leave Prague and move to Berlin. It was a period of his life filled with intense feelings of isolation, worries about his health, and complaints about his incapacity and general stultification.¹⁶ In contrast to the creative burst he had experienced in the second half of 1914,¹⁷ he was now struggling to write anything at all, burdened by his responsibilities at work and plagued by headaches and insomnia. The man who would appear at Felice’s doorstep after the war would be one tattered and rundown by physical and mental exhaustion. In such a state, he wrote, he would not yet be fit to take her hand and renew their engagement. First, he would have to subject himself to an aggressive routine of

¹⁶ On this period of Kafka’s life, see Nicholas Murray, *Kafka: A Biography* (New Haven & London: Yale University Press, 2004), pp. 237-40.

¹⁷ In October 1914, Kafka finished work on *The Man Who Disappeared* and “In the Penal Colony.” In December of the same year he completed “Before the Law” and most of *The Trial*. It is considered the second great period of his life as a writer, the first being the autumn of 1912. See *ibid.*, p. 219.

introspection and even more extreme forms of solitude. “For the time being,” he explained, “my task will be to crawl into a hole and listen to myself (*mich abzuhören*).”¹⁸

Kafka’s letter posits a strict regime of isolation and introspection as both a remedy to his somatic and creative ailments as well as a prerequisite for his reunion with Felice. But it also privileges hearing as a constitutive element in this figurative therapy. Taking the doctor and medical auscultation as its model, the letter more specifically outlines a mode of listening according to which the ear is turned in on itself and directed inward toward the listener’s own body.¹⁹ Kafka’s desire to employ techniques of auditory self-observation came two years before he was officially diagnosed with tuberculosis and nine months after he began wearing wax and cotton earplugs produced by the newly founded Ohropax firm in Berlin to block out the noise of his surroundings while writing.²⁰ The wax and cotton balls which Kafka regularly stuffed into his ears can be regarded as the material basis for his proposed regime of self-observation, providing the user with a “hole” in the form of acoustic isolation from the surrounding environment while simultaneously enabling him to “listen to himself” by bringing to the foreground both his inner mental life and the sounds of his own body. By 1922, shortly before he

¹⁸ “Meine Aufgabe wird zunächst sein, mich irgendwo in ein Loch zu verkriechen und mich abzuhören”; Franz Kafka, To Felice Bauer, January 18, 1916, *Briefe an Felice und andere Korrespondenz aus der Verlobungszeit*, ed. Erich Heller and Jürgen Born (Frankfurt a.M.: Fischer, 2003), p. 647.

¹⁹ On medical auscultation and its role in the formation of new modes of listening in the nineteenth century, see Jens Lachmund, “Making Sense of Sound: Auscultation and Lung Sound Codification in Nineteenth-Century French and German Medicine” in *Science, Technology, and Human Values* 24 (4) (1999): 419-50; Jonathan Sterne, “Medicine’s Acoustic Culture: Mediate Auscultation, the Stethoscope and the ‘Autopsy of the Living’” in *The Auditory Culture Reader*, ed. Michael Bull and Les Back (Oxford & New York: Berg, 2003): 191-222.

²⁰ See Kafka, To Felice Bauer, April 5, 1915, *Briefe an Felice*, p. 632. On the history of the earplug, see *Lauter Ruhe: 100 Jahre Ohropax: 100 Jahre Luxus für die Ohren* (Wehrheim: Ohropax GmbH, 2007); Hillel Schwartz, “Inner and Outer Sancta: Ear Plugs and Hospitals” in *The Oxford Handbook of Sound Studies*, ed. Trevor Pinch and Karin Bijsterveld (Oxford: Oxford University Press, 2011): pp. 273-97. See also Caroline Basset, “Twittering Machines: Antinoise and Other Tricks of the Ear” in *differences: A Journal of Feminist Cultural Studies*, Volume 22, Numbers 2 & 3 (2011): 276-99.

started “The Burrow,” his use of the rudimentary anti-noise device had become a self-proclaimed necessity.²¹

In the context of this later narrative, it is also important to note that early discussions surrounding the earplug praised its usefulness not only for eliminating noise, but also as a means for intentionally *producing* subjective sounds in the ears of experimental subjects, in much the same way that the silent underground home in Kafka’s literary text is described as eliciting sounds with no external source from its lone inhabitant. Maximilian Plessner’s antiphone from 1885, for example, was explicitly marketed as a tool for “the production of subjective auditory sensations (*zum Hervorbringen subjektiver Gehörsempfindungen*)” and was at least in part inspired by August Lucae’s influential work on subjective noises published one year earlier.²² Thus the earplug promised to reshape its user’s experience of the surrounding environment in a somewhat paradoxical manner. On the one hand, it served to eliminate noise completely and establish a sense of peace and tranquility believed to have existed in earlier historical periods. In this way, modern urban soundscapes could be temporarily tamed and subdued, and it was during these intervals that, for Kafka, writing could take place. On the other hand, it functioned as a tool for rendering audible those sounds produced within the body, thereby bringing into existence an entirely different set of noises otherwise imperceptible. Rather than providing listeners with ‘absolute silence’—an unreachable acoustical ideal imagined as the antidote to the sonic realities of the modern world—the

²¹ See Kafka, *Briefe an Felice*, p. 632; Franz Kafka, July 24, 1922, *Briefe 1902-1924*, ed. Max Brod (New York: Schocken Books, 1958), p. 398.

²² See Maximilian Plessner, *Die neueste Erfindung: Das Antiphon. Ein Apparat zum Unhörbarmachen von Tönen und Geräuschen* (Rathenow, Schulze und Bartels, 1885), p. 42; August Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen* (Berlin: Otto Enslin, 1884).

device layered the muffled sounds of the external world atop the now amplified sounds of the listener's own breathing and a range of subjective noises with no connection to spaces outside of the body. By simultaneously abating external noise and manipulating the inner ear to produce subjective tones, the earplug forced self-observation on its users as a default mode of perceiving the world.

The term 'self-observation (*Selbstbeobachtung*)' has long encompassed a set of activities and experiences relevant to both aesthetics and the experimental sciences. It designates 'introspection' in the broadest sense of probing the inner life of the mind as well as the examination of one's own psychological states and sensory experiences.²³ The convergence of literary and scientific self-observations would become even more pronounced around 1900 when modernist narrative strategies of first-person stream-of-consciousness and a preoccupation with the nature of sense perception ran parallel to self-reflexive scientific investigations into subjective phenomena and the role of the body in perceptual processes. It was during this same period that philosophers and literary authors such as Friedrich Nietzsche and Robert Musil lauded the subjugation of their own bodies to scientific modes of experimentation and chose to characterize introspection as an experimental operation. In *The Gay Science* from 1882, for example, Friedrich Nietzsche declared: "We want to be our own experiments and laboratory animals (*Wir selber wollen unsere Experimente und Versuchs-Thiere sein*)," calling on thinkers who "look experiences in the eye as strictly as in a scientific experiment (*Erlebnissen so*

²³ On the history of introspection and self-observation within the modern sciences, see Edwin G. Boring, "A History of Introspection" in *Psychological Bulletin* 50 (1953): 169-89; Kurt Danziger, "The History of Introspection Reconsidered" in *Journal of the Behavioral Sciences* 16 (1980): 241-62; Dehorah J. Coon, "Standardizing the Subject: Experimental Psychologists, Introspection, and the Quest for a Technoscientific Ideal" in *Technology and Culture* 34/4 (1993): 757-83; Christoph Hoffmann, "Gebilde des Protokollierens: Schreibverfahren in Kurt Lewins Psychologie der Selbstbeobachtung" in *Kulturgeschichte des Menschenversuchs im 20. Jahrhundert*, ed. Birgit Griesbeck et al. (Frankfurt a.M.: Suhrkamp, 2009): 129-55.

streng ins Auge sehen, wie einem wissenschaftlichen Versuche)."²⁴ Two decades later, Robert Musil wrote in his diary that he strove to be "the scholar who placed his own organism under the microscope (*der Gelehrte zu sein, der seinen eigenen Organismus unter das Mikroskop setzt*)."²⁵ Kafka's desire to crawl into a hole and listen to himself reiterates this literary and philosophical celebration of isolation and self-reflexivity. But it also introduces a distinctly auditory dimension into discussions of self-observation, substituting an attentive ear for the scrutinizing gaze. If Musil invokes the microscope and Nietzsche speaks of staring his own experiences in the eye, Kafka depicts the self-observer as an attentive listener with both ears turned inward towards the body.

Despite a preoccupation with techniques of observation, *self-observation's* historical development in both aesthetics and the experimental sciences has remained remarkably underexplored. In their introduction to the recent collection, *Histories of Scientific Observation*, Lorraine Daston and Elizabeth Lunbeck demonstrate the ways in which even a pervasive and fundamental practice like observation underwent significant historical transformations and gave rise to ever-changing modes of recording and

²⁴ Friedrich Nietzsche, *Die fröhliche Wissenschaft* (1882) in *Friedrich Nietzsche: Werke II*, ed. Karl Schlechta (Frankfurt a.M.: Ullstein, 1972), p. 460. On self-experimentation in literature and science, see Bernt Karger-Decker, *Ärzte im Selbstversuch: Ein Kapitel heroischer Medizin* (Leipzig: Koehler & Armelang, 1969); Lawrence K. Altman, *Who Goes First? The Story of Self-Experimentation in Medicine* (Berkeley: University of California Press, 1998); Arsen P. Fiks, *Self-Experimenters: Sources for Study*, ed. Paul A. Buelow (Westport, Conn.: Praeger, 2003); Jürgen Daiber, "Selbstexperimentation: Von der empirisch-aufklärerischen zu einer spezifisch romantischen Versuchspraxis" in *Aurora: Jahrbuch der Eichendorff-Gesellschaft für die klassisch-romantische Zeit* 58 (1998): 49-68; Katrin Solhdju, *Selbstexperimente: Die Suche nach der Innenperspektive und ihre epistemologischen Folgen* (München: Wilhelm Fink, 2011).

²⁵ Robert Musil, *Tagebücher I*, ed. Adolf Frisé (Reinbek bei Hamburg: Rowohlt, 1976), p. 3. On Musil and self-observation, see Christoph Hoffmann, 'Dichter am Apparat': *Medientechnik, Experimentalpsychologie und Texte Robert Musils 1899-1942* (München: Fink, 1997), pp. 61-88.

displaying data.²⁶ However, while they convincingly make the case for observation as a legitimate object of historical inquiry—one that increases our understanding of both scientific practices and the cultural history of the senses—surprisingly, the authors make no mention of self-observation and its role within the sciences, especially within experimental psychology.

Their omission can be understood, at least in part, as an uncritical acceptance of self-observation's increasingly marginalized status within the sciences over the course of the nineteenth century. As early as 1858, the physician and physiologist Emil Du Bois-Reymond attributed the physical and mental collapse of his former mentor, Johannes Müller, to his “self-absorbed listening to his sense organs” and the “overgrowing of science with aesthetics.”²⁷ According to Du Bois-Reymond, Müller's attentiveness to the sounds of his own body, and his attempt to straddle the divide between the roles of experimental subject and scientific researcher, would ultimately result in his death. Self-observation was not only unscientific; it was dangerous and self-destructive. In his critique, Du Bois-Reymond also made sure to present self-observation as a methodology more suited to the realm of aesthetics, which he portrayed as an unruly and unmanageable enterprise antithetical to the production of scientific knowledge.

²⁶ Lorraine Daston and Elizabeth Lunbeck, “Observation Observed” in *Histories of Scientific Observation*, ed. Lorraine Daston and Elizabeth Lunbeck (Chicago: University of Chicago Press, 2011): 1-9.

²⁷ See Erlmann, *Reason and Resonance*, pp. 202-16. In his 1826 study, *On the Comparative Physiology of Human and Animal Vision*, Müller called for a detailed investigation into the nature and origin of subjective auditory sensations by means of self-observation. Whereas the topic of subjective vision had gained considerable currency in recent years with the publication of Goethe's color theory (1810) and Jan Purkinje's work on visual afterimages (1823/26), subjective hearing, Müller argued, remained a largely unexplored domain within the science of the senses. “Subjective auditory sensations,” he wrote, “await a true self-observer (*Selbstbeobachter*).” See Johannes Müller, *Zur vergleichenden Physiologie des Gesichtssinnes des Menschen und der Thiere nebst einem Versuch über die Bewegungen der Augen und über den menschlichen Blick* (Leipzig: C. Knobloch, 1826), p. 454.

Du Bois-Reymond's commentary on the death of his former mentor prefigures a more intense critique of self-observation around 1900, giving rise to a gradual shift from practices of introspection to a reliance on objective measurements of psychical phenomena within mainstream experimental psychology and research on the physiology of sense perception. As the historian of science Christoph Hoffmann points out, one of the main tensions within experimental psychology in the second half of the nineteenth century was between the methodologies advocated by Wilhelm Wundt and Carl Stumpf.²⁸ While the former was distrustful of the experimental subject's own testimony of his or her sensory experiences and sought to replace the philosophical tradition of introspection with more reliable, objective methods of documenting experience, Stumpf and early Gestalt psychologists privileged self-observation in the laboratory and strove to train subjects in analyzing, recording, and articulating their own experiences in the most accurate way possible.²⁹ Around the same time, Oswald Külpe and the Würzburg School of psychology also became major proponents of self-observation, explicitly opposing the methods of more mainstream figures like Wundt and aligning themselves with Stumpf and his students.³⁰

²⁸ Hoffmann, 'Dichter am Apparat', p. 66.

²⁹ Perhaps not surprisingly, many of these same scientists were also deeply interested in aesthetics and frequently turned to works of art, or invoked the power of music over the human soul, in outlining theories of the human sensorium as enduringly coherent and unified amidst modern processes of autonomization and fragmentation. See Max Wertheimer, "Gestalt Theory" (1924) in *A Source Book of Gestalt Psychology*, ed. Willis D. Ellis (London: Kegan Paul, Trench, Trubner & Co., LTD., 1938), pp. 1-11; Erich M. v. Hornbostel, "Die Einheit der Sinne" in *Melos: Zeitschrift für neue Musik*, Vol. IV (1925): 290-97; Mitchell G. Ash, *Gestalt Psychology in German Culture, 1890-1967* (Cambridge: Cambridge UP, 1995).

³⁰ On the Würzburg School, see the editor's introduction to *Introspektion: Texte zur Selbstwahrnehmung des Ichs*, ed. Paul Ziche (Wien/New York: Springer, 1999), pp. 1-42; Burkhard Vollmers, *Kreatives Experimentieren: Die Methodik von Jean Piaget, den Gestaltpsychologen und der Würzburger Schule* (Wiesbaden: Deutscher Universitäts Verlag, 1992); Andrea Pelmtner, 'Experimentierfeld des Seinkönnens' – *Dichtung als 'Versuchsstätte': Zur Rolle des Experiments im Werk Robert Musils* (Würzburg: Königshausen & Neumann, 2008), pp. 102-7.

Two simultaneous and interrelated historical developments inform the cultural context from which Kafka's interest in self-auscultation emerges. On the one hand, the dominant approach within experimental psychology began to rely more and more on the objective measuring of psychical phenomena, leaving little room for self-observation which became coded by many as non-scientific and associated with aesthetics. On the other hand, philosophers and literary authors began to articulate a strong desire to subject their own bodies to scientific forms of experimentation and observation. It would be wrong, however, to conclude that self-observation simply disappeared from the sciences and migrated to the realm of aesthetics. While influential figures like Wilhelm Wundt attempted to exorcise it from experimental psychology, and Du Bois-Reyomond criticized the practice as too closely bound up with aesthetics, early Gestalt psychology and Külpe's Würzburg School were two cases where it not only maintained its scientific credibility, but was in fact privileged over alternative methodologies. It is against the backdrop of these changing valuations of self-observation and its position on the border between science and aesthetics that Kafka's literary representation of subjective hearing must be understood.

Indeed, one of the more specific areas of scientific research in which self-observation thrived at the time, and with which Kafka's "The Burrow" shared considerable thematic ground, was in investigations regarding the interrelated phenomena of silence, subjective noises, and medical diseases of the ear. While Nietzsche and Musil lauded the subjugation of their own bodies to scientific modes of experimentation and observation, late nineteenth-century experimental psychologists and medical scientists began to employ self-observation as a methodology in scientific research on sound and

hearing. For their studies on the perception of tone, threshold sensitivity, and various psychological disorders, figures such as Carl Stumpf, William T. Preyer, and August Lucae listened in near silence to the acoustic properties of noises produced by their own bodies and textually recorded the conditions under which they appeared.

Employing techniques of self-observation, scientists began to highlight the perpetual noise generated by the body and to redefine the basic parameters of silence. In his influential study, *On the Limits of the Perception of Tone*, William T. Preyer set out to refute a popular hypothesis advanced by foundational experimental psychologist, Gustav Fechner, which stated that there were significant differences between the auditory phenomenon known as silence and the visual darkness perceived by an observer with his or her eyes closed. While Fechner maintained that visual darkness constituted a positive sensation, he regarded silence as equivalent to not listening at all. By contrast, Preyer saw silence and darkness as essentially the same, in that they both registered sensations on the positive side of zero. Silence, he argued, was a “true positive sensation (*wahre positive Empfindung*).”³¹

Despite the mole-like creature’s apparent preoccupation with absolute silence in “The Burrow,” a closer look at the text reveals that his acoustical ideal in fact comes closest to Preyer’s reformulation of silence as a “true positive sensation.” As we will see, it is not silence as such that he desires but rather “the rustling of silence (*das Rauschen*

³¹ William T. Preyer, *Über die Grenzen der Tonwahrnehmung* (Jena: H. Dufft, 1876), p. IV. “Out of internal factors just like the eye, so too out of internal factors of the blood stream, warmth, and fluid pressure in the inner parts of the ear, an uncharacteristic sensation comes about in the ear which one identifies as peculiar only because it emerges when all or most of the nerves are excited simultaneously but with limited intensity. This sensation, however, is that of silence (*Wie im Auge aus inneren Gründen, so muss auch im Ohre aus inneren Gründen schon durch den Druck der Flüssigkeit in den inneren Ohrtheilen, den Blutstrom und die Wärme eine Empfindung zu Stande kommen, die man nur deshalb gewöhnlich nicht charakteristisch findet und als besondere Empfindung bezeichnet, weil sie entsteht, indem all oder die meisten tonempfindenden Nerven zugleich erregt sind, nur mit äusserst geringer Intensität. Diese Empfindung ist aber die der Stille*); Preyer, *Über die Grenzen der Tonwahrnehmung*, p. 67.

der Stille)” (B 492). In this way the text avoids positing an all or nothing ideal of total silence and instead promotes what Eugenie Brinkema has recently termed a “regime of near inaudibility,” an auditory environment bearing distinct traces of the listener’s body.³²

Rather than relying on testimony from patients, Preyer’s reversal of assumptions surrounding silence and sensation drew on practices of self-observation and the auto-perception of the internal organs. “Various auditory sensations can also be induced without external auditory stimuli in healthy ears,” he wrote, “for example, I am able to hear clearly the individual phases of heart activity and the contraction and expansion of the arteries when I lie down and close one ear with my finger.”³³ Just as Kafka insisted on wearing earplugs while writing, Preyer stuffed his ears with his own fingers in order to block out external impressions and better isolate, even induce, the subjective buzzing, ringing, and hissing that served as his object of study.

The same approach was easily transferable to related scientific domains. Like Preyer, August Lucae employed “repeated self-observation (*wiederholte Selbstbeobachtung*)” in his studies of “ringing in the ears (*Ohrklingen*)” and other otological disorders,³⁴ while Carl Stumpf recorded his self-observations as part of a study

³² Eugenie Brinkema, “Critique of Silence” in *differences: A Journal of Feminist Cultural Studies*, Volume 22, Numbers 2 & 3 (2011): 211-34.

³³ “Man kann aber mannigfaltige Schallempfindungen im gesunden Ohre auch ohne äusseren Schallreiz hervorrufen. Ich bin z.B. im Stande, wenn ich liegend ein Ohr mit einem Finger verschliesse, die einzelnen Phasen der Herzthätigkeit und die Contraction und Expansion von Arterien vollkommen deutlich zu hören”; Preyer, *Über die Grenzen der Tonwahrnehmung*, p. 72.

³⁴ Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen*, p. 3.

on the perception of tones at the threshold of audibility.³⁵ Plugging his ears like Preyer and Kafka, Stumpf observed the way in which he was able to turn the hallucinatory “sound of rain (*das Geräusch des Regens*)” on and off. At another point, he recounted how the subjective sound of the sea increased or decreased depending on his position in bed.³⁶ Here, the boom of the sea gradually gave way to a new sound, one completely unrelated to the acoustic content of his surrounding environment. “The deep roar of the sea, where I was staying at that time for six weeks,” he observed, “stopped completely. Only a hissing (*Zischen*) remained.”³⁷ The “hissing” that persisted in Stumpf’s ears after all other sounds had been silenced around him was a complaint voiced again and again by patients suffering from subjective noises and traumatic injuries to the ear.³⁸ But it was also a problem experienced by Kafka’s mole-like protagonist, who upon waking one day in its formerly silent home suddenly hears “an almost inaudible hissing sound (*ein an sich kaum hörbares Zischen*)” (B 487).

³⁵ Both Stumpf and Lucae explicitly referred to Preyer’s study as convincing proof against the possibility of absolute silence. See Stumpf, *Tonpsychologie*, 2 vols. (Leipzig: S. Hirzel, 1883), vol. 1, p. 382; Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen*, p. 17.

³⁶ Carl Stumpf, “Beobachtungen über subjective Töne und über Doppelthören” in *Zeitschrift für Psychologie und Physiologie der Sinnesorgane* 21 (1899): 100-21, here p. 102. On scientific research related to subjective noises and the perception of tone at this time, see Wolfgang Scherer, “Hör-Versuche: Die experimentelle Decodierung des musikalischen Hörens um 1900” in *Armaturen der Sinne: Literarische und technische Medien 1870 bis 1920*, ed. Jochen Hörisch and Michael Wetzel (München: Fink, 1990): 107-36.

³⁷ “Das tiefe Brausen des Meeres, an welchem ich mich damals sechs Wochen aufhielt, hörte vollständig auf, nur ein Zischen blieb übrig”; Stumpf, “Beobachtungen über subjective Töne und über Doppelthören,” p. 102.

³⁸ Lucae recounted a case in which a female patient was plagued by “a continuous, severe, high hissing in the ears (*einem kontinuierlichen heftigen hohen Ohrenzischen*)” and asserted in the same text that “in a number of purulent infections of the middle ear, after complete recovery, a hissing or rustling (*Zischen oder Rauschen*) persists for months, even years (*Bekannt ist ferner, dass in einer grossen Reihe von eiterigen Mittelohrentzündungen, nach völliger Verheilung derselben, Monate, ja selbst Jahre lang leises Zischen oder Rauschen bestehen bleiben*).” Elsewhere, Stumpf described how one of his own patients suffered from “hissing (*Zischen*)” and the “roar of a steady waterfall (*Rauschen eines stetigen Wasserfalls*).” See Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen*, pp. 8, 10; Stumpf, *Tonpsychologie*, p. 424.

Similar to Preyer and Stumpf, the protagonist of Kafka's "Burrow" is depicted as a figure engaged in scientific activities of experimentation and observation, frequently employing notions of 'experiment,' 'calculation,' and 'observation' in the construction and surveillance of his underground home. Throughout the text, the incommensurability between hypothesis and empirical evidence is cited as one of the primary reasons for the creature's anxiety and increasingly erratic behavior. "But precisely the fact that it remains the same at all points bothers me the most," he explains with regard to the sound's omnipresence, "for it cannot be reconciled with my original assumption (*Aber gerade dieses Gleichbleiben an allen Orten stört mich am meisten, denn es läßt sich mit meiner ursprünglichen Annahme nicht in Übereinstimmung bringen*)" (B 490). Inside the burrow the creature makes "exhausting calculations (*mühselige Berechnungen*)" (B 466) and constructs "experimental diggings (*Versuchsgrabungen*)" (B 487) and an "experimental area (*Versuchsgebiet*)" (B 490) to corner its enemy. Elsewhere, we watch as it builds an "experimental ditch (*Versuchsgraben*)" (B 478) and carries out "partial and incomplete experiments (*Halb- und Zehntelversuche*)" (B 478) to practice its escape outside the entrance of its home.

In a passage that recalls Kafka's 1916 letter to Felice Bauer, the creature elaborates on its activities involving the experimental ditch and its strained effort to assume the roles of both scientific researcher and experimental subject:

I crawl into the ditch, close it after me, wait meticulously calculated periods of time, long and short, at various hours of the day, then fling off the moss, come out from my hole and record my observations (*registriere meine Beobachtungen*). I have the most varied experiences, both good and bad; but I have not been able to discover a universal principle or an infallible method of descent.³⁹

³⁹ "Ich krieche in den Graben, decke ihn hinter mir zu, warte sorgfältig berechnete kürzere und längere Zeiten zu verschiedenen Tagesstunden, werfe dann das Moos ab, komme hervor und registriere meine Beobachtungen. Ich mache die verschiedensten Erfahrungen, guter und schlimmer Art, ein allgemeines Gesetz oder eine unfehlbare Methode des Hinabsteigens finde ich aber nicht" (B 479).

In its multiple allusions to experimentation, observation, and the detailed recording of data in the hope of establishing general laws, the text depicts the creature as an experimental scientist, one eager to incorporate its own body into the experimental protocol. The observational practices utilized in the surveillance of the burrow's entrance are applied to the creatures' own experiences, thereby bringing to mind Nietzsche's call for the modern individual to look his or her own experiences in the eye "as strictly as in a scientific experiment." Through the frantic experimental procedure the protagonist races back and forth between the experimental ditch and his observational post, oscillating between the position of observer and the object of inquiry and struggling to occupy both internal and external spaces simultaneously.

Domestic and Corporeal Hybrids in "The Burrow"

The surveillance of the burrow's actual and experimental entrance, which, as the protagonist explains, it could spend the rest of its life "observing and keeping constantly before [his] eyes" (*mein Leben in der Beobachtung des Eingangs zu verbringen und immerfort mich vor Augen zu halten*)" (B 477), is ultimately revealed to be a figurative form of self-observation. What had initially appeared to be the cool, detached gaze of the scientist examining its specimen turns out to be a mode of visual perception folded back on itself and aimed at the observer's own body. "At such times it is as if I'm standing not in front of my house, but rather in front of myself while I'm sleeping."⁴⁰ Thus, the text portrays the mole-like animal as assuming the roles of both experimental subject and scientific observer at the same time that the boundaries between its body and the

⁴⁰ "Mir ist dann, als stehe ich nicht vor meinem Haus, sondern vor mir selbst, während ich schlafe"; *ibid.*, p. 476.

underground burrow begin to blur. In racing between the experimental ditch and an observational post, the protagonist enacts a collapsing of distinctions between subject and object, inside and outside, domestic and corporeal spaces.

From the start, Kafka's text emphasizes the symbiotic relationship between the protagonist and its underground home. Addressing the walls and passageways of the burrow, the mole-like creature proclaims: "You belong to me, I belong to you, we are united. What can happen to us?"⁴¹ Thus, the text draws connections between the anatomy of the ear and the spatial arrangement of the burrow, while also pointing to a more fundamental, self-conscious intermingling of body and home. In fact, one of the preconditions for the construction of the burrow lies in the merger of human and architectural forms, with the walls of the private sphere taking shape only in coordination with the fracturing of the body and the release of internal fluids. Recalling the way in which it was forced to build the central square of the burrow, the protagonist remarks: "So I had to run against the ground with my forehead thousands and thousands of times, for whole days and nights, and I was glad when I beat it bloody, for that was proof that the walls were beginning to harden."⁴² In order to secure protection against threats from the outside world, the protagonist must inflict physical damage on its own body. Without proper tools, it is forced to form the walls by bashing its head against the earth and, in the process, spilling its own blood. At the same time that it highlights the crude methods with which the protagonist operates, it stages the construction of the private sphere as a melding of architectural materials and the internal fluids of the body. What is important

⁴¹ "Ihr gehört zu mir, ich zu Euch, verbunden sind wir, was kann uns geschehn"; *ibid.*, p. 487.

⁴² "Mit der Stirn also bin ich tausend und tausend mal tage- und nächtelang gegen die Erde angerannt, war glücklich wenn ich sie mir blutig schlug, denn dies war ein Beweis der beginnenden Festigung der Wand"; *ibid.*, p. 469).

to note is not merely that the body must be instrumentalized in order to ensure isolation, but rather, more radically, that evidence for this fortification can only be glimpsed once the body has given way to, and been cracked open by, an architectural structure subsequently regarded as a protective shell and guarantee of physical safety.

With the sudden appearance of unlocalizable noises within the burrow, this symbiotic union is shown to be a liability. “But simply by virtue of being the owner of this great sensitive (*empfindlich*) work I am obviously defenseless against any serious attack. The joy of possessing it has spoiled me, the sensitivity of the burrow has made me sensitive; any physical harm to it (*seine Verletzungen*) pains me as if it were my own.”⁴³ Invoking contemporaneous accounts of the ear as dangerously passive and open to attack by the aggressive noises of the modern world, both the burrow and its owner are revealed to be “defenseless (*wehrlos*).”⁴⁴ This newly discovered vulnerability manifests itself in the form of mutual pain shared by the protagonist and the home it has constructed. In its ability to experience pain, the architectural structure is portrayed as an almost living organism. The passage additionally reiterates the protagonist’s initial

⁴³ “Eben als Besitzer dieses großen empfindlichen Werkes bin ich wohlverstanden gegenüber jedem ernstern Angriff wehlos, das Glück seines Besitzes hat mich verwöhnt, die Empfindlichkeit des Baues hat mich empfindlich gemacht, seine Verletzungen schmerzen mich als wären es die meinen”; *ibid.*, p. 502.

⁴⁴ In 1911, for example, one medical expert noted: “Of the total number of stimuli which strike our brain over the course of the day and which must be processed by it, an extraordinarily high percentage go the way of the ear. This sensory organ is therefore at a disadvantage in contrast to the other ‘higher’ senses and the eye, *as it has been left defenseless by nature*. There may be just as many light and color impressions moving around me, but I don’t need to look away and can close my eyes in the most disruptive cases and be protected. Against sound waves, however, there is no escape (*Von der Gesamtzahl der Reize, die im Laufe des Tages unser Gehirn treffen und von ihm verarbeitet werden müssen, geht ein außerordentlich großer Teil den Weg des Ohres, dabei ist dieses Sinnesorgan dem anderen ‘höheren’ Sinne, dem Auge gegenüber insofern im Nachteil, als es von der Natur wehrlos gelassen worden ist. Mögen noch so viele Licht- und Farbeindrücke um mich herum sich bewegen, ich brauche nicht hinzusehen, kann im störendsten Falle die Augen schließen und bin geschützt. Gegen Schallwellen gibt es aber keine Rettung*”); Hans Haenel, “Die Wohnung und der Lärm” in *Bericht über den III. Internationalen Kongreß für Wohnungshygiene in Dresden vom 2. bis 7. Oktober 1911*, ed. Friedrich Eugen Hopf (Dresden: Buchdruckerei der Dr. Güntzschen Stiftung, 1911), pp. 256-66, here p. 257, my emphasis.

experience of pain during the construction of the central square. Its voluntary self-destruction in that opening scene, which had served as a means to secure protection against intrusions from the outside world, results in both an inextricable union between body and home as well as a false sense of comfort and heightened sensitivity to the very possibility of intrusions from without.

A feeling of confusion regarding the limits of the body is reinforced through the text's superimposition of the anatomical structure of the ear onto the architectural layout of the protagonist's home, further situating the practice of self-observation within a series of metaphorical displacements that externalize the body.⁴⁵ While Kafka's literary text refers to the burrow's "canals" or "passageways (*Gänge*)" (B 467), "the narrow and thin-walled canals of the labyrinth (*die engen und schwachwandigen Gänge des Labyrinthes*)" (B 485), the "labyrinth structure (*Labyrinthbau*)" (B 473) and "entry labyrinth (*Eingangslabyrinth*)" (B 473), medical scientists employed an almost identical set of spatial metaphors, citing the "auditory canals (*Gehörgänge*)" and "walls (*Wände*)" of the ear, as well its "stairs (*Treppen*)" and "circular window (*das runde Fenster*)" (fig. 3.1 and 3.2).⁴⁶ They also vehemently defended their use of the metaphorical term, "labyrinth (*Labyrinth*)," for the inner ear as "completely justified (*durchaus berechtigt*)" due to the

⁴⁵ Such a reading finds support in interpretations given by Encke and Johannes Türk, who both note the ways in which the structural traits of the burrow resemble the ear. See Encke, *Augenblicke der Gefahr*, p. 149; Johannes Türk, "Rituals of Dying, Burrows of Anxiety in Freud, Proust, and Kafka: Prolegomena to a Critical Immunology" in *The Germanic Review* 82.2 (Spring 2007): 141-56, here p. 153.

⁴⁶ The use of this particular set of architectural metaphors to describe the anatomy of the ear goes back at least as far as Ernst Florens Friedrich Chladni's pioneering work in acoustics in the early nineteenth century. See his *Die Akustik* (Leipzig: Breitkopf und Härtel, 1802), pp. 277-83. Veit Erlmann notes that it was Galen of Pergamon (AD 129-216), personal physician to the Roman emperor Marcus Aurelius, who first compared the inner ear to a labyrinth. See Erlmann, *Reason and Resonance*, p. 217.



Fig. 26. Das Gehörorgan bei einem Erwachsenen. Die rechte Seite zeigt das Ohr mit dem Gehörgang, die linke Seite zeigt das Innenohr. A. äußere Gehöröffnung, B. Gehörgang, C. Trommelfell, D. Hammer, E. Amboss, F. Steigbügel, G. Hammerhaken, H. Hammerhakenknopf, I. Hammerhakenknopfknopf, J. Hammerhakenknopfknopfknopf, K. Hammerhakenknopfknopfknopfknopf, L. Hammerhakenknopfknopfknopfknopf, M. Hammerhakenknopfknopfknopfknopfknopf, N. Hammerhakenknopfknopfknopfknopfknopfknopf, O. Hammerhakenknopfknopfknopfknopfknopfknopfknopf, P. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopf, Q. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopfknopf, R. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopfknopfknopf, S. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopf, T. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopf, U. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopf, V. Hammerhakenknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopfknopf.



Fig. 27. Das Innenohr, hier vergrößert und zum Teil geöffnet. A. Vestibulum, B. Schnecke, C₁, C₂, C₃ die drei Windungen der Schnecke, a die drei Nervenstränge, b, c, d, e, f, g, h, i, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, aa, ab, ac, ad, ae, af, ag, ah, ai, aj, ak, al, am, an, ao, ap, aq, ar, as, at, au, av, aw, ax, ay, az, ba, bb, bc, bd, be, bf, bg, bh, bi, bj, bk, bl, bm, bn, bo, bp, bq, br, bs, bt, bu, bv, bw, bx, by, bz, ca, cb, cc, cd, ce, cf, cg, ch, ci, cj, ck, cl, cm, cn, co, cp, cq, cr, cs, ct, cu, cv, cw, cx, cy, cz, da, db, dc, dd, de, df, dg, dh, di, dj, dk, dl, dm, dn, do, dp, dq, dr, ds, dt, du, dv, dw, dx, dy, dz, ea, eb, ec, ed, ee, ef, eg, eh, ei, ej, ek, el, em, en, eo, ep, eq, er, es, et, eu, ev, ew, ex, ey, ez, fa, fb, fc, fd, fe, ff, fg, fh, fi, fj, fk, fl, fm, fn, fo, fp, fq, fr, fs, ft, fu, fv, fw, fx, fy, fz, ga, gb, gc, gd, ge, gf, gg, gh, gi, gj, gk, gl, gm, gn, go, gp, gq, gr, gs, gt, gu, gv, gw, gx, gy, gz, ha, hb, hc, hd, he, hf, hg, hh, hi, hj, hk, hl, hm, hn, ho, hp, hq, hr, hs, ht, hu, hv, hw, hx, hy, hz, ia, ib, ic, id, ie, if, ig, ih, ii, ij, ik, il, im, in, io, ip, iq, ir, is, it, iu, iv, iw, ix, iy, iz, ja, jb, jc, jd, je, jf, jg, jh, ji, jj, jk, jl, jm, jn, jo, jp, jq, jr, js, jt, ju, jv, jw, jx, jy, jz, ka, kb, kc, kd, ke, kf, kg, kh, ki, kj, kk, kl, km, kn, ko, kp, kq, kr, ks, kt, ku, kv, kw, kx, ky, kz, la, lb, lc, ld, le, lf, lg, lh, li, lj, lk, ll, lm, ln, lo, lp, lq, lr, ls, lt, lu, lv, lw, lx, ly, lz, ma, mb, mc, md, me, mf, mg, mh, mi, mj, mk, ml, mm, mn, mo, mp, mq, mr, ms, mt, mu, mv, mw, mx, my, mz, na, nb, nc, nd, ne, nf, ng, nh, ni, nj, nk, nl, nm, nn, no, np, nq, nr, ns, nt, nu, nv, nw, nx, ny, nz, oa, ob, oc, od, oe, of, og, oh, oi, oj, ok, ol, om, on, oo, op, oq, or, os, ot, ou, ov, ow, ox, oy, oz, pa, pb, pc, pd, pe, pf, pg, ph, pi, pj, pk, pl, pm, pn, po, pp, pq, pr, ps, pt, pu, pv, pw, px, py, pz, qa, qb, qc, qd, qe, qf, qg, qh, qi, qj, qk, ql, qm, qn, qo, qp, qq, qr, qs, qt, qu, qv, qw, qx, qy, qz, ra, rb, rc, rd, re, rf, rg, rh, ri, rj, rk, rl, rm, rn, ro, rp, rq, rr, rs, rt, ru, rv, rw, rx, ry, rz, sa, sb, sc, sd, se, sf, sg, sh, si, sj, sk, sl, sm, sn, so, sp, sq, sr, ss, st, su, sv, sw, sx, sy, sz, ta, tb, tc, td, te, tf, tg, th, ti, tj, tk, tl, tm, tn, to, tp, tq, tr, ts, tt, tu, tv, tw, tx, ty, tz, ua, ub, uc, ud, ue, uf, ug, uh, ui, uj, uk, ul, um, un, uo, up, uq, ur, us, ut, uu, uv, uw, ux, uy, uz, va, vb, vc, vd, ve, vf, vg, vh, vi, vj, vk, vl, vm, vn, vo, vp, vq, vr, vs, vt, vu, vv, vw, vx, vy, vz, wa, wb, wc, wd, we, wf, wg, wh, wi, wj, wk, wl, wm, wn, wo, wp, wq, wr, ws, wt, wu, wv, ww, wx, wy, wz, xa, xb, xc, xd, xe, xf, xg, xh, xi, xj, xk, xl, xm, xn, xo, xp, xq, xr, xs, xt, xu, xv, xw, xx, xy, xz, ya, yb, yc, yd, ye, yf, yg, yh, yi, yj, yk, yl, ym, yn, yo, yp, yq, yr, ys, yt, yu, yv, yw, yx, yy, yz, za, zb, zc, zd, ze, zf, zg, zh, zi, zj, zk, zl, zm, zn, zo, zp, zq, zr, zs, zt, zu, zv, zw, zx, zy, zz.

Fig. 3.1 and 3.2. Late nineteenth-century illustrations of the outer and inner ear. Note the ways in which the labyrinth or inner ear, below, resembles an underground tunnel space. From: Paul Wossidlo, *Leitfaden der Zoologie für höhere Lehranstalten*, 5th Ed. (Leipzig: Fischer & Wittig, 1893), pp. 305, 306.

region's peculiar shape and spatial layout.⁴⁷ Set in the more specific context of an underground burrow, the imagery of Kafka's narrative overlaps with medical texts that described the physiology of the inner ear as a kind of "tunnel space" (*Tunnelraum*).⁴⁸

Both literary and medical texts employed a common set of metaphors that highlighted the structural similarities between architectural forms and the anatomy of the ear. The projection of the ear's anatomical structure onto the surface of the underground burrow can thus be read as a literalization of the spatial metaphors used by scientists to analyze the auditory organ. If upon peering into the ear medical researchers had seen a set of interconnecting hallways and portals, readers of Kafka's literary narrative are taken inside and guided through a home built in the shape of the auditory canal and the inner ear.

This view of the burrow's entrance is subsequently implicated in the protagonist's fear that it is not alone in its surveillant activities. Still situated outside the entrance to the burrow, the creature begins to suspect another reversal of the roles of observer and observed, one that mirrors its initial perception of the burrow as an extension of itself. "No, I am not observing my sleep, as I believed," it comes to realize, "rather I am the one who is sleeping while the destroyer watches."⁴⁹ By connecting the protagonist's surveillance of the burrow with fears of surveillance, the text explicitly ties self-observation to the projection of an invisible enemy lurking in the shadows. Self-

⁴⁷ A. Eckert-Möbius, "Mikroskopische Untersuchungstechnik und Histologie des Gehörorgans" in *Handbuch der Hals- Nasen- Ohrenheilkunde*, Bd. 6, ed. A. Denker and O. Kahler (Berlin: Julius Springer, 1926): 211-359, here p. 288.

⁴⁸ J. Rich. Ewald, "Zur Physiologie des Labyrinths" in *Archiv für die Gesamte Physiologie* 76 (1899): 147-88, here p. 177.

⁴⁹ Nein, ich beobachte doch nicht wie ich glaubte meinen Schlaf, vielmehr bin ich es der schläft, während der Verderber wacht" (B 478).

observation, the passage suggests, actually *produces* an enemy who can neither be seen nor confirmed with absolute certainty. Before even hearing the sound inside the burrow, the protagonist has already posited the existence of an unverifiable enemy. The disruptive noise heard later can therefore be understood as merely providing more evidence for an already suspected enemy, a pernicious surveillant generated through self-observation.

In his historical study of the soundproof room, Henning Schmidgen refers in passing to the historical coincidence of emerging spaces of acoustical research and techniques of discipline and punishment, as described by Michel Foucault in his work on the modern prison and the asylum.⁵⁰ Indeed, the fact that the designer of one of the earliest soundproof rooms explicitly cited the hermetic space of the padded cell as a model for his acoustic laboratory should compel us to look closer at the ways in which new architectural forms of isolation and sensory deprivation cut across the fields of medicine, experimental psychology, and jurisprudence, as well as the ways in which Kafka's literary narrative superimposes elements from these various spaces onto the

⁵⁰ See Henning Schmidgen, "Silence in the Laboratory: The History of Soundproof Rooms" in *Sounds of Science - Schall im Labor (1800-1930)*, ed. Julia Kursell (Berlin: Max-Planck Inst. Für Wissenschaftsgeschichte, 2008): 47-62, here p. 50. Schmidgen shows that the development of soundproof rooms was originally related to efforts to avoid disturbances of test persons in experiments on reaction time in the late nineteenth century. It was only with Hendrik Zwaardemaker's design in 1904 that the structure was then applied to research on acoustics. On the history of soundproof rooms, see also "Über das physiologische Ohrensausen" in *Internationales Centralblatt für Ohrenheilkunde*, Band 3 (1905): 462; Shepherd Ivory Franz, "A Noiseless Room for Sound Experiments" in *Science*, Vol. 26, No. 677 (Dec. 20, 1907): 878-81. On the satirical writer Thomas Carlyle's attempt to construct a soundproof room in the middle of the nineteenth century, see John M. Picker, "The Soundproof Study: Victorian Professional Identity and Urban Noise" in *Victorian Soundscapes* (New York: Oxford University Press, 2003). In 1910, an article on Zwaardemaker's soundproof room appeared in Theodor Lessing's anti-noise journal, *Das Recht auf Stille*. Lessing enthusiastically recommended that the same materials and building methods be applied to the construction of modern, soundproof homes and apartment buildings. See Theodor Lessing, "Ratschläge für unsere Mitglieder" in *Das Recht auf Stille* (January 1910), pp. 33-4.

single space of the burrow.⁵¹ Along with the mole-like creature's underground home, both experimental and disciplinary spaces insisted on a common sensory regime of silence and isolation. In the prison, inmates were isolated in cells and prohibited from communicating with one another, while Kafka's protagonist praises his burrow precisely for the peace and quiet it provides its lone inhabitant. Interestingly enough, the end result of the prison's suppression of all acoustic stimuli was not far off from the mysterious auditory phenomena documented as a consequence of the noiseless spaces of the burrow. Each produced, in its own way, noises perceptible only to the subject. If Kafka's protagonist hears the sound of his own blood, the modern prison was intended to provoke an intense examination of conscience on the part of the inmate, which was figured as a kind of auditory self-observation, a turning away from the noises of the surrounding environment to the internal voices of guilt and reform. "In the Pennsylvania prison," Foucault writes, "the only operations of correction were the conscience and the silent architecture that confronted it. At Cherry Hill, 'the walls are the punishment of the crime; the cell confronts the convict with himself; *he is forced to listen to his conscience.*'"⁵²

However, whereas in *Discipline and Punish* Foucault shows the ways in which the perpetual visibility of power and the threat of surveillance were intended to provoke a

⁵¹ "In 1904 when the laboratory had to be somewhat enlarged, we took occasion to construct a *camera silenta* in the upper story. I was guided in my attempt by a remark of the French physiologist Charpentier. He had to make threshold estimations in tonal sensitivity, and for this purpose used a room in an insane asylum at Nancy. At that time padded cells were used in the asylums. Charpentier preferred such an experimental room, because the reverberation in it is slight, and the acoustical reflection on the walls is very slight. Following out the idea of the padded cell, we covered the walls of our silent room with absorbing material borrowed from a Belgian publication, Dr. Biltris recommending a thick layer of horsehair as an excellent covering for telephone cells"; Hendrik Zwaardemaker, "An Intellectual History of a Physiologist with Psychological Aspirations" (1930) in *A History of Psychology in Autobiography*, Vol. 1, ed. Carl Murchison (Worcester: Clark UP, 1961): 491-516, here p. 504.

⁵² Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (1975; New York: Vintage Books, 1995), p. 239, my emphasis.

turn inward on the part of the inmate, Kafka's text inverts the arrangement. Rather than the suspected presence of a malevolent surveillant leading to self-observations in the form of 'internal voices of conscience,' it is self-observation—in its more metaphorical iteration outside the entrance to the burrow—which elicits fears of panoptic surveillance. Instead of a movement that leads from surveillance to introspection, we find the opposite; self-observation leads to fears of surveillance. Thus in Kafka's text, self-observation gives rise to multiple, unexpected side effects, one of which is the eruption of unlocalizeable noises inside the burrow and the other the fear of becoming the target of visual surveillance.

I refer to Foucault's study because I believe it is helpful in elucidating the heterogeneous character of the mole-like creature's underground burrow, whose characteristics exhibit affinities with a wide range of disciplinary spaces. The burrow can be said not only to map the spaces of the body onto the private sphere, as its multiple references to 'labyrinths' and 'passageways' suggest, but also to combine these corporal and domestic spaces with the architectonics of experimentation and disciplinary power as they evolved concomitantly over the course of the nineteenth century. Similar to the burrow's function as a site for scientific research, Foucault defined Bentham's panopticon in particular as a "privileged place for experiments on men," "a machine to carry out experiments, to alter behavior, to train or correct individuals."⁵³ Both are conceived of as spaces for the scientific observation and management of bodies, where hypotheses can be tested and revised within the confines of a carefully constructed

⁵³ Ibid., pp. 203, 204.

architecture of control. However, while the prison takes criminals as its object of inquiry, Kafka's burrow constitutes a space of *self*-experimentation and *self*-observation.

If Foucault sees disciplinary power as inextricably bound up with “an architecture that would operate to transform individuals,”⁵⁴ Kafka's narrative stresses the deep connection between the protagonist's sensory experiences of the world and the corridors of the burrow. Throughout the text, the protagonist notes the way in which its perceptions of the surroundings cannot be abstracted from the spaces in which they are registered. “I did not hear [the hissing] at all when I first arrived, although it must certainly have been there; I first had to feel completely at home (*völlig heimisch werden*) before I could hear it; it is, so to speak, audible only to the ear of the real householder performing his duties.”⁵⁵ On the one hand, the passage implies that the disruptive noise can only be perceived once the burrow's owner has become fully acquainted with its nuances and idiosyncrasies. Underlying this reading is the suggestion that the protagonist's life inside the home has also served to train and remake its sensory abilities. The burrow's labyrinthine structure and near silence provide an environment in which practices of close-listening can be cultivated in a manner not possible elsewhere. Like Foucault's prison, entering the spaces of the burrow transforms the individual's behavior in significant ways, introduces new objects of inquiry and modes of analysis, and promotes a sensitivity to sounds once outside the range of audibility. On the other hand, the passage points to the possibility that the homeowner might be the only one able to hear the noise. Rather than simply becoming more sensitive to his surroundings, the

⁵⁴ *Ibid.*, p. 175.

⁵⁵ “Ich habe es gar nicht gehört, als ich kam, trotzdem es gewiß schon vorhanden war; ich mußte erst wieder völlig heimisch werden, um es zu hören, es ist gewissermaßen nur mit dem Ohr des wirklichen sein Amt ausübenden Hausbesitzers hörbar” (*B* 488).

protagonist's familiarity with its home has led to perceptual confusion and inability to recognize the differences between corporeal noises and external sounds.

This anxiety is more clearly articulated on the following page, where the protagonist now states: "It's really nothing, I sometimes think, no one other than me (*niemand außer mir*) would hear it."⁵⁶ As a subtle indication of the possible existence of subjective noises, the multiple layers of meaning internal to the German formulation "niemand außer mir" should be taken seriously. For, in addition to suggesting that no one *other than* the protagonist can hear the sounds, the phrase contains connotations of externalization, of a space *outside* the protagonist. Keeping in mind the entanglement between the burrow and the protagonist's body, as well as the resemblance between the anatomical structure of the ear and the layout of the underground home, it is possible to read this expression as both referring to the subjective nature of the sound—to the fact that the sound is only audible to the one inhabiting this particular body—as well as pointing to the existence of a position outside of the body from which the sound can no longer be heard. What begins as the symbiosis of body and home in the construction of the burrow and its visual surveillance becomes an inability to distinguish between sense impressions produced by the body and those emanating from sources outside of it.

Doubts surrounding the sound's objective status are accompanied by the protagonist's implementation of scientific methods in analyzing its characteristics. There is a remarkable overlap between the creature's practices of experimentation and empirical observation outside the burrow and its approach to identifying the origin of the mysterious auditory disruption. Indeed, it is shortly after it leaves the experimental ditch outside the burrow's entrance that the creature first hears the hissing. Without the

⁵⁶ "Es ist ja nichts, manchmal glaube ich, niemand außer mir würde es hören"; *ibid.*, p. 489.

slightest hesitation it proposes a method for locating the source of the sound, which incorporates many of the same activities used aboveground, including the construction of “experimental diggings (*Versuchsgrabungen*)” (B 487) and, later, an “experimental area (*Versuchsgebiet*)” (B 490).⁵⁷ And if the entryway to the burrow had initially served as the object of his experiments and calculations, the focus of attention now gradually shifts to “observing” the sounds of an alleged enemy encircling the home.⁵⁸ Thus the same experimental practices used to monitor the home from outside are deemed applicable to the situation inside the burrow.

Such continuities reinforce the protagonist’s self-identification as an experimental scientist. But they also point to structural similarities between its external perspective on the home and its search for the noise’s origins within the cavernous corridors. Both the ear-like burrow viewed from outside as well as the sounds heard within the confines of its interior become subjects of scientific modes of experimentation and observation. The ear now joins the eye in the creature’s scientific pursuits. In conjunction with the construction of an experimental ditch that runs parallel to the preexisting walls of the structure, the protagonist employs methods of close listening to manage and protect its home. These more attentive modes of listening provide an auditory counterpart to his visual inspection and surveillance of the burrow’s entryway and come to form a constitutive part of its scientific method. “For example,” the creature explains, “I imagine precisely, in a manner that can be recorded, the cause of the noise, which my ear

⁵⁷ Wolf Kittler rightly emphasizes the similarities between the topography of the underground burrow and the battlefields of World War One, but his reading overlooks the burrow’s more heterogeneous nature and Kafka’s superimposition of military, scientific, corporeal, and domestic spaces all onto a single architectural structure. See Kittler, “Grabenkrieg - Nervenkrieg - Medienkrieg.”

⁵⁸ “Ich nehme nur an dass das Tier [...] mich einkreist, wohl einige Kreise hat es schon um meinen Bau gezogen, *seitdem ich es beobachte*” (B 501, my emphasis).

has practiced differentiating in all of its finest details, and now feel pressure to verify if my conclusion corresponds to reality.”⁵⁹

If outside the burrow its figurative self-observations had given rise to panoptic fears of surveillance, the protagonist’s scientific practices underground lead both to anxieties of invasion as well as an epistemic crisis and gradual descent into irrationality. The scientifically minded protagonist is compelled to construct a theory of the sound’s origins that will conform to its auditory characteristics. However, a clean-cut correspondence between hypothesis and experimental results is never fully realized. Instead, each theory is confronted with data it cannot adequately account for. The conflict between hypothesis and evidence culminates in a feeling of complete desperation and the realization that the protagonist is no longer capable of carrying out its scientific work:

What was it? A quiet hissing only audible at long intervals, a mere nothing that I wouldn’t say one could get used to. No, one could not get used to it. One could, however, without doing anything about it at once, observe it for a while; that is, listen every few hours and patiently record the results, but not fix one’s ear to the wall as I do and dig up the earth whenever the noise becomes audible, in order not really to find anything but rather to do something that answers to internal agitation.⁶⁰

The protagonist again assumes the role of the experimental scientist, proposing that the solution to his problem lay in the proper observation of its surroundings and the detailed recording of results. But this detached scientific perspective serves as an ideal

⁵⁹ “Ich stelle mir z.B. nach dem Geräusch, das mein Ohr in allen seinen Feinheiten zu unterscheiden die Übung hat, ganz genau, aufzeichnenbar, die Veranlassung vor und nun drängt es mich nachzuprüfen, ob die Wirklichkeit dem entspricht”; *ibid.*, p. 489. “For as long as a conclusion remains unreached, I cannot feel safe (*denn solange hier eine Feststellung nicht erfolgt ist, kann ich mich auch nicht sicher fühlen*)”; *ibid.*, p. 489.

⁶⁰ “Was ist es denn? Ein leichtes Zischen, in langen Pausen nur hörbar, ein Nichts, an das man sich, ich will nicht sagen, gewöhnen könnte, nein gewöhnen könnte man sich daran nicht, das man aber, ohne vorläufig geradezu etwas dagegen zu unternehmen, eine Zeitlang *beobachten* könnte, *beobachten*, d.h. alle paar Stunden gelegentlich hinhorchen und *das Ergebnis geduldig registrieren*, aber nicht wie ich das Ohr die Wände entlang schleifen und fast bei jedem Hörbarwerden des Geräusches die Erde aufreißen, nicht um eigentlich etwas zu finden sondern um etwas der innern Unruhe Entsprechendes zu tun”; *ibid.*, p. 494.

and does not correspond to the reality of the creature's activities. Instead of listening only occasionally and patiently recording its experiences, the protagonist exhibits obsessive tendencies that overwhelm his mind and body. Almost against its will, it seems, the creature is provoked to dig up the earth where it believes to hear a sound, discarding the cool scientific recording of data for direct, physical intervention. Moreover, this frantic digging has no aim; it is intended "not really to find anything." So in contrast to earlier passages in which it confidently applied scientific methods to questions of securing the burrow and locating the source of the sound, here its scientific methodology is revealed to be unsustainable, ultimately giving way to mania and paranoid anxieties with no direction or goal. As I have suggested above, it is initially the metaphorical self-observation outside the burrow—the creature's assertion that its observations of the burrow are in fact observations of itself—, which is implicated in the creation of an unverifiable enemy. Here, along with knowledge about the external world, scientific practices again lead to fear and anxiety, to suspicions of a mysterious enemy whose existence cannot be confirmed.

It is therefore tempting to conclude that Kafka's text provides a straightforward critique of rationality and the methods and presuppositions of the experimental sciences.⁶¹ However, the fact that the creature's anxiety increases in relation to his gradual abandonment of scientific methods in favor of purely emotional responses suggests that it is perhaps its *inability* to remain committed to rational modes of analysis that is the object of critique in the text. In the passage quoted above, the scientific path that it abandons, while in many ways obsessive, pales in comparison to the physical and

⁶¹ For readings of the text as a commentary on rationalization, see Schmidt, "Am Grenzwert des Denkens"; Sussman, "The All-Embracing Metaphor."

mental destruction wrought by its incessant digging and growing fears of a real enemy stalking the burrow. Science, in other words, is not easily identified as the culprit. As a set of recording practices and modes of observing the world, it both leads to irrational fear and paranoia, while at the same time serving to restrain the protagonist who goes on to exhibit more extreme forms of behavior once its scientific pretensions have been abandoned.

If the text leaves open the role of rational inquiry in bringing about the creature's paranoid behavior, it explicitly codes the unformed ground around the burrow as the domain of the subjective and the irrational. It is no coincidence that the reference to "inner agitation" coincides with the protagonist being seized by the idea of digging up the ground around it, evoking images of bringing to the surface that which has been hidden below. The process of pushing through the malleable surface of the earth runs parallel to processes of introspection and the discovery of an "inner agitation." In the process, science and rational thinking are superseded by the creature's aimless digging, which has no goal other than to quiet a sense of unease. Even before the appearance of the mysterious noise in the burrow, we find characterizations of the earth as a realm dominated by belief rather than knowledge, unfounded fear, and the subjective:

And it is not only by external enemies that I am threatened. There are also those inside the earth. I have never seen them, but the legends tell of them and I firmly believe in them. It is the ways of the inner earth, not even the legends can describe them, even those who become their victims have barely seen them. They come, you can hear the scratching of their claws right under you in the earth, which is their element, and you are already lost.⁶²

⁶² "Und es sind nicht nur die äußern Feinde die mich bedrohen, es gibt auch solche im Innern der Erde, ich habe sie noch nie gesehn, aber die Sagen erzählen von ihnen und ich glaube fest an sie. Es sind Wesen der innern Erde, nicht einmal die Sage kann sie beschreiben, selbst wer ihr Opfer geworden ist hat sie kaum gesehn, sie kommen, man hört das Kratzen ihrer Krallen knapp unter sich in der Erde, die ihr Element ist, und schon ist man verloren" (B 467).

The passage begins by drawing a distinction between “external enemies” and those “inside the earth.” While it is unclear whether or not the protagonist has ever encountered the former, the text makes sure to emphasize that the latter exist only in legend. They are associated with belief rather than fact and cannot be described or even seen by their victims. At the same time, the invisible enemies who are said to prey there are connected to legend, myth, and the oral transmission of narrative.

In light of the parallels repeatedly drawn between the body and home, as well as the text’s unwillingness to confirm or deny the existence of a real enemy, it is hard to overlook the implication that the internal enemy and inner agitation are meant to signal the inherent subjectivity of the creature’s fears. Although convinced that the ground swarms with malicious foes, the protagonist is unable to find evidence to support such claims. Simultaneously, we watch as it abandons scientific observations of the external world and instead focuses on its inner mental life. So when the creature later states that it would be happy, “if I could only quiet the conflict inside me (*wenn ich nur den innern Widerstreit beruhigte*)” (B 498), it is suggesting that the solution to his problem lies in either locating the source of the sound beneath the earth, or in quieting the conflict inside. Both fulfill the same role of neutralizing the threat represented by the noise. Thus, in the end the protagonist comes to ignore the noise as less significant than the psychological conflicts it has awoken inside. Inner enemies believed to lurk beneath the surface of the earth and behind the walls of the burrow ultimately fade away behind the internal antagonisms of the mind.

But this last line of interpretation, which posits a mind slowly descending into madness and subjective hallucinations, threatens to blind us to the physical, corporeal

elements emphasized throughout Kafka's text. While the narrative does explore the conflicted psyche and troubled mind of its central figure, it also goes to great lengths to foreground the body's physicality and the physiology of listening. As we have already seen, the early stages of the burrow's construction demanded that the protagonist crack open its head and spill its own a blood, thereby juxtaposing the narrator's paranoid reflections and psychological instability with images of physical violence and the oozing of bodily fluids. Furthermore, the burrow itself is described in a language that draws attention to the similarities between the protagonist's underground home and the anatomical structure of the ear. The mysterious noises, which critics have traditionally interpreted as symptoms of the creature's insanity and decaying mental state, occur within a space that continually reminds readers of the corporeal dimension of auditory perception.

The sounds of internal bodily processes are rendered audible within the space of the burrow, suggesting parallels between his "inner agitation" and thumping of blood in his ears. "Sometimes it seems to me as if the sound has stopped," the protagonist remarks, "there are long breaks, sometimes one misses the hissing sound, as one's own blood is pounding all too loudly in one's ears."⁶³ On the one hand, the passage serves to justify readerly suspicions that the root of the acoustic disturbance can be traced back to auto-perceptions of the body, as foreshadowed by the creature's earlier visual

⁶³ "Manchmal scheint es mir, als habe das Geräusch aufgehört, es macht ja lange Pausen, manchmal überhört man ein solches Zischen, allzu sehr klopft das eigene Blut im Ohr"; *ibid.*, p. 497. The fact that the blood can be heard at all testifies to the remarkably low volume that prevails in the burrow. If William T. Preyer had been forced to plug his ears in order to hear the sound of his heart and the expansion and contraction of his arteries, Gustav Brunner similarly observed that, "under normal circumstances we do not hear the circulation of blood in the ear or its surrounding. For this, one needs especially favorable moments (*Unter normalen Verhältnissen hören wir die Blutbewegung im Ohr oder dessen Umgebung nicht, es bedarf hierzu besondere begünstigende Momente*)"; Brunner, "Zur Lehre von den subjectiven Ohrgeräuschen," p. 201.

observations outside the burrow and its willingness to use its body as the object of scientific study. In listening to the sound of its own blood the protagonist comes to occupy a more distant and self-reflexive position with regard to its own body, one that echoes its scientific activities outside the entrance of the home as well as those conducted by Preyer, Lucae, and Stumpf.

At the same time, the sound of blood and the disruptive hissing are portrayed as mutually exclusive phenomena. It is during moments in which its blood becomes audible, the creature suggests, that the noise is “missed (*überhört*).” The passage therefore presents a case of auditory masking par excellence—a process through which the presence of one sound affects and ultimately renders inaudible another unwanted sound. Lucae had developed a medical therapy to treat subjective noises using rudimentary masking tools (fig. 3.3) and Maximilian Plessner had conceived of his antiphone as potentially serving the same purpose in the name of noise-abatement.⁶⁴ The idea was that, while it was nearly impossible to cure most otological disorders permanently, by intentionally producing another, less grating subjective noise, the patient’s suffering could be greatly ameliorated, at least temporarily. Subjective noises could not be done away with entirely, but they could be hidden beneath other less harmful subjective noises and tones specifically designed for that purpose, giving rise to a more positive notion of noise, or what Jonathan Sterne has recently referred to as the

⁶⁴ Lucae’s case study of a patient plagued by “a continuous, severe, high hissing in the ears (*einem kontinuierlichen heftigen hohen Ohrenzischen*)” mentions that the woman took to riding subway trains in order to block out the noise with the dull grinding of the wheels on the tracks. See Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen*, p. 10, pp. 34-41; Plessner, *Die neueste Erfindung*, pp. 39-46.

“domestication of noise” and its modern function as a *tool* rather than a problem to be eliminated or overcome.⁶⁵

Within the context of Kafka’s literary narrative, masking occurs at the moment in which the normal functioning of the body becomes audible. According to the protagonist, then, it would be impossible for the noise to emanate from its own body, since it is the sound of the body that prevents the creature from hearing the hissing noise in the burrow. So while earlier, the creature had entertained the possibility that it was the only one able to hear the sound, in this later passage it conceives of its body as detached from the noises it hears. Although it assumes a position from which the sounds of the



Fig. 3.3. August Lucae’s rudimentary masking tool used in therapy for patients suffering from subjective noises. The device consisted in a resonator to be placed in the ear and a tuning fork selected on the basis of the subjective noise’s acoustic properties. “A high subjective hissing sound (*ein hohes subjectives Zischen*),” for example, was treated with a tuning fork set to low C. The objective tone from the tuning fork was initially played for patients for two minutes but this was extended to as long as 10 minutes, with the volume also increasing gradually over the course of a session. From: August Lucae, *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen* (Berlin: Otto Enslin, 1884), p. 39.

⁶⁵ See Jonathan Sterne, *MP3: The Meaning of a Format* (Durham: Duke UP, 2012), pp. 92-127. Within the last four decades, Sterne shows, masking has come to play a crucial role in the development and functioning of new audio technologies and digital modes of recording and storing sound such as the MP3.

body become audible, it never considers that these corporeal noises might be related to the eruption of hissing inside the burrow. In a text pervaded by figurations of boundary crossing and confusion over distinctions between organic and inorganic, inside and outside, the passage stands out as a clear instance of maintaining a dividing line. The hissing sound, the creature asserts, is decidedly *not* a sound originating in the body. The most explicit invocation of auditory self-observation appears at one of the only moments in the text in which the disruptive sound can no longer be heard at all.

Beyond the protagonist's assertion that the two noises are mutually exclusive, the passage is significant in that it portrays the sound of the listener's own body as a potential liability and danger to his safety. Although the periodic inaudibility of the sound initially alleviates the protagonist's worries and allows it to regain an appetite, upon listening to its surroundings again the creature realizes that it has been "outrageously mistaken (*sich schmächtig geirrt hat*)" (B 497) and immediately returns to the task of tracking down the source of the sound. The noise of the body is described in negative terms, as a problem to be overcome. The blood thumps "all too loudly (*allzusehr*)" in its ears and this causes the creature to "miss (*überhören*)" lingering indications of an encroaching enemy. Sterne's "domestication of noise" is shown here to be a risk to the listener's safety, enabling the creature to proceed as if there is no longer any danger when in fact the threat still lies hidden beneath the thumping of blood.

Similar to the juxtaposition of visual self-observations from outside with fears of an invisible enemy watching from afar, the audibility of the creature's body soon gives rise to a concrete vision of a malevolent body tied to the hissing sound. If at most other times the noise "could be heard everywhere and always at the same volume and,

moreover, uniformly by day and night (*[es ist] überall zu hören und immer in gleicher Stärke, und überdies regelmäßig bei Tag und Nacht*)” (B 500), shortly after listening to the thumping of its own blood the sound begins to move through space (*scheint ein Näherkommen*) and “one literally sees the step with which it approaches. One jumps back from the wall, one seeks to ignore all the possibilities that this discovery implies.”⁶⁶ Once again, self-observation is linked to the creation of an enemy whose existence cannot be verified based on the evidence the protagonist has at his disposal. The audibility of the body as gleaned through self-observational practices is shown to be a liability that masks the true threat as well as an occasion for the paranoid projection of a clearly defined, but unverifiable, enemy.

The Rustling of Silence

A solution that resolves the issue of embodiment while still maintaining self-observational practices can be glimpsed in the protagonist’s plans to separate the central square from the surrounding spaces of the burrow. As we discover, despite the creature’s ongoing frustration over disruptions to his auditory isolation, it is not absolute silence that it seeks but rather the “rustling of silence (*Rauschen der Stille*).”⁶⁷ At a particularly telling moment during its investigation into the strange noise, the creature pauses briefly

⁶⁶ “Und dieses Stärkerwerden scheint ein Näherkommen, noch viel deutlicher als man das Stärker-Werden hört, sieht man förmlich den Schritt mit dem es näherkommt” (B 497).

⁶⁷ On the aesthetics and cultural history of *Rauschen*, see Rüdiger Campe, “The ‘Rauschen’ of the Waves: On the Margins of Literature” in *SubStance*, Vol. 19, No. 1, Issue 61: Special Issue: Voice-Over: On Technology (1990): 21-38; Katja Stopka, *Semantik des Rauschens: Über ein akustisches Phänomen in der deutschsprachigen Literatur* (München: M Press, 2005); Oliver Simons, “Botschaft oder Störung? Eine Diskursgeschichte des ‘Rauschens’ in der Literatur um 1800” in *Monatshefte* 100/1 (2008): 33-47. On the term’s media-theoretical significance, see Friedrich Kittler, “Signal-Rausch-Abstand” in *Materialität der Kommunikation*, ed. Ulrich Gumbrecht & K. Ludwig Pfeiffer (Frankfurt a.M.: Suhrkamp, 1988), pp. 342-59; *Zwischen Rauschen und Offenbarung: Zur Kultur- und Mediengeschichte der Stimme*, ed. Friedrich Kittler and Thomas Macho (Berlin: Akademie Verlag, 2002).

to outline his plan for an additional architectural structure within the preexisting burrow.

Ideally, it explains, the central square would be further isolated from all surrounding spaces:

One of these favorite plans of mine had been to isolate the main square from the ground that surrounded it, that is to say, to leave its walls at a thickness about my height and, in addition, to create a hollow space (*Hohlraum*) of the same dimensions around the central square, except for a small foundation, which unfortunately it would not be possible to detach. I had always imagined this hollow space as the most wonderful abode possible, and not without reason. To hang onto the rounded outer wall, to pull oneself up onto it, to slide down, tumble over and once again have the ground beneath one's feet, and to play all these games literally on the body of the central square (*auf dem Körper des Burgplatzes*) and yet not actually inside it. To be able to avoid the central square, to allow my eyes a break from it, to defer the joy of seeing it again to a later time and yet not have to have to do without it.⁶⁸

The construction of this ideal architectural structure and liminal space of free play, the protagonist asserts, would release it from the panicked and obsessive visual observations which had preoccupied it outside the burrow. On an acoustic level it would no longer be forced to listen to the sounds of possible intruders or the hissing of invisible enemies, “but instead to listen in ecstasy (*mit Entzücken*) to something that completely escapes [it] now: the rustling of silence in the main square (*sondern mit Entzücken etwas, was [ihm] jetzt völlig entgeht: das Rauschen der Stille auf dem Burgplatz*)” (B 492).⁶⁹

⁶⁸ “Einer dieser Lieblingspläne war es gewesen, den Burgplatz loszulösen von der ihn umgebenden Erde d.h. seine Wände nur in einer etwa meiner Höhe entsprechenden Dicke zu belassen, darüber hinaus aber rings um den Burgplatz bis auf ein kleines von der Erde leider nicht loslösbares Fundament einen Hohlraum im Ausmaß der Wand zu schaffen. In diesem Hohlraum hatte ich mir immer, und wohl kaum mit Unrecht, den schönsten Aufenthaltsort vorgestellt, den es für mich geben könnte. Auf dieser Rundung hängen, hinauf sich ziehen, hinab zu gleiten, sich überschlagen und wieder Boden unter den Füßen haben und alle diese Spiele förmlich auf dem Körper des Burgplatzes spielen und doch nicht in seinem eigentlichen Raum; den Burgplatz meiden können, die Augen ausruhn lassen können von ihm, die Freude ihn zu sehen auf eine spätere Stunde verschieben und doch ihn nicht entbehren müssen” (B 491).

⁶⁹ In his reading of the passage, Gerhard Kurz points out that, as early as Martin Luther, the Greek “ekstasis” was translated into German as “Entzückung.” Although Kurz productively highlights the term’s connotations of an out-of-body experience, he at no point discusses how this relates to the text’s broader thematization of the body nor does he note the irony that, at this very moment in the text, the protagonist imagines listening to an architectural structure described as the “*body* of the central square.” See Gerhard Kurz, “Das Rauschen der Stille: Annäherungen an Kafkas ‘Der Bau’” in *Franz Kafka: Zur ethischen und*

Ironically, this “rustling of silence” was a sound typically associated with the circulation of blood through the body. “The noises of the muscles and the blood [...] have, as is well known, a deeper acoustic quality which corresponds to rustling (*Rauschen*), roaring, or growling,” an 1879 study of subjective noises stated.⁷⁰ In his treatise on modern noise-abatement, Maximilian Plessner similarly referred to the well-known fact that the “rustling (*Rauschen*)” heard within the body was caused by the circulation of blood near the ear, a sound that could, moreover, be amplified in the service of scientific research by artificially closing off the auditory canal with the help of his antiphone.⁷¹ Similarly, participants in experiments involving soundproof rooms described “a rushing character” and the sound of “wind in the tops of the trees in the woods” upon entering the modern experimental space.⁷²

Thus, both the pulsating, hissing sound that disrupts the burrow *as well as* the protagonist’s auditory fantasy of near silence bear similarities to contemporaneous scientific accounts of the sounds of the body, as gleaned through practices of self-observation. What is characterized in Kafka’s literary text as an acoustic ideal is presented in contemporaneous medical literature as an effect of the body’s ordinary functioning, one rarely perceptible amidst the noise of the external world. This striking overlap again foregrounds the corporeal dimension of hearing and lends further credibility to suspicions that the sound might be nothing more than the subjective

ästhetischen Rechtfertigung, ed. Beatrice Sandberg and Jakob Lothe (Freiburg: Rombach, 2002), pp. 151-74, here p. 163.

⁷⁰ “Die Muskel- und Blutgeräusche [...] haben bekanntlich einen tieferen, dem Rauschen, Brausen oder Brummen entsprechenden Toncharakter”; Brunner, “Zur Lehre von den subjectiven Ohrgeräuschen,” p. 197.

⁷¹ Plessner, *Die neueste Erfindung*, p. 45.

⁷² Zwaardemaker, “An Intellectual History of a Physiologist with Psychological Aspirations,” pp. 505-6.

byproduct of the protagonist's own body, a displaced and figurative version of the self-observational practices employed by Stumpf, Preyer, and Lucae.

The ideal scenario inside the burrow is not one of total and direct immersion. While the creature dreams of constructing an area even more isolated than the already detached underground burrow, it does not imagine ever occupying the space. Instead, in a revealing formulation, the creature longs to circle around it, "on the body of the central square and yet not actually inside it." The use of the term "body (*Körper*)" to describe the central square at this particular moment is no coincidence. Amidst plans for further isolating itself from the external world, the protagonist reinforces connections drawn throughout the narrative between its own body and the architectural structure of the burrow. Just as it watched what it mistook for its own body from an external perspective, it now imagines listening to the "rustling of silence" from a position not inside, but rather on the margins of the central space. The passage figures the central square as an organic body and the dweller of the burrow as an observer listening through its walls, while never entirely within its borders.

Rather than concentrating on the sound of his blood and engaging in more straightforward practices of self-observation, the protagonist projects the sounds of his own body onto a detached architectural space. In doing so, the protagonist refuses to acknowledge the embodied nature of auditory perception, while simultaneously imagining the ideal environment as one invested with the same acoustic properties as internal physical processes. Kafka's narrative, in other words, juxtaposes the externalization of the ear's physiology alongside the figurative act of listening to the listening body. Not surprisingly then, this ideal mode of listening is carried out "in

ecstasy (*mit Entzücken*),” an expression that contains connotations of externalization and an emotional state believed to draw the listener out of his or her own body. Listening to the gentle murmuring inside the “body of the central square” from its liminal position against the outer wall, the protagonist is in turn carried into ecstasy beyond its embodied limits.

What the creature achieves in building the structure is a space undisturbed by external sounds and capable of rendering audible the flow of blood and other acoustic nuances internal to the body. The structure is, in a sense, an apparatus that elicits self-observations, but that does so under the guise of having the listener listen to its hollow center. With its ear against the wall of the planned space, the erasure of boundaries between the body and the underground home is complete. Although ostensibly aimed toward the murmurings of an empty center, the ear is in fact directed at itself, compelled to listen to the subject listening amidst the precarious silence of the burrow.

Narrative Self-Auscultation

As we have seen so far, “The Burrow” is structured around two related modes of self-observation; first, the protagonist listens to the sounds produced by its own body. This mode of listening signifies a *literal self-observation*. Second, the creature engages in *figurative self-observations*, both visual and aural, in which the architecture of the burrow becomes invested with corporeal qualities and merges with the observer’s body, thus enabling the protagonist to subsequently observe itself metaphorically from a third-person perspective. In addition, the text presents a third, distinctly *narrative* form of self-observation. For the remainder of this chapter I want to examine the structural

affinities between the text's depiction of self-reflexive listening practices and its narrative structure. In what ways, I want to ask, is the text's thematization of scientific practices and modes of knowledge inscribed onto the particular rhetorical and linguistic forms the creature uses to communicate its experiences in and around the burrow? How does the protagonist's tendency toward self-observation affect its reliability as a narrator? Finally, how are narrative and linguistic issues linked to the creation of an unverifiable enemy and to what extent do they support or undermine claims to its objective existence?

In her reading of "The Burrow" as a reflection on modern forms of suspicion and conspirational paranoia, Elisabeth Strowick has drawn attention to the text's overlap with the burgeoning scientific field of psychology and, in particular, psychoanalysis. Strowick argues that the text's engagement with science manifests itself not only on the level of content but also formally. Pointing to the dominance of the present tense, for example, she sees Kafka's literary work as reminiscent of an "investigative record (*Untersuchungsprotokoll*)," one that quotes and reworks a distinctly "scientific system of inscription (*ein wissenschaftliches Aufzeichnungssystem*)."⁷³ As I have attempted to show over the course of this chapter, both the creature's external surveillance of the burrow as well as its investigation into the allusive sound are activities that are explicitly forced into scientific paradigms relying on strategies of observation, experimentation, and calculation. Comparing the creature's language with that of Stumpf and other scientific figures, there are undeniable similarities between the first-person narration employed in "The Burrow" and the self-observational auditory experiments recorded at the turn of the twentieth century.

⁷³ Strowick, "Epistemologie des Verdachts," p. 130.

However, to claim that the text resembles a scientific protocol is, I think, an exaggeration, one that threatens to conceal both the ambiguities internal to the creature's retelling of events inside the burrow as well as the ways in which those uncertainties complicate its self-identification as a scientist. Nowhere is the text's divergence from scientific modes of writing clearer than in its opening line: "I have completed the construction of the burrow and *it seems to be successful*" (B 465).⁷⁴ The narrator's use of "seems" in evaluating the stability and security of his home signals an ambiguity that stands at the heart of the construction and feeds into the creature's increasing paranoia and delusions of persecution. While the range of scientific writing in the early twentieth century is varied and encompasses a wide range of stylistic registers, it would be hard to find a study, I believe, whose opening thesis is expressed with such obvious uncertainty. In contrast to its subsequent self-presentation as a hyper-rational experimental scientist, the protagonist's initial statement displays an equivocacy, which threatens to undermine its reliability as an observer and stokes suspicions that, from the start, the burrow lacks the security attributed to it so by its primary inhabitant.

This sense of uncertainty is exacerbated by the introduction of the hissing sound, which unsettles the creature's peace of mind as well as the analytic categories it employs in assessing the relative safety or danger of the situation. As I indicated above, the sound ultimately leads to a breakdown of the protagonist's scientific methodology, which is discarded in favor of emotional responses and a paranoid frenzy. But this breakdown of rational inquiry is already prefigured through the descriptions the creature provides of its scientific work. In place of assertions of fact and rational argument, which we might expect from a figure with scientific aspirations, its investigation into the sound is

⁷⁴ "Ich habe den Bau eingerichtet und *er scheint wohl gelungen*" (B 465, my emphasis).

articulated in a language of unfounded belief and guesswork. Shortly after the initial eruption of the sound, for example, the protagonist acknowledges that its own prejudices and desires might be affecting the results of his research. Arriving at its “favorite area (*Lieblingsplatz*)” halfway through the narrative, it decides to continue walking in order to search for the sound elsewhere. “The whole thing is a joke,” the creature remarks, “*as if I want to prove* that my favorite area is not alone to blame, but that there are disturbances elsewhere as well.”⁷⁵ Unable to bear the thought that its favorite room might be the origin of the disruptive sound, the protagonist is forced to confess that its allegedly scientific methods are nothing more than a “joke” aimed at suppressing an unwanted truth. Rather than basing its conclusions on empirical evidence gathered throughout the burrow, the creature “wants to prove” a particular hypothesis for the sake of the peace of mind it provides. So while the text portrays the protagonist as engaged in various scientific pursuits and committed to rational modes of inquiry, a closer look at the ways in which it describes its activities reveals them to be anything but objective.

Elsewhere, the creature admits that it has difficulty hearing the sound with its own ears and is forced to speculate about its existence without perceiving it directly. “Then it is only with an effort, indeed with great immersion, that I more guess at than hear the merest hint of a noise now and then.”⁷⁶ Again, the blatant confession that its methods rest on guesswork would hardly be appropriate for a scientific protocol. As the passage indicates, there is no sensory data on which the creature is drawing in order to formulate its theories about the sound’s origins. The almost inaudible noise hovers on the border

⁷⁵ “Das ganze ist eigentlich ein Scherz, *so als wollte ich beweisen*, dass nicht etwa gerade mein Liebelingsplatz allein mor diese Störung bereitet hat, sondern dass es Störungen auch anderwärts gibt”; *ibid.*, p. 489, my emphasis.

⁷⁶ “Dann kann ich überhaupt nur mit Anstrengung, ja mit Versenkung hie and da den Hauch eines Lautes mehr erraten, als hören”; *ibid.*, p. 490.

between subjective hallucination and objective threat. Thus, contrary to Strowick's claim that the text resembles a scientific protocol, a closer examination of the creature's language reveals the ways in which the precise descriptions of its activities undermine its claims to scientific rigor. Efforts to remain committed to a methodology of hypothesis, experimentation, and calculation are perpetually disrupted by guesswork, personal belief, and a desire to manipulate data.

At the same time, we should not overestimate the linguistic and conceptual stability of contemporaneous scientific research. As I indicated in the introduction, scientists working on subjective noises around the same time that Kafka began writing "The Burrow" commonly expressed frustration over the ambiguous nature of subjective noises, which were "patchy" and obscure and whose specific sonic features remained difficult to translate into written language. Indeed, there is an important point of contact between literary and scientific representations of subjective noises, in that both view such auditory phenomena as impervious to traditional methods of observation and analysis and each search for new ways to describe them textually. But it is nonetheless important to note that the protagonist's open admission to blind speculation would have been out of place in a scientific report. While acknowledging certain difficulties in their investigations, scientists typically avoided publishing guesswork or freely admitting to manipulating data in order to have it conform to preexisting desires. Kafka's protagonist, by contrast, is a figure characterized by an ongoing oscillation between subjective impulses and aspirations to objectivity, a commitment to rational scientific practices and an open acknowledgment of its deviation from the same principles.

While largely indifferent to the interaction between scientific and literary modes of writing, secondary scholarship on “The Burrow” has long emphasized more general connections between the protagonist’s maintenance of the underground burrow, on the one hand, and practices of reading and writing, on the other. Indeed, it is hard to find a critical interpretation of the text that does not in some way make reference to the etymological connection between ‘writing’ and ‘digging.’⁷⁷ Such readings find further support in the creature’s description of itself as “the owner of this great sensitive work (*Besitzer dieses großen empfindlichen Werkes*)” (B 502), thereby invoking parallels between the construction of the burrow and the production of a literary work. Although I see no reason to refute entirely the importance of writing as a metaphorical figure in the text, there is a danger of reducing its concerns to a single question of textual interpretation and, in the process, of losing sight of the centrality of hearing and sound in the construction of the narrative. Wolf Kittler, for example, rightly characterizes the disruptive noise in the burrow as “writing’s other (*das Andere der Schrift*),” but falls short of examining the ways in which the modes of hearing that the sound elicits are concomitant with the text’s self-reflexive narrative strategies.⁷⁸

In her attempt to reintroduce sound back into readings of “The Burrow,” Julia Encke has emphasized its oral qualities, noting both the convergence of narrative and narrated time and the text’s dominant use of the present tense. “In the foreground, then,” she writes, “stands a speaking in acoustic space (*Im Vordergrund steht dann ein Sprechen*

⁷⁷See Stanley Corngold, *Franz Kafka: The Necessity of Form* (Ithaca: Cornell UP, 1988), p. 282; Sussman, “The All-Embracing Metaphor,” pp. 132-35; Maché, “The Noise in the Burrow,” p. 528; Kittler, “Grabenkrieg - Nervenkrieg - Medienkrieg,” p. 293; Bettine Menke, *Prosopopoiia: Stimme und Text bei Brentano, Hoffmann, Kleist und Kafka* (München: Fink, 2000).

⁷⁸ Kittler, “Grabenkrieg - Nervenkrieg - Medienkrieg,” p. 293.

im Hörraum).⁷⁹ Although Encke's focus on hearing as both thematically and formally important to "The Burrow" constitutes a much-needed intervention, her comments come dangerously close to essentializing the senses. They posit necessary connections between sound and the present tense in an age that saw the emergence of the gramophone and other technologies for storing the sounds of the past.⁸⁰ In doing so, they threaten to simplify the complex construction of temporality in Kafka's text, which, as J.M. Coetzee has shown, is anything but a stable and consistent use of one form of the present tense.⁸¹ At the same time, it must be acknowledged that there was a tendency to portray acoustically complex scenes in a language dominated by the present tense and the simulation of real-time narration. Nowhere is this clearer than in Kafka's own "Great Noise" or Peter Altenberg's "The Drummer Belin," which, as we saw in the first chapter, consisted of ostensibly real-time accounts of complex auditory experiences.

Encke's challenge to the priority of writing in "The Burrow" compels us to look beyond issues of temporality to additional points of convergence between the modes of listening operative within the text and the text's formal narrative structure. One such point of intersection lies in what I would like to call *narrative self-auscultation*, a mode of listening which takes narration itself as an auditory object, with the narrator able to listen to its own narration in the process of that narrative's unfolding as an acoustic phenomenon. In many ways, narrative self-auscultation resembles what, in his reading of Husserl's phenomenology, Jacques Derrida has termed "hearing-oneself-speak"

⁷⁹ Encke, *Augenblicke der Gefahr*, p. 133.

⁸⁰ On the cultural context from which such technologies emerged, see Sterne, *The Audible Past*, pp. 287-333.

⁸¹ J.M. Coetzee, "Time, Tense and Aspect in Kafka's 'The Burrow'" in *MLN*, Vol. 96, No. 3, German Issue (April 1981): 556-79.

(*s'écouter*).⁸² To speak, Derrida argues, is necessarily to hear oneself speak, thus “the signifier, animated by my breath and by the meaning intention [...] is in absolute proximity to me.”⁸³ This act of listening-to-oneself-speak enables the subject to recognize the other in already familiar terms at the same time that it prevents the possibility of knowing the other, since to hear another speaking is always to hear oneself speak. As Hans Ulrich Gumbrecht explains, hearing-ourselves-speak is inextricably bound up with the idea of a subject controlling its own actions and speech. It fosters the illusion that it is possible to attribute stable meanings to texts and words and strengthens the subject’s claim to controlling a ‘world of objects.’⁸⁴

While it is beyond the scope of the current project to elaborate further on the role of hearing and the voice in Derrida’s deconstruction of a ‘metaphysics of presence,’ his remarks are helpful in that they enable us to conceive of speech as both the act of communicating and producing sound *as well as* the act of listening to those sounds as an expression of the self.⁸⁵ In “The Burrow,” hearing-oneself-speak introduces a gap into the process of communication, with the subject differentiated into the roles of both speaker and listener. The passage that most clearly illustrates this rupture comes shortly after the protagonist hears the sound of its own blood. Thus, at almost the same moment that the body becomes audible, the creature notes a significant shift in the nature of the

⁸² See Jacques Derrida, *Speech and Phenomena and Other Essays on Husserl’s Theory of Signs*, trans. David B. Allison (Evanston: Northwestern UP, 1973), especially pp. 76-87.

⁸³ *Ibid.*, pp. 77.

⁸⁴ See Hans Ulrich Gumbrecht, “A Farewell to Interpretation” in *Materialities of Communication*, ed. Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer, trans. William Whobrey (Stanford: Stanford UP, 1994): 389-402, here p. 393.

⁸⁵ For a critical reading of Derrida’s treatment of hearing and the ear, see Erlmann, *Reason and Resonance*, pp. 47-60.

allegedly external noise it is attempting to locate. Whereas before the location and volume of the sound had remained constant, this regularity now gives way to a dynamic noise conceived as an almost autonomous entity capable of moving through space. Without explicitly connecting it to a body, the qualities of the sound suggest mobility and ultimately give rise to visual hallucinations of a living organism:

The noise seems to have gotten louder, not much louder, of course—here it was always about only the slightest differences—but still a little louder, clearly recognizable to the ear. And this getting-louder seems to be a getting-closer. Even clearer than one hears the getting-louder, one literally sees the step with which it approaches. One jumps back from the wall, one searches with a glance to survey all possibilities that this discovery brings with it.⁸⁶

If in the past the protagonist had lamented, “I’m not getting any closer at all to the location of the noise,” here the sound moves toward the listener.⁸⁷ Not only does the movement of the noise through space suggest corresponding visual characteristics, but the sound becomes so vivid that the protagonist is provoked to jump out of its way, convinced that its allegedly physical body will collide with the creature’s own. What had once been static and immutable now grows louder and softer, moves nearer and farther away, taking on both visual and tactile properties.

Yet the passage is ultimately ambiguous in outlining what the protagonist actually perceives. The conclusion that the noise resembles a physical body capable of traveling through three-dimensional space seems to constitute a logical leap from the empirical evidence the creature has gathered through its scientific investigations. The sound’s movement is explained in terms of an increase in intensity, a “getting louder

⁸⁶ “Das Geräusch scheint stärker geworden, nicht viel stärker natürlich, hier handelt es sich immer nur um feinste Unterschiede, aber ein wenig stärker doch, deutlich dem Ohre erkennbar. Und dieses Stärkerwerden scheint ein Näherkommen, noch viel deutlicher als man das Stärker-Werden hört, sieht man förmlich den Schritt mit dem es näherkommt. Man springt von der Wand zurück, man sucht mit einem Blick alle Möglichkeiten zu übersehen, welche diese Entdeckung zur Folge haben wird” (*B* 497).

⁸⁷ “Ich komme gar nicht dem Ort des Geräusches näher”; *ibid.*, p. 488.

(*Stärkerwerden*),” which is itself invested with organic qualities, as “it comes closer (*es näherkommt*).” What the “it” actually refers to remains unclear beyond its ambiguous acoustic characteristics, which enable the listener to draw connections between a change in volume and location in space. Thus, at the same time that it depicts the sound as increasingly autonomous and mobile, the passage raises questions about the protagonist’s scientific methods and its ability to draw logical connections between what it perceives and what is actually the case. “My imagination will not stop (*stillstehen*),” the creature explains only a few pages later.⁸⁸

The role of the imagination is again questioned during a crucial moment in which the noise is finally given a body. It is at this time that the verb “hissing (*zischen*)” becomes the noun “hisser (*der Zischer*),” thereby implying that the mysterious noise can now be attributed to a single, living organism rather than architectural damage in the burrow or the mass of workers the protagonist regularly employs. “[The hissing] grows louder,” the creature repeats, “it comes closer, but I wriggle my way through the labyrinth and camp out up here under the moss; it is almost as if I were already leaving the house to the hisser, content if only to have a little peace up here. To the hisser? Have I come to a new conclusion concerning the cause of the noise?”⁸⁹ The shift from “hissing” to “the hisser” is so unexpected that the protagonist is forced to stop its narration abruptly in a manner that is unprecedented in the text. “To the hisser?” it asks,

⁸⁸ “Die Einbildungskraft will nicht stillstehn”; *ibid.*, p. 500.

⁸⁹ “[Das Zischen] wird stärker, es kommt näher, ich aber schlängele mich durch das Labyrinth und lagere mich hier oben unter dem moos, es ist ja fast, als überließe ich dem Zischer schon das Haus, zufrieden wenn ich nur hier oben ein wenig Ruhe habe. Dem Zischer? Habe ich etwa eine neue bestimmte Meinung über die Ursache des Geräusches?”; *ibid.*, p. 499.

as if unsure of what it is saying and shocked by its own change of opinion regarding the source of sound.

It is important to note the trajectory that the creature's theories about the source of the sound take over the course of the narrative. Contrary to Mladen Dolar's claim that "it never occurs to the badger that the sound may be a phenomenon of inorganic origin,"⁹⁰ the creature's initial hypothesis is precisely that the acoustic disruption comes from structural damage in the burrow.⁹¹ On one level, of course, Dolar is right to say that the sound is always connected to qualities of vitality and life. As we have seen, the architectural structure itself is invested with organic properties, depicted as capable of feeling pain and often indistinguishable from the creature's own body. Yet in overemphasizing this overlap we run the risk of missing the significance of the protagonist's assertion of a living, breathing "hisser" at this late stage in the narrative, the ways in which its theory of the sound source shifts from conceiving the sound as an architectural flaw to later understanding it as an indication of another living body. Just as the creature's figurative self-observations outside the burrow provoke suspicions of an external enemy monitoring its every move, inside the burrow experiences of listening to the sound of its own blood and fantasies of listening to the rustling of the central square lead to suspicions that the hissing emanates from a living body. In positioning instances of self-observation in close proximity to fears of an external enemy throughout the text,

⁹⁰ Dolar, "The Burrow of Sound," p. 115.

⁹¹ "I recognize what it is immediately; the small fry, whom I had not monitored closely enough and had been far too easy on, had burrowed a new path somewhere during my absence, this path must have intersected with an older one, the air was caught there, and that produced the whistling noise (*ich verstehe es sofort, das Kleinzeug, viel zu wenig von mir beaufsichtigt, viel zu sehr von mir geschont, hat in meiner Abwesenheit irgendwo einen neuen Weg gebohrt, dieser Weg ist mit einem alten zusammengestoßen, die Luft verfängt sich dort and das ergibt das zischende Geräusch*)" (B 487).

Kafka implicates the practice of self-observation in the production of the hissing enemy, who is never seen and whose existence the text chooses to leave unverified.

The shift from hissing to an invisible hisser indicates a rupture within the protagonist, or, what Elisabeth Strowick has analyzed as the protagonist's growing "suspicion against itself."⁹² Indeed, the creature's sudden realization that the sound might come from a hisser is marked by uncertainty and surprise at what it is saying. If, earlier in the text, it had pronounced: "I can, however, trust only myself and the burrow (*vertrauen aber kann ich nur mir und dem Bau*)" (B 481), this later passage signals a lack of trust regarding its own intuitions. Its isolation and paranoia lead the creature not only to posit the existence of invisible, malevolent enemies, but to a breakdown of confidence in itself. By the end the creature can trust no one, not even itself. The passage stages a struggle internal to the protagonist between two competing intuitions, two voices which can no longer be reconciled, existing in a state of extreme tension within a single individual. On the one hand, the protagonist wants to assert that the sound comes from the various channels being dug by its small servants. On the other, it perceives the sound as capable of moving closer and farther away, implying that the noise is tied to a living body. The tension between the two theories leads to a crisis of confidence in itself. "Is that not my specific opinion (*ist das nicht meine bestimmte Meinung*)" (B 499), it asks in relation to its initial theory of architectural damage. Interestingly enough, it is at the moment in which the creature becomes irresolvably of two minds that the enemy solidifies and is cast into a single body.

This crucial scene therefore lends credibility to Strowick's argument that the text enacts a breakdown of trust in the self. But the creature's internal split also models a

⁹² See Strowick, "Epistemologie des Verdachts," pp. 123, 129.

mode of narrative self-auscultation. In posing the question of whether or not it believes that the sound comes from a single body, the protagonist provides a delayed response to its own narration of events in the previous sentence, shocked by what it has just described. The question, in other words, registers surprise at its own seemingly real-time, present tense account of the situation, as if not only narrating but also listening to itself in the act of narration. Just as the text thematizes self-observation, and hints at the possibility that the mysterious sound may be nothing more than the auditory byproduct of the creature's own internal organs, as overheard in an unknowing act of self-auscultation, here we see the superimposition of this perceptual act onto the narrative itself. And if earlier before the sound appeared in the burrow, the protagonist had drawn connections between internal enemies and modes of oral narrative and the telling of legends and myths ("*die Sagen erzählen von ihnen*"), the act of speaking and of overhearing itself speak intensifies suspicions of a singular, unverifiable enemy inside the home. In both cases, oral storytelling—characteristics of which structure Kafka's own first-person narrative—is depicted as a realm conducive to inner enemies, even complicit in their creation.

At the same moment that the protagonist listens to its own narration, the sound it hears takes on a body. No longer understood as the result of structural damage to the burrow or the collective effect of the workers, but still believed to be severed from the creature's own body, the mysterious noise is now projected onto a single invisible enemy situated somewhere in the external world. The externalization of physiological processes in fantasies surrounding an even more isolated castle square coincides with the gradual solidification and materialization of the enemy outside of the protagonist's body. The

allegedly objective sound assumes a menacing omnipresence, impossible to locate but forever stalking the corridors of the architectural ear.

Kafka's literary text portrays the unexpected effects of scientific modes of self-experimentation and self-observation. Over the course of the creature's investigation into mysterious auditory phenomena inside the burrow, the act of narration itself becomes embedded within this experimental framework. A mode of listening that encompasses both auditory self-observations, and an attentiveness to the sounds of blood in its own ears, also takes as its object the narrative it constructs in order to communicate these experiences. However, just as the sound with no identifiable source unravels the creature's pretensions as an experimental scientist, the act of listening-to-itself-speak gives rise to a breakdown in self-confidence, a suspicion against itself, and a firm conviction that the sound signifies the singular threat of an invisible adversary.

In the next two chapters I continue to explore conceptions of literary narration as acoustical experiment, turning to several texts by Robert Musil. In addition, I build on my discussion of subjective and hallucinatory noises in "The Burrow" and, more specifically, the transformation of pure sonority into living bodies capable of moving through space. Once again, the scene begins with a close-up of the ear, functioning as a space to be entered into, this time with mystical implications.

Chapter 4

Stereoscopic Sound:

Robert Musil and the Archaeology of Acoustic Space

Binaural sounds are more clearly defined, they are things acoustically perceived, which, stationary or in motion, are in the same space as the things that one sees.
E.M. von Hornbostel, “Observations on Monaural and Binaural Hearing”

Finally, two legs come through the night. The footstep of two female legs and the ear. I don't want to look. My ear stands on the street like an entryway. Never was I so united with a woman as with this stranger, whose footsteps disappear deeper and deeper in my ear.
Robert Musil, “The Believer”

At almost the same time that Kafka was exploring the interrelations between paranoia, subjective noises, and auditory embodiment, Robert Musil composed a short literary text entitled “The Believer (*Der Gläubige*)” (1924).¹ Similar to Kafka, Musil drew connections between the spaces of the ear and architectural structures, portraying the auditory organ as a space that can be entered into by other living creatures. The text, which begins with the protagonist suddenly roused from his sleep by what he ironically refers to as divine intervention, concludes with a highly erotic, mystical union with a stranger on the street. Although the woman remains hidden from view, the protagonist sends out his ear in search of her below and, in the end, her footsteps enter into his ear's cavernous spaces as if the sounds were solid, three-dimensional objects.

¹ The text originally appeared in an issue of *Die Lebenden* dated April 6, 1924. Musil would then produce a slightly different version of the text under the title “The Awakened One (*Der Erwachte*)” in December of the same year. Another modified version would appear under the title, “Der Erweckte,” in his 1936 collection of short prose works, *Posthumous Papers of a Living Author* (*Nachlaß zu Lebzeiten*). See Musil, “Der Gläubige” and “Der Erwachte” (1924) in *Gesammelte Werke*, ed. Adolf Frisé (Reinbek bei Hamburg: Rowohlt, 1978), pp. 575-77; Musil, *Nachlaß zu Lebzeiten* (Hamburg: Rowohlt Verlag, 2004), pp. 23-24.

While Kafka and Musil both represent the ear as a quasi-architectural structure, the resulting merger of sound-space with the listener's body in each case produces remarkably different outcomes and operates according to diverging techniques of listening. One of the most glaring differences between the two texts lies in Musil's representation of the ear as a *mobile organ* capable of moving from interior spaces to the street below and actively searching out the source of the sounds. If Kafka and Altenberg portrayed the modern noise as an aggressive force capable of inflicting physical damage on the body of a passive and vulnerable listener, Musil's protagonist, by contrast, actively reaches out to meet the sound halfway. Moreover, he does so with confidence, easily finding the location of the sound and inviting it into the ear without the epistemic confusion found in Kafka, where localization was commonly a problem.

Indeed, surveying other literary representations from the same period, it would not be an exaggeration to describe "The Believer" as truly singular, almost idiosyncratic, in its account of a more confident and active listener eager to extend his ear outward to the sounds on the street below his window. Rather than ravishing and physically destroying the listener's ear like the noise of Altenberg's "The Drummer Belin," Kafka's legal subject, or the violent streetcar from the often-quoted opening section of Rainer Maria Rilke's *The Notebooks of Malte Laurids Brigge*,² Musil's more active and

² "That I can't give up sleeping with the window open. Electric trolleys race ringing through my room. Automobiles rush over me. A door slams. Somewhere a pane of glass shatters, I hear the big fragments laugh, the small ones titter. Then, suddenly, a muffled, confined noise from the other side, within the building. Someone is climbing the stairs. Coming, incessantly coming. Is here, here a long time, passes by. And the street again (*Daß ich es nicht lassen kann, bei offenem Fenster zu schlafen. Elektrische Bahnen rasen läutend durch meine Stube. Automobile gehen über mich hin. Eine Tür fällt zu. Irgendwo klirrt eine Scheibe herunter, ich höre ihre großen Scherben lachen, die kleinen Splitter kichern. Dann plötzlich dumpfer, eingeschloßener Lärm von der anderen Seite, innen im Hause. Jemand steigt die Treppe. Kommt, kommt unaufhörlich. Ist da, ist lange da, geht vorbei. Und wieder die Straße*"); Rainer Maria Rilke, *The Notebooks of Malte Laurids Brigge* (1910), trans. Burton Pike (Normal, IL.: Dalkey Archive Press, 2009), p. 2; *Die Aufzeichnungen des Malte Laurids Brigge*, ed. Manfred Engel (Stuttgart:

confident listener willingly invites the sounds of the street into the ear but experiences none of the violence so central to those other accounts. One might be tempted to attribute this contrast to a qualitative difference in the properties of the sounds they hear. The noise of a streetcar or the cacophony of modern warfare, one could argue, are undoubtedly more intense than the sound of footsteps echoing on the street. Yet Rilke's protagonist is just as distressed by the sound of a metal lid rolling on the floor in his neighbor's apartment as he is by the rattling streetcar,³ while in "Great Noise" Kafka describes the subtle noises of his family's morning routine in a language more fitting for the streets of the metropolis. As I have attempted to show throughout the dissertation, the physical properties of sound waves—their intensity, frequency, and wave pattern—constitute only one set of elements within a much more complex configuration of social, cultural, and aesthetic considerations related to the perception of sonic objects.

While still attentive to figurative imaginings of the internal spaces of the ear, this chapter focuses on the evolution of scientific research on subjective noises located inside the body to the construction of a theory of auditory space *outside the body*. According to this conception of an external acoustic space, modern soundscapes were inhabited by 'auditory things (*Hördinge*)'—sounds situated along spatial coordinates and invested with corporeal qualities, but perceived without the paranoia and solipsism, epistemic and ontological difficulties that plague Kafka's protagonists.

Reclam, 1997), p. 8. See also Michael Cowan, "Imagining Modernity through the Ear: Rilke's *Die Aufzeichnungen des Malte Laurids Brigge* and the Noise of Modern Life" in *Arcadia* 41, no. 1 (2006): 124-46.

³ Rainer Maria Rilke, *Die Aufzeichnungen des Malte Laurids Brigge*, ed. Manfred Engel (Stuttgart: Reclam, 1997), p. 152.

I link scientific discussions of a distinctly auditory mode of spatial perception to Robert Musil's representation of a more active listener in "The Believer." Although critics have noted connections between Musil's account of World War I and contemporaneous theories of hearing, they make almost no mention of "The Believer."⁴ In addition they limit their discussion of acoustic space to its iteration within early Gestalt psychology and neglect its significant prehistory in the nineteenth century. Finally, despite a pronounced interest in media theory, critics have often overlooked the complex coevolution of visual and acoustic media like the stereoscope and the telephone, on the one hand, and the conceptualization of acoustic space in the experimental sciences, on the other.

The notion of 'auditory space' has frequently been invoked in media theory and writings on the cultural history of the senses—from Marshall McLuhan and Walter J. Ong to more recent studies by Emily Thompson, Jonathan Sterne, and Steven Connor—to denote either the actual architectural spaces in which sounds are heard or a more fluid, permeable, and less well-defined experience of space in which distinctions between internal and external spaces are broken down and rendered untenable.⁵ As we have seen,

⁴ Manfred Moser, "Ing. Dr. Phil. Robert Musil: Ein Soldat Erzählt" in *Arsenale der Seele: Literatur- und Medienanalyse seit 1870*, ed. Friedrich A. Kittler and Georg Christoph Tholen (München: Wilhelm Fink, 1989): 97-115; Peter Berz, "Der Fliegerpfeil" in *Armaturen der Sinne: Literarische und technische Medien 1870 bis 1920*, ed. Jochen Hörisch and Michael Wetzels (München: Wilhelm Fink, 1990): 265-88; Bernhard Siegert, "Rauschfilterung als Hörspiel: Archäologie nachrichtentechnischen Wissens in Robert Musils *Amse!*" in *Robert Musil – Dichter, Essayist, Wissenschaftler (Musil-Studien 8)* (München: Wilhelm Fink, 1993): 193-208; Christoph Hoffmann, *'Der Dichter am Apparat': Medientechnik, Experimentalpsychologie und Texte Robert Musils 1899-1942* (München: Fink, 1999), pp. 113-138, 187-229; Julia Encke, *Augenblicke der Gefahr: Der Krieg und die Sinne (1914-1934)* (München: Wilhelm Fink, 2006), pp. 162-93.

⁵ See Marshall McLuhan and Edmund Carpenter. "Acoustic Space" in *Explorations in Communication, an Anthology*, ed. Edmund Carpenter (Boston: Beacon Press, 1960), pp. 65-70; Walter J. Ong, *The Presence of the Word: Some Prolegomena for Cultural and Religious History* (New Haven: Yale UP, 1967), especially pp. 163-69; Emily Thompson, *The Soundscape of Modernity* (Cambridge: MIT Press, 2002); Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham: Duke UP, 2003), especially p.

these were indeed characteristics that were commonly used to describe the listener's experience of sound and space, albeit at the most general and abstract level.

Surprisingly absent from recent work on the cultural history of listening, however, is any consideration of the late nineteenth and early twentieth-century scientific interest in what was variously termed “acoustic and auditory space (*Hörraum*),”⁶ “the ear’s sense of space (*Raumsinn des Ohres*),”⁷ “spatial hearing (*räumliches Hören*),”⁸ “plastic hearing (*plastisches Hören*),”⁹ and “stereo-acoustical hearing (*stereoakustisches Hören*).”¹⁰ As I show, during the same period that cultural critics and literary authors lamented the abstract dismantling of spatial boundaries through noise, and otologists peered into the internal spaces of the ear, experimental psychologists, technical experts, and those working in the field of physiological acoustics began to theorize the existence of a purely auditory mode of spatial perception. Whereas around 1800 only the eye and the sense of touch were invested with the ability to perceive space, by the early decades of the twentieth century, the ear was also regarded as capable of orienting individuals spatially.

93; Steven Connor, “The Modern Auditory I” in *Rewriting the Self: Histories from the Renaissance to the Present*, ed. Roy Porter (London: Routledge, 1996), pp. 203-23.

⁶ Matataro Matsumoto, “Researches on Acoustic Space” in *Studies from the Yale Psychological Laboratory* 5 (1897): 1-75; Arthur Henry Pierce, *Studies in Auditory and Visual Space Perception* (New York: Longmans, Green, and Co., 1901); E.M. von Hornbostel, “Beobachtungen über ein- und zweiohriges Hören” in *Psychologische Forschung*, Bd. 4 (1923): 64-114, especially p. 114.

⁷ Ernst Mach, “Bermerkungen über den Raumsinn des Ohres” in *Annalen der Physik* (1865): 331-33; Hugo Münsterberg, “Raumsinn des Ohres” in *Beiträge zur Experimentellen Psychologie*, Heft 2 (1889): 182-234.

⁸ E.M. von Hornbostel, “Das räumliche Hören” in *Handbuch der normalen und pathologischen Physiologie*, ed. G. v. Bergmann, A. Bethe, et al (Berlin: Springer, 1926), pp. 602-618.

⁹ Manfred von Ardenne, “Plastisches Hören von Rundfunkdarbietungen” in *Funk*, Heft 23 (1925), p. 281; Gerhard Staar, “Plastisches Hören mit Doppelpfänger” in *Funk*, no. 28 (1925): 340.

¹⁰ Erwin Meyer, “Über das stereoakustische Hören” in *Elektrotechnische Zeitschrift*, Heft 22 (28. Mai 1925): 805-807.

Under the right conditions, scientists argued, objects could be located in space by means of the ear alone.¹¹

‘Acoustic space’ not only connoted a more fluid and expansive space, one that corresponded to experiences of urban noise and encounters with new media like radio and wireless telegraphy. At the same time that anti-noise activists and cultural critics lamented the infiltration of the domestic sphere by urban noise and contemporaneous media technologies—some going so far as to identify the ‘end of the private sphere’ in an age bombarded by radio transmissions and the neighbor’s gramophone¹²—scientists were also experimentally investigating issues related to sound’s directionality, the ear’s geometry and spatial properties, and the technical implementation of acoustic space through stereophonic sound experiments involving the telephone.¹³

This chapter examines the cultural and technological preconditions of auditory space along with its articulation in the domain of literature in an attempt to sketch out the emergence of a more active listener around 1900. My trajectory follows three interrelated paths. First, I examine how early scientific work on acoustic space was bound up with studies of vision in the nineteenth century. Theories of auditory space did not emerge suddenly on the battlefields of World War I, as some critics have suggested,

¹¹ In 1889, for example, Hugo Münsterberg argued that the ear’s sense of space was “beyond doubt” (182) and concluded that, “the ear has an equally autonomous spatial sense as the eye and skin” (209). Arthur Henry Pierce similarly noted in 1901: “So far as it goes [auditory space] is no less real than its sister spaces, and to an extent much greater than is commonly acknowledged it contributes to their development” (203). See Münsterberg, “Raumsinn des Ohres”; Pierce, *Studies in Auditory and Visual Space Perception*.

¹² Martha Maria Gehrke, “Das Ende der privaten Sphäre” (1930) in *Radio-Kultur in der Weimarer Republik*, ed. Irmela Schneider (Tübingen: Gunter Narr Verlag, 1984), pp. 136-38.

¹³ On early stereophonic sound experiments and early radio discourse on the aesthetics of sound-space, see Ludwig Kapeller, “Der stereophonische Rundfunk” in *Funk*, Heft 27 (1925): 317-319; Manfred von Ardenne, “Raumgetreues oder Räumliches Hören?” in *Die Sendung*, 3. Jahrgang, no. 13 (26. März 1926): 4; Hermann Schütze, “Raumhören (Stereoakustik)” in *Kosmos. Gesellschaft der Naturfreunde*, Heft 5 (1926): 155-157; Rudolf Leonhard, “Die Situation des Hörspiels” (1928) in *Radio-Kultur in der Weimarer Republik*, p. 161.

but were instead the result of a much earlier shift in scientific theories of human sense perception, which Jonathan Crary has termed the discovery of the “binocular body.”¹⁴ Growing interest in seeing with two eyes, facilitated by the stereoscope, soon gave rise to studies on the relations between the two ears. Within these discussions the stereoscope functioned as what Crary has called an “epistemological figure,” providing a framework of references and terminology for analyzing related processes of binaural hearing.¹⁵ At the same time, the visual device served as what Mara Mills and John Tresch have recently termed a “commissure,” the place where vision and hearing are joined together, the hyphen contained within ‘audio-visual,’ a figure that makes possible the exchanges—but not necessarily the interchangeability—among the human senses or between technological interfaces.”¹⁶ Along these same lines, my second aim will be to bring to the surface the neglected and perhaps initially confounding interrelations between the stereoscope and the telephone as media of popular entertainment and as scientific instruments.

Finally, I look at the ways in which Robert Musil’s literary writings appropriate contemporaneous scientific research on acoustic space in constructing a more confident and capable listener, who stands in stark contrast to those depicted in works by Kafka or Altenberg. That Musil was familiar with contemporaneous work on auditory space is evidenced most clearly by his training as an experimental psychologist before embarking

¹⁴ On the discovery of the binocular body, see Jonathan Crary, *Techniques of the Observer: On Vision and Modernity* (Cambridge: MIT Press, 1990), pp. 116-29.

¹⁵ *Ibid.*, p. 30.

¹⁶ Mara Mills and John Tresch, “Introduction: Audio/Visual” in *Grey Room* 43 (Spring 2011): 7-15, here p. 10. “Well before television or digital computers,” Mills and Tresch rightly observe, “notions of the convergence, connectivity, and analogical relation between the auditory and the visual were widespread in both theory and technological practice” (8).

on a literary career and his contact with one of the most vehement defenders and theoreticians of acoustic space, Erich Moritz von Hornbostel, who was both a longtime friend and former colleague of Musil's at the Berlin Institute for Experimental Psychology.¹⁷ In an essay entitled "Observations on Monaural and Binaural Hearing," published a year before Musil's "The Believer," Hornbostel argued that the ability to perceive the world spatially was by no means dependent on vision or touch. Through processes of binaural hearing and the registration of the temporal difference between sensations perceived by each of the two ears, sounds also came to possess spatial characteristics. They were, according to Hornbostel, "things acoustically perceived (*Dinge, die hörend wahrgenommen werden*)," localizable three-dimensional entities that moved through space.¹⁸

While it cannot be confirmed that Musil had read Hornbostel's 1923 essay before writing "The Believer," he was certainly aware of research on auditory space during his days as a student in Berlin and remained in contact with his former colleague long after

¹⁷ For a thorough account of Hornbostel's activities as both an experimental psychologist and ethnomusicologist, see the collection of essays, *Vom tönenden Wirbel menschlichen Tuns': Erich M. von Hornbostel als Gestaltpsychologe, Archivar und Musikwissenschaftler: Studien und Dokumente*, ed. Sebastian Klotz (Berlin: Schibri-Verlag, 1998).

¹⁸ E.M. von Hornbostel, "Beobachtungen über ein- und zweiohriges Hören" in *Psychologische Forschung*, Bd. 4 (1923): 64-114, here p. 114. Hornbostel's notion of the 'aural thing' is indebted to Ewald Hering's concept of the 'visual thing (*Sehding*),' which he first outlined in 1879. As Tobias Wilke has insightfully noted, there is a remarkable shift in the term's semantic field between Hering in the late nineteenth century and Rudolf Arnheim's usage of the same term after major technological innovations in the early twentieth century. For the former, it is intended to differentiate 'real objects' from visual impressions influenced by distance, perspective, and lighting conditions. For Arnheim, by contrast, in an age more fully immersed in media like cinema and photography the distinction between 'visual things' and 'real things' becomes non-existent. At the same time, Wilke mistakenly attributes Arnheim's dismissal of aural things to his familiarity with Gestalt psychology. As I show, Hornbostel and Wertheimer—two pioneering figures in early Gestalt psychology—were in fact the most vocal proponents of auditory space and a corresponding theory of aural things. See Tobias Wilke, *Medien der Unmittelbarkeit: Dingkonzepte und Wahrnehmungstechniken 1918-1939* (München: Wilhelm Fink, 2010), pp. 44-51; Roberto Casati, "The Concept of *Sehding* from Hering to Katz" in *Gestalt Psychology: Its Origins, Foundations and Influence: An International Workshop, Firenze, 13-17 Novembre 1989* (1994): 21-57.

leaving the institute in 1908.¹⁹ As early as 1901, his dissertation advisor, Carl Stumpf, had been praised as one of the few “bold enough to stand out for an auditory space” and, as the director of the institute, had encouraged his students to investigate the topic in greater detail.²⁰ Musil would have also encountered discussions of auditory space in writings by Ernst Mach, who was both the subject of his doctoral dissertation as well as one of the earliest figures to address the ear’s spatial capabilities. Finally, Hornbostel’s initial research on sound and space aided in the development of new military technologies on the same battlefields that Musil experienced firsthand as a soldier and later depicted with a remarkable attentiveness to sound in his notebooks and literary writings.²¹

Jan Purkyne: Subjective Space and Intracranial Localization

In a report summarizing the results of their earliest experiments on auditory localization conducted in the spring of 1915 at the Psychological Institute of the University of Berlin, Erich Moritz von Hornbostel and his colleague Max Wertheimer

¹⁹ In a journal entry dated the first of October, 1911, Musil writes: “At the beginning of this time together with Hornbostl. and Wertheimer, felt a little homesick for psychology (*Zu Beginn dieser Zeit mit Hornbostl u. Wertheimer einmal zusammengewesen, ein bisschen Heimweh nach der Psychologie bekommen*)”; Musil, *Tagebücher*, ed. Adolf Frisé (Reinbek bei Hamburg: Rowohlt, 1976), p. 240. Another entry recounts a visit Musil made to the Psychological Institute in Berlin in April of 1913, where he also visited Hornbostel and his family; see Musil, *Tagebücher*, p. 268. A 1923 letter from Martha and Robert Musil to Annina Marcovaldi indicates that Musil invited Hornbostel to what was presumably the premiere of his play, “Vincent and the Girlfriend of Important Men (*Vinzenz und die Freundin bedeutender Männer*), which was held on December 4 of the same year; Musil, *Briefe: 1901-1942*, ed. Adolf Frisé (Reinbek bei Hamburg: Rowohlt, 1981), p. 324.

²⁰ See Pierce, *Studies in Auditory and Visual Space Perception*, p. 8.

²¹ See Carl Stumpf, *Über den psychologischen Ursprung der Raumvorstellung* (Leipzig: S. Hirzel, 1873), 298-301; Ernst Mach, “Bermerkungen über den Raumsinn des Ohres”; Ernst Mach, “Der physiologische Raum im Gegensatz zum metrischen” in *Erkenntnis und Irrtum* (1906; Leipzig: Johann Ambrosius Barth, 1920), especially p. 341. On Hornbostel and the First World War, see Christoph Hoffmann, “Wissenschaft und Militär: Das Berliner Psychologische Institut und der I. Weltkrieg” in *Psychologie und Geschichte*, Jahrgang 5, Heft 3/4 (April 1994): 261-85.

cited the Czech physiologist Jan Purkyne (1787-1869) and the American scientist and inventor Alexander Graham Bell as the two figures to whom their study was most indebted.²² They credit Purkyne as being the first to study the localization of “dichotic sound images”—i.e., the stimulation of both ears simultaneously by two different sounds—which the two authors compare to processes of stereoscopic vision. Purkyne is perhaps best known today for his studies of subjective vision and visual afterimages, but as in the case of many physiologists of the nineteenth century his interest in vision coevolved with concurrent studies of hearing.²³ Already in 1825 he had addressed questions related to ‘Tartini tones,’ or, combination tones—an acoustic phenomenon where two tones played simultaneously give rise to an additional third tone perceived by some listeners. Purkyne noted that, unlike cases involving sounds that came from objectively real sources in the world, listeners could not determine even rough spatial coordinates or directionality for combination tones. Instead, they traced the sound’s location back to somewhere inside their own ear and, like Kafka’s protagonist in “The Burrow,” “felt like they were being followed (*verfolgt fühlen*).”²⁴ Thus, Purkyne

²² “The localization of dichotic sound images, which is comparable with stereoscopic vision, was first observed in 1860 by Purkyne. An experimental protocol analogous to ours was already used by Bell in 1880 (*Die dem stereoskopischen Sehen vergleichbare Lokalisation dichotischer Schallbilder wurde zuerst 1860 von Purkyne beobachtet, eine der unseren analoge Versuchsanordnung schon 1880 von Bell benutzt*”); Erich Moritz von Hornbostel and Max Wertheimer, “Über die Wahrnehmung der Schallrichtung” in *Sitzungsberichte der Preußischen Akademie der Wissenschaften* (1920): 388-96, here p. 389 n. 2.

²³ On Purkyne, see Crary, *Techniques of the Observer*, pp. 102-104; Veit Erlmann, *Reason and Resonance: A History of Modern Aurality* (New York: Zone Books, 2010), pp. 207-11.

²⁴ Jan Purkyne, “Untersuchungen über den Tartinischen dritten Ton” (1825) in *Opera Omnia*, vol. 2 (Prague 1918-1939), pp. 58-60.

provides one of the earliest examples of the ways in which scientific studies of subjective noises were coupled with investigations of the ear's capacity to perceive space.²⁵

Ironically, his remarks on auditory localization were related to the localization of *subjective tones*, which had no objective counterpart. This oscillation between objective and subjective spaces is epitomized in Purkyne's notion of a "topology of the senses (*Topologie der Sinne*)," which he outlined several decades later. According to the author, in addition to "objective space (*objectiver Raum*)," which could be understood and defined by mathematics and natural physical laws, there was also a "subjective space (*subjectiver Raum*)," which allegedly served as the foundation for every external, objective space we perceive. Information about space gleaned through locomotion and the movements of specific bodily organs, Purkyne argued, was always compared with, and set alongside, imaginary locations and spatial arrangements in "our subjective, inner, bodily space (*unser subjective innere Körperraum*)."²⁶ Thus, if, as Jonathan Crary has argued, Purkyne's work on vision and visual afterimages helped to map the eye "as a productive territory with varying zones of efficiency and aptitude," this rationalization and quantification of bodily surfaces was carried out under the auspices of, and articulated in a language that made reference to Romantic notions of interiority and a

²⁵ Compare also William Preyer's study of subjective noises in *Über die Grenzen der Tonwahrnehmung* (Jena: H. Dufft, 1876) with his work on auditory localization in "Die Wahrnehmung der Schallrichtung mittels der Bogengänge" in *Pflügers Archiv* 40 (1887): 586-619. See also August Lucae's study of intracranial localization in his "Zur Physiologie und Pathologie des Gehörorganes" in *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin*, 25. Band, 3. and 4. Heft (1862): 339-54, and his *Zur Entstehung und Behandlung der subjectiven Gehörsempfindungen* (Berlin: Otto Enslin, 1884). For an example from the early twentieth century, see Erich Waetzmann's related work on localization and subjective noises in his "Das Abhören von Flugzeugschall" in *Zeitschrift für technische Physik* 2 (1921): 191-94; *Schule Des Horchens* (Leipzig/Berlin: B.G. Teubner, 1934); *Hören in der Stille* (Göttingen: Vandenhoeck & Ruprecht, 1937).

²⁶ Purkyne, "Die Topologie der Sinne," (1854) in *Opera Omnia*, vol. 3 (Prague: 1939), pp. 79-91, here p. 79.

private spatial realm closed off from the outside world.²⁷ Once again, Purkyne was interested in processes of localization not as they occurred in the objective, external world, but in a “topography of the senses” that privileged subjective perceptions and an “inner, bodily space.”

In the same text, Purkyne stressed the inherent subjectivity of auditory perception and the ear’s inability to locate sounds in space. Because the ears remained fixed to the skull and could not move like the eye, he argued, they could only determine the directionality of sound “very vaguely (*sehr unbestimmt*).”²⁸ An individual could perhaps decide whether the sound was louder in one ear or the other, Purkyne continued, and, in turn, determine its general direction, but this was the extent of the ear’s spatial capabilities. Purkyne was compelled to conclude his remarks on auditory localization by again discussing the ways in which attentive listeners could often locate subjective noises in specific parts of the ear, or believed to hear quiet sounds like the ticking of a watch in sections of the skull.²⁹ The listener posited by Purkyne was therefore one disoriented by the multitude of acoustic stimuli common to everyday life, incapable of gleaning more than basic information about the properties of a sound’s source and, in particular, its location. But this same listener was capable of locating the parts of the body affected by, or responsible for, noises with no grounding in external reality.

During a series of experiments conducted four years later, where, among other things, he demonstrated a self-observational device for “stethoscopically listening to the

²⁷ Crary, *Techniques of the Observer*, p. 104.

²⁸ Purkyne, “Die Topologie der Sinne,” p. 80.

²⁹ *Ibid.*, p. 81.

beating of one's own heart (*einen Apparat zum sthetoskopischen [sic] Behorchen des eigenen Herzschlags*)” and other subjective auditory phenomena, Purkyne attempted to evaluate the ear's capacity for attention and the listener's ability to distinguish between two lines of conversation spoken simultaneously.³⁰ For the experiments he had his assistants stand behind doors to the right and left of the subject, who listened to each speak simultaneously through tubes equipped with sound cones. Purkyne concluded that it was impossible to fuse the two disparate sound sources into a single, unitary perception and listeners were instead forced to switch constantly between one and the other. More interesting to Purkyne, however, was the fact that, when his two assistants spoke at the same time, the listener located the sound somewhere behind him, “nearby on the nape of the neck (*dicht am Nacken*),” rather than in front as he had expected. Purkyne remarked that a clear explanation was needed to account for the phenomenon and it was during the next four years that he would produce the foundational work on auditory localization cited by Hornbostel and Wertheimer.³¹

Purkyne's major contribution to the study of spatial hearing involved the more specific phenomenon known as “conduction (of sound) through cranial bones (*Kopfknochenleitung*).” The theory was commonly invoked to help explain the means by which speakers came to hear the sound of their own voices. Purkyne emphasized that this occurred through the transmission of vibrations between the larynx, the bones of the jaw, and those of the skull. Drawing on Purkyne's work two years later, the medical

³⁰ Purkyne, “Naturwissenschaftlich-mathematische Section, am 18. October 1858” in *Opera Omnia*, vol. 2 (Prague 1937), p. 99.

³¹ See *Prager Vierteljahrschrift* 3 (1860): 94. On September 22, 1862, Purkyne also gave a talk “On the Directionality of Sound (*Über die Richtung des Schalles*)”; *Opera Omnia*, vol. 2, pp. 117-118.

scientist August Lucae—whose pioneering work on subjective noises I discussed in the previous chapter—investigated the auditory effects generated by placing a ticking watch on top of the head.³² Why was it, Lucae asked, that when one closes his or her ears the ticking of the clock grows louder? Why, when we close a single ear, can the ticking be heard only in the closed ear? What was the impact of plugging the ears on our perception of the voice and sound sources located in the external world?

This set of questions seems an unlikely starting point for examining processes of auditory localization. But the experiments would later be referred to as proving beyond a doubt that the ear possessed a means of perceiving space that was independent of both vision and touch. The debate surrounding acoustic space, Arthur Henry Pierce observed in 1901, involved whether auditory impressions were themselves endowed with spatial attributes (direct perception) or if these spatial attributes were merely borrowed from the visual and tactual fields (indirect perception).³³ Experiments on the conduction of sound through cranial bones conducted by Purkyne and Lucae, Pierce continued, strongly suggested that whenever two simultaneously sounding bodies of similar nature were placed at a close distance from the head certain portions of the inner ear, skull, and other internal masses were thrown into vibration. “The resulting single sound is in each case located *within the head*.”³⁴ This “phantom-sound,” as Pierce called it, was increased by stopping the ears as Lucae had shown, thereby strengthening the vibrations of the tympanum. The phenomenon could be demonstrated most clearly by two telephones

³² See Lucae, “Zur Physiologie und Pathologie des Gehörorganes.”

³³ Pierce, *Studies in Auditory and Visual Space*, p. 180.

³⁴ *Ibid.*, p. 124, author’s emphasis.

with fusing sounds, which were moved closer and farther away from the listener's head. In changing the distance from 8 to 4 centimeters, the listener could hear the phantom-sound as it crossed over the threshold from external to internal spaces, moving from a point just outside the head to a specific location inside the head.³⁵

The theory of *Kopfknochenleitung* therefore provided undeniable evidence that the ear did not depend on vision or touch in localizing certain sounds, as neither the eye nor the surface of the skin was stimulated in any way. "The only outcome," Pierce stated in reference to the phenomenon, "seems to be the assumption for the independent reality of an auditory space [...] Without further ado, then, we may rest our case here, allowing facts to speak for themselves."³⁶ Intracranial localization, in other words, proved once and for all that the ear possessed the ability to perceive space.

Pierce's line of argumentation is somewhat surprising. On the one hand, it makes sense that he would chose intracranial localization as an example of auditory localization, since it was in those cases that sensory cues provided by vision and touch could be fully excluded. According to these criteria, auditory space was indeed 'independent' from sense modalities more commonly attributed with the ability to perceive space. Yet it is also bizarre that the basis of his argument for the ear's spatial abilities rests on the localization of 'phantom-sounds' inside the head. Although he goes out of his way to emphasize how specific the localizations are, that these sounds "are not only within the head, but *at well-defined positions there*,"³⁷ this should not distract us from the basic fact that these localizations are not tracking anything in the external world. There simply is

³⁵ See *ibid.*, pp. 128, 182.

³⁶ *Ibid.*, pp. 183, 184.

³⁷ *Ibid.*, p. 183, author's emphasis.

no sound source located inside the experimental subject's head, no matter how precisely he or she might be able to describe its position to researchers. As was readily apparent to both the researcher and eventually the subject, the source of the sound came instead from the two telephones located on either side of the head. Thus, proof for the existence of an independent acoustic space was provided by precise but inherently subjective localizations of phantom-sounds whose true origins were to be found elsewhere.

The early history of scientific research into auditory space and auditory localization was dominated by issues related to subjective auditory phenomena with no clear physical source in the world—from Tartini tones, through notions of *Körperraum*, to the noise produced by the internal organs and the transmission of sonic vibrations through the skull. As we will see, this was not the case during the 'mature years' of research on the topic in the decades that followed, at which time scientists began to employ more sophisticated tools for abating noise and controlling sound through technologies like the telephone, at the same time that they shifted their attention to mapping the contours and precise geometries of acoustic space external to the listener's body. However, acoustic space's initial grounding in the subjective would be preserved through the figure of the stereoscope, which helped to shape its theoretical development, as well as the related rhetoric of simulation and medial space.

Stereoscopic Sound: Solidity and Simulation in Bell's Telephones

In 1880, four years after receiving the first United States patent for the telephone, Alexander Graham Bell turned his attention to questions of auditory localization and the interrelations between the two ears. For his experiments, which would be replicated by

Hornbostel and Wertheimer in 1915, Bell constructed a telephonic apparatus modeled on the principles and structure of the stereoscope. “It occurred to me last year, while in England, that the stereophonic phenomena of binaural audition might be produced artificially by the telephone, in like manner as the peculiarities of binocular vision are produced by the stereoscope.”³⁸

This first of many experimental arrangements detailed in the report consisted in four telephones strategically arranged between two rooms. Standing in one of these rooms, Bell listened to two of the telephones simultaneously. Each of the telephones was then connected via metallic circuits with the two telephones in the adjacent room, where Bell’s assistant walked around reciting a description of his surroundings in a normal, conversational tone. In most cases, the subject was blindfolded or asked to close his eyes to prevent the influence of visual cues—a practice that would become standard in subsequent studies of spatial hearing.³⁹ “I held the telephones C and D to my left and right ears respectively,” Bell explained, “and, from my knowledge of the other room, I could compare the sensations received by telephone with those that would have been

³⁸ Alexander Graham Bell, “Experiments Relating to Binaural Audition” in *The American Journal of Otology* 2, no. 3 (1880): 169-79, here p. 169.

³⁹ Accounts of blindfolding the experimental subject pervade the literature on auditory space. In addition to Bell, the researcher Matataro Matsumoto remarked in 1897: “In order to eliminate the influence of suggestion upon judgment, the eyes of the observer were blindfolded before he was allowed to enter the chamber. He consequently never knew anything of its construction or contents” (17). Anton Steinhauser stated that, “in all experiments the eyes must always be closed” (10). Lord Rayleigh frequently referred to “an observer with eyes closed” and explained: “It is often necessary to cover the eyes with the hands as well as to close the eye-lids in order sufficiently to exclude the light” (217). Kurt Goldstein and Olly Rosenthal-Veit found that, “in cases of localization, all experimental subjects make more mistakes with their opens than with their eyes closed” (324). See Matsumoto, “Researches on Acoustic Space”; Anton Steinhauser, *Die Theorie des Binauralen Hörens: Ein Beitrag zur Lehre vom Schalle* (Wien: Gerold, 1877); Lord Rayleigh, “On our Perception of Sound Direction” in *Philosophical Magazine* (1907): 214-32; Kurt Goldstein und Olly Rosenthal-Veit, “Über akustische Lokalisation und deren Beeinflußbarkeit durch andere Sinnesreize” in *Psychologische Forschung* 8 (1926): 318-35.

experienced had I personally been in the place occupied by the telephones A, B” (fig. 4.1).⁴⁰

Bell’s somewhat confusing explanation of his experimental procedure and his reason for including the telephone as a scientific instrument rely on two equivalencies, which appear again and again throughout the text. First, he collapses the distinctions between direct audition and mediated listening via the telephone. At the outset, he predicts that the use of the two telephones will create a sense of verisimilitude so strong that the listener will perceive the direction of the speaker’s voice “as though the listener himself were in the place occupied by the telephones A, B.”⁴¹ While he is ultimately proven wrong, and openly admits to his mistake, his initial hypothesis is strikingly naïve

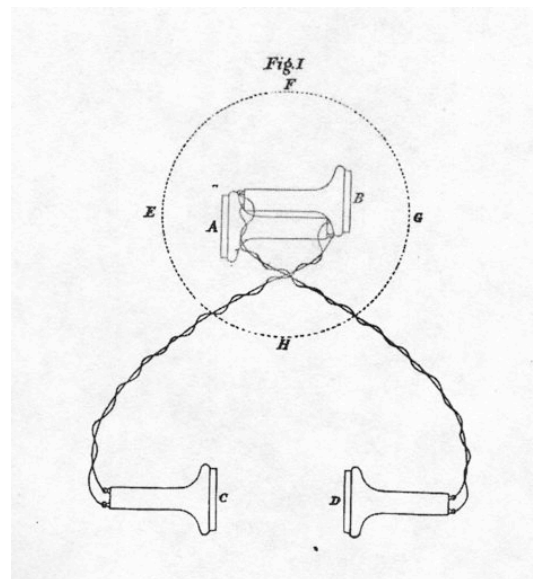


Fig. 4.1. Diagram of Bell’s experimental setup. From: Bell, “Experiments Relating to Binaural Audition,” located between pages 172 and 173.

⁴⁰ Bell, “Experiments Relating to Binaural Audition,” p. 170.

⁴¹ Ibid.

in assuming an equivalence between the ears' capacity to follow sounds in space through direct audition, on the one hand, and those transmitted over the wires of the binaural telephonic apparatus, on the other. The medium is presented as transparent, neutral, communicating without distortion or alteration the details of the listener's sonic surroundings as if perceived by the naked ear. At the same time, Bell insists that his detailed "knowledge of the other room" will be enough to ensure an accurate comparison with its technological mediation, thereby removing direct audition from the experiment entirely, substituting in its place an imagined perception based on memory.

Second, Bell repeatedly specifies that the telephonic apparatus should replicate the structure of the human ear. He demands that the mouthpieces of telephones A and B be turned away from one another, "like the auricles of a person's ears," and that the diaphragms of the two instruments be "as far apart as the drum membrane of the two ears."⁴² Elsewhere, he has diaphragms mounted on a stepladder, "so as to be about as far from the ground as the ears of a person of average height."⁴³ The telephones on both sides of the wall, in other words, were organized according to the dimensions and spatial arrangement of the human ear. This is perhaps not surprising for a man who had attached a severed human ear to a piece of wood in experiments and inserted a tympanic membrane inside a telephone receiver.⁴⁴ There, as here, the distinctions between

⁴² Ibid.

⁴³ Ibid., p. 172.

⁴⁴ See Sterne, *The Audible Past*, pp. 31-5; Sterne, *MP3: The Meaning of a Format* (Durham: Duke UP, 2012), p. 60.

humans and machines, mediated and unmediated listening, were challenged and ultimately dismantled.⁴⁵ If positioned properly, the telephone could stand in for the human ear. Direct audition could be unproblematically replaced by mediated listening. Yet, at no point does Bell feel compelled to defend his decision to privilege the telephone in his experiments, indeed, to explain why he needs it at all, especially if his concern is making sure that the device perfectly replicates the human ear and the normal functioning of direct audition. Mediated audition is, in any case, the starting point for examining processes of auditory localization as they occur ordinarily.

Bell's rhetoric of simulation presupposes a correspondence between 'solidity' and reality. "When we close one ear and listen to sounds through the medium of the other [...]," he wrote in the opening paragraph, "there is a feeling of incompleteness about our sensations that cannot well be described [...]. When both ears are employed simultaneously, *a sort of stereoscopic effect of audition is perceived*. Sounds assume a 'solidity' (if I may use the expression) which was not perceptible so long as one ear alone was employed."⁴⁶ Bell indicates a lack of linguistic and conceptual terminology available to describe the phenomena he observes. The acoustic incompleteness of monaural hearing "cannot well be described," he admits, later hesitating before applying the term "solidity" to binaural sounds and qualifying his description with the comment, "if I may use the expression."

⁴⁵ This blurring of distinctions between humans and machines appears to have become commonplace in most contemporary research on auditory space. In an essay from 1997, for example, the influential scientist Jens Blauert describes the two ears and head as forming "an antenna system, mounted on a mobile base" (593). Each of the ears, he writes, contain "auditory channels," which are one part of a more elaborate, "biologic multipurpose parallel computer with a huge memory and various interfaces and input and output ports" (594). See Jens Blauert, "An Introduction to Binaural Technology" in *Binaural and Spatial Hearing in Real and Virtual Environments*, ed. Robert H. Gilkey and Timothy R. Anderson (Mahwah: Lawrence Erlbaum Associates, 1997), pp. 593-610.

⁴⁶ Bell, "Experiments Relating to Binaural Audition," p. 169, my emphasis.

However reluctant he may claim to be, in referring to the “solidity” of binaural sounds Bell is importing terminology more commonly associated with stereoscopic vision and the related three-dimensional images produced by the stereoscope. In his 1859 text on the visual device, for example, Oliver Wendell Holmes employed an almost identical formulation to characterize stereoscopic vision, also expressing hesitation in his choice of words. “By means of these two different views of an object,” he explained, “the mind, *as it were*, feels round it *and gets an idea of its solidity*. We clasp an object with our eyes, as with our arms, or with our hands, or with our thumb and finger, and then we know it to be something more than a surface.”⁴⁷ Elsewhere in the same essay Holmes labeled the stereoscope “an instrument which makes surfaces look solid.”⁴⁸ Drawing on this same language of solidity and simulated three-dimensionality, Bell finds in discussions surrounding the stereoscope a preexisting inventory of sensory terminology for analyzing otherwise unfamiliar aspects of auditory perception. In attributing solidity to the sounds heard over the binaural telephone he testifies both to the productive exchange between contemporaneous studies of sound and vision as well as the formation of a common language used to describe experiences of medial space across sensory registers.

According to this logic of solidity as a simulation of the real, encounters with stereoscopic and stereophonic spaces were often described in terms of travel and transport. As is well known, the popular stereoscopic images on display at the *Kaiserpanorama* in Berlin which opened in 1881, enticed visitors with the slogan “Travel

⁴⁷ See Oliver Wendell Holmes, “The Stereoscope and the Stereograph” (1859) in *Classic Essays on Photography*, ed. Alan Trachtenberg (New Haven: Leete’s Island Books, 1980): 71-82, here p. 75.

⁴⁸ *Ibid.*, p. 74.

throughout the entire world (*Reisen durch die ganze Welt*).”⁴⁹ By the turn of the twentieth century an American publisher began to market multi-media ‘stereoscopic tours’ in English and German. Each tour included 27 to 100 stereoscopic photographs along with a book and numerous maps, which were packaged together in a leather case and sold for between five to eighteen dollars.⁵⁰ Through the combination of medial and cartographic spaces, print and three-dimensional photographs, readers/observers were guided through a series of natural disasters, political upheavals, and historical landmarks in distant, exotic lands.

Not surprisingly, authors eager to sell their product amidst the expanding media marketplace around 1900 exploited the rhetoric of simulation and virtual reality that was often associated with the visual medium. “The stereograph tells no lies,” one author asserted, “If you cannot visit a country and see it as the traveler does, do the next best

⁴⁹ On the *Kaiserpanorama*, see Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge: MIT Press, 1999), pp. 135-39. Already in 1853, one critic claimed that through the stereoscope, “on the tables of our own drawing rooms may we examine at our leisure, those far-distant scenes in which we are interested, without the toil of travel”; quoted in Schiavo, “From Phantom Image to Perfect Vision,” p. 129.

⁵⁰ Titles in the series included James Ricalton, *China through the Stereoscope: A Journey through the Dragon Empire at the Time of the Boxer Uprising* (New York/London: Underwood & Underwood, 1901); M.S. Emery, *Russia through the Stereoscope: A Journey across the Land of the Czar from Finland to the Black Sea* (New York/London: Underwood & Underwood, 1901); Albert E. Osborne, *The Stereograph and the Stereoscope: With Special Maps and Books forming a Travel System, What They Mean for Individual Development, What They Promise for the Spread of Civilization* (New York/London: Underwood & Underwood, 1909). See also George Kennan, *St. Pierre and mont Pelée through the stereoscope, a visit during the terrors of the June Eruption, 1902* (New York/London: Underwood & Underwood, 1903); Jesse Lynam Hurlbut, *Das Reisen im Heiligen Lande durch das Stereoskop* (New York/London: Underwood & Underwood, 1907); Mabel Sarah Emery, *Die Schweiz durch das Stereoskop*, trans. Elise Flury (New York/London: Underwood & Underwood, 1908); John Talbot, *Eine Pilgerfahrt nach Rom durch das Stereoskop*, trans. Elise Flury (New York/London: Underwood & Underwood, 1908); James Henry Breasted, *Ägypten durch das Stereoskop: Eine Reise durch das Land der Pharaonen*, trans. Paul P. Grünfeld (New York/London: Underwood & Underwood, 1908); D.J. Ellison, *Italien durch das Stereoskop*, trans. Elise Flury (New York/London: Underwood & Underwood, 1908); Dr. phil. Rufus Byam Richardson, *Griechenland durch das Stereoskop*, trans. Dr. Aloys Weiss (New York/London: Underwood & Underwood, 1908). Already in 1862, the Bierstadt brothers of New Hampshire had published their own stereographically illustrated tourist companion, *Stereoscopic Views among the Hills of New Hampshire*, which included a pair of lenses attached to a flap on the inside cover of the book for convenient viewing of the illustrations. See Schiavo, “From Phantom Image to Perfect Vision,” p. 129.

thing and see it through that miracle of realism, the stereograph.”⁵¹ Looking through the device, another argued, one sees “real objects, full-size.”⁵² Claims about the stereoscope’s realism were additionally propped up by reference to the ‘reality’ communicated by the monoaural telephone. “What the telephone does for the ear, the stereoscope does for the eye,” one critic observed in 1903.⁵³ Both devices created experiences that were not quite ‘illusory’ and not quite ‘actual.’ However, after considering the stereoscopic image’s epistemic and ontological status, another author concluded that, though somewhat paradoxical, the only logical option was to classify the images and sounds communicated by these devices as analogous to “actual experiences.” “These illusory experiences, therefore, as far as we get them in connection with the telephone or the stereoscope, are to be *classed with actual experiences*, or experiences right in the presence of the physical reality.”⁵⁴ The sense of reality, immediacy, and physical presence conveyed by both the stereoscope and the telephone—even in its monoaural form—were used to legitimate notions of virtual travel. In doing so, the medial spaces communicated over the two devices were taken to be dynamic spaces of transport and motion, separate but indistinguishable from unmediated reality.⁵⁵

Jonathan Crary and Stephan Oettermann both stress that the *Kaiserpanorama*’s promise to take visitors “travel[ing] throughout the entire world” by means of

⁵¹ Ricalton, *China through the Stereoscope*, pp. 11-12.

⁵² Emery, *Russia through the Stereoscope*, p. 26.

⁵³ “Travelling by Means of the Stereoscope” in *The Catholic World: A Monthly Magazine of General Literature and Science*, Vol. LXXVII (April to September 1903): 267-68, here p. 267.

⁵⁴ Osborne, *The Stereograph and the Stereoscope*, p. 89.

⁵⁵ On the interrelations between new visual media and virtual travel in the nineteenth century, see Anne Friedberg, *Window Shopping: Cinema and the Postmodern* (Berkeley: University of California Press, 1994).

stereoscopic photography, coincided with the expansion of German colonialism in Africa and other parts of the globe.⁵⁶ The increasing popularity of the visual device's spatial illusions, in other words, occurred at a time in which the spaces of empire were rapidly expanding overseas. This more conceptual parallel finds its material analogy in the fact that, in order to satiate the public's demand for images, the owner of the *Kaiserpanorama*, August Fuhrmann, was forced to send teams of photographers around the world to bring back images of exotic places, many from these same colonial spaces. It is therefore tempting to situate early stereophonic sound experiments within a similar framework of colonialist expansion and a growing desire for exotic images of foreign lands. As we will see below, like the stereoscope, stereophonic sound-space was often linked to feelings of being transported to other spaces such as the performance hall. Moreover, one of the technology's earliest public demonstrations took place at the 1889 Paris World's Fair, which, as Crary notes, was "unprecedented for its extensive presentation of colonial peoples and lifestyles as object of spectacle."⁵⁷

Despite experiences of movement and transport associated with technologically produced sound-space, what listeners heard transmitted over stereophonic telephones came almost exclusively from their own backyard. As Annegret Fauser explains with regard to stereophonic transmissions of opera performances at the 1889 Paris World Fair, the material chosen for transmission "could not have been more patriotic," and featured predominantly French works such as Jules Massenet's opera *Esclarmonde* (1889) and

⁵⁶ Crary, *Suspensions of Perception*, p. 137, n. 109; Stephan Oettermann, *The Panorama: History of a Mass Medium*, trans. Deborah Lucas Schneider (New York: Zone Books, 1997). For an excellent overview of German colonialism, see Sebastian Conrad, *German Colonialism: A Short History* (Cambridge: Cambridge UP, 2012).

⁵⁷ Crary, *Suspensions of Perception*, p. 231.

Ambroise Thomas's ballet *La Tempête* (1889).⁵⁸ Similarly, the performances that were transmitted stereophonically several decades later in Germany were of operas staged within the confines of that nation's borders.⁵⁹ There was simply nothing comparable to the stereoscope's visual tour of the world within the domain of stereophonic sound reproduction. While both were conceived of as media of transport, the software of the stereophonic telephone was much more local and nationalistic than that used in conjunction with the stereoscope.⁶⁰

However, early studies of acoustic space did draw on cartographic practices and the imagery of mapmaking in elucidating the nature of the ear's capacity to perceive space. This appropriation of the same tools of spatial analysis that were mobilized in the service of colonialist expansion, also marked an *externalization* of auditory space from inside the body to the spaces surrounding it.⁶¹ While Purkyne had conceived of a

⁵⁸ Annegret Fauser, *Musical Encounters at the 1889 Paris World's Fair* (Rochester: University of Rochester Press, 2005), p. 288.

⁵⁹ See "Opernrundfunk auf Draht: Eine neue Übertragungsschaltung auf das Fernsprechnetz" in *Funk*, vol. 1, no. 11 (1924): 189-91; Erwin Meyer, "Über das stereoakustische Hören" in *Elektrotechnische Zeitschrift*, no. 22 (1925): 805-7.

⁵⁹ See Fauser, *Musical Encounters*, p. 284.

⁶⁰ This is by no means to suggest that all forms of sound recording were disconnected from contemporaneous imperialist projects and the exploration of foreign lands. On the contrary, the phonograph was at this time becoming an increasingly important tool for ethnomusicologists like Carl Stumpf and Erich Moritz von Hornbostel. But the "phonogram archive" that they constructed from recordings by Thai, Japanese, Sudanese and Somali performers drew primarily on itinerant shows that came to Berlin rather than performances captured in the field. More important for the current study, these recordings were mono not stereo. See Erika Brady, *A Spiral Way: How the Phonograph Changed Ethnography* (Jackson: University Press of Mississippi, 1999); Eric Ames, "The Sound of Evolution" in *Modernism/Modernity* 10.2 (2003): 297-325.

⁶¹ Tara Rodgers also draws attention to the interrelations between acoustical research, oceanography, and colonialist expansion around this time. "The idea that electronic sounds were part of a flux of waves or 'ocean of air'," she writes, "was informed by maritime themes and modernist sensibilities in nineteenth-century European and American cultures. At that time, naval strategies were central to colonialist expansion, and investigators plumbed the depths of the ocean for the first time and instituted oceanography as scientific discipline"; Tara S. Rodgers, "Synthesis: Technologies and Others in the Evolution of Synthesized Sound" (PhD Dissertation, McGill University, 2010), p. 4.

“topography of the senses” and posited a state of mutual influence between internal subjective spaces and the perception of mathematically-defined, external spaces, figures like Bell did away with any reference to interiority, or, *Körperraum*, instead presenting the contours of auditory space as a pure cartographic surface. “Imagine yourself to be looking down upon a globe,” Bell began in the summary of his experimental results, referring readers to a simple diagram of his telephonic apparatus. “Let the usual meridian lines and parallels of latitude be imagined upon the surface of the globe,” he continued, “and let the points E, G be the two poles. Upon this construction F and H become two points upon the equator.”⁶² By producing a sound near telephones A and B, for example, “we can take its bearings upon the surface of our globe; that is, we can determine the latitude and longitude of the sound.”⁶³ Bell’s cartographic rendering of the human sensorium superimposed the individual experience of local spaces onto the figure of the global. His recourse to cartographic terminology suggests that, to the extent that auditory space can be read as an attempt to reduce hearing to the categories of vision, it was also an attempt to subject both the visual and auditory field to procedures of mapping.

This convergence of global mapping and the study of human sense perception was epitomized by Anton Steinhauser, who from 1859 to 1877 wrote and edited books not only on binaural hearing and the stereoscope, but also on military cartography and world geography.⁶⁴ The fact that he published his *Theory of Binaural Hearing* only two years

⁶² Edison, “Experiments Relating to Binaural Audition,” p. 171.

⁶³ Ibid.

⁶⁴ Anton Steinhauser, *Grundzüge der mathematischen Geographie und der Landkarten-Projection* (Vienna: F. Beck, 2nd Ed., 1880); August von Fligely, “Organisation und Fortschritt der militärisch kartographischen Arbeiten in Österreich,” ed. Anton Steinhauser, in *Mitteilungen der kais. königl. Geographischen Gesellschaft in Wien*, 3. Jahrg. (1859); Steinhauser, *Über die geometrische Construction der*

after writing a high school geography textbook testifies both to Steinhauser's polymathic abilities and wide-ranging interests as well as the structural affinities that existed between methods of cartographic representation and the analysis of spatial perception in the late nineteenth century. In his essay on binaural hearing, which he called a "companion piece (*Seitenstück*)" to his work on the stereoscope, Steinhauser depicted auditory space as a complicated arrangement of angles, lines, and geometric shapes, at the center of which stood the ear (fig. 4.2-4.4). In a language that frequently translated the sonic into the visual and relied on the central notion of "sound rays (*Schallstrahlen*)," Steinhauser outlined the topography of hearing as a mathematically precise geometry, which represented the content of auditory space in terms of angles and reflections from the wall, skull, and various parts of the ear.

Auditory space was analyzed and theoretically elaborated on within the framework of technological simulations of space and articulated in a language investing those mediated sensations with physical qualities and solidity. At the same time, scientific and technological interest in auditory space coincided conspicuously with rising globalism and the enduring popularity of global exhibition culture and world fairs.⁶⁵

Stereoscopbilder: Ein Beitrag zur centralen Projection; bearbeitet zum Gebrauche für Techniker und Fisiker (Graz: Pock, 1870); Steinhauser, *Geographie von Oesterreich-Ungarn* (Prague: F. Tempsky, 1872); Steinhauser, *Allgemeine Geographie* (Prague: Tempsky, 1875); Stehinhauser, *Lehrbuch der Geographie für Mittelschulen* (Prague: Tempsky, 1875); Steinhauser, *Die Theorie des binauralen Hörens: Ein Beitrag zur Lehre vom Schalle* (Wien: Gerold, 1877); Steinhauser, *Die theoretische Grundlage für die Herstellung der Stereoscopbilder auf dem Wege der Photographie und deren sachgemässe Betrachtung durch Stereoskope* (Vienna: R. Lechner, 1897).

⁶⁵ On the world's fair and exhibition culture around 1900, see Robert w. Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876-1916* (Chicago: University of Chicago Press, 1987); Timothy Mitchell, "The World as Exhibition" in *Comparative Studies in Society and History* 31:2 (1989): 217-36; Tony Bennett, "The Exhibitionary Complex" in *New Formations* 4 (Spring 1988): 73-102. On the 1889 Paris Exhibition, more specifically, see Deborah Silverman, "The 1889 Exhibition: The Crisis of Bourgeois Individualism" in *Oppositions* 8 (Spring 1977: 71-91); Bertho-Lavenir, Catherine, "Innovation technique et société du spectacle: le théâtrephone à l'Exposition de 1889" in *Le Mouvement social*, No. 149 (Oct.-Dec. 1989): 56-69; Fauser, *Musical Encounters*.



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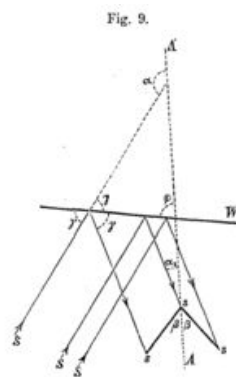
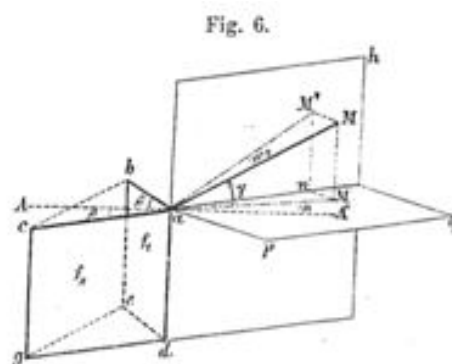


Fig. 4.2-4.4. Steinhauser's geometric renderings of acoustic space. From: Steinhauser, *Die Theorie des Binauralen Hörens: Ein Beitrag zur Lehre vom Schalle* (Wien: Gerold, 1877).

Auditory space became a legitimate object of scientific inquiry at the site of a productive transfer between the senses, embodied in the figure of the stereoscope as both a material and epistemological tool. But it was also made possible by a broader cartographic imagination, which rendered the perception of sound-space as a grid of geometric angles and equators, intersecting lines of latitude and longitude.⁶⁶ In doing so, the sounds of the immediate environment, once believed to be perceived only inside the body or with the help of an internal *Körperraum*, were transferred to the surface of an imaginary globe.

Stereophonic Exhibitions at the 1889 Paris World's Fair

One year after the publication of Bell's scientific article, the construction of auditory space made possible by his stereophonic telephones migrated from the experimental laboratory to the exhibition hall. In 1881 Clément Ader became the first person to transmit performances stereophonically from the stage of the Paris Opera to a set of rooms at the Paris Electrical Exhibition by means of a series of Bell telephone transmitters (fig. 4.5).⁶⁷ In the patent he obtained for the setup Ader not surprisingly invoked the stereoscope as a way to characterize the technological simulation of auditory space. "This double hearing (*doppelte Hören*) of sounds that have been recorded and transmitted through various apparatuses," the patent reads, "is, in relation to its intended

⁶⁶ On the 'cartographic imagination,' see Chenxi Tang, *The Geographic Imagination of Modernity: Geography, Literature, and Philosophy in German Romanticism* (Stanford: Stanford UP, 2008); Eric Bulson, *Novels, Maps, Modernity: The Spatial Imagination, 1850-2000* (New York: Routledge, 2007).

⁶⁷ Ader's stereophonic experiments were only one part of his larger technological conquest of space. He was also a pioneer in the field of aviation and wrote extensively on the potential uses of mechanical flying machines in modern warfare. See his *Military Aviation* (1909), ed. and trans. Lee Kennett (Maxwell AFB, Alabama: Air University Press, 2003).

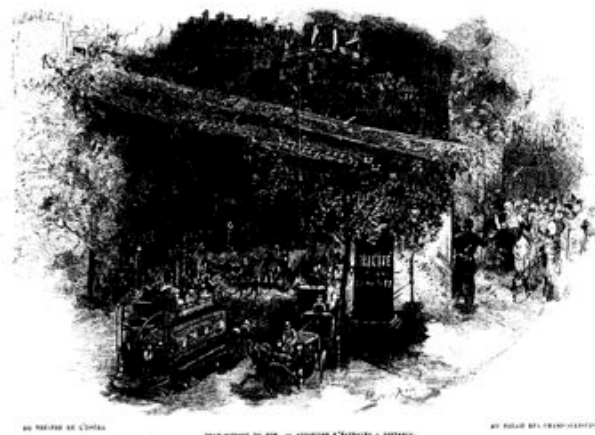


Fig. 4.5. Artistic rendering of Ader's 1881 stereophonic transmission, with the sounds of the orchestra on the right travelling from the concert hall into the city on the left. From Fauser, *Musical Encounters*, p. 289.

effects, analogous to that which the stereoscope provides for vision.”⁶⁸ His setup utilized two microphones to capture live performances, one on the right and the other on the left-hand side of the stage. Those microphones were then connected to a receiver at the exhibition hall and communicated to two earphones (one for the right and other for left side of the stage) at various listening stations. The sonic display would be recreated in spectacular fashion for the *Pavillon des Téléphones* at the 1889 Paris World's Fair with great success (fig. 4.6).⁶⁹ There listeners paid 50 centimes to hear ten minutes of a performance from the *Fantaisies-Parisiennes* in the afternoon and 1 franc for ten minutes

⁶⁸ “Dieses doppelte Hören der durch verschiedene Apparate aufgenommenen und weitergegebenen Laute ist in bezug auf die erzielten Effekte analog demjenigen, was das Stereoskop für das Sehen ist”; quoted in Ludwig Kapeller, “Der stereophonische Rundfunk” in *Funk*, Heft 27 (1925): 317-9, here p. 317.

⁶⁹ The two-channel telephonic process was subsequently commercialized in France from 1890 to 1932 as the *Théâtrophone*. The service offered news and musical performances by coin-operated receivers at hotels and cafés, or by subscription to private homes. On the details of the *théâtrophone*, see Catherine Bertho-Lavenir, “Innovation technique et société du spectacle: le théâtrophone à l'Exposition de 1889” in *Le Mouvement social*, No. 149 (Oct.-Dec. 1989): 56-69; Fauser, *Musical Encounters at the 1889 Paris World's Fair*, pp. 279-97. While there is evidence that a similar service was offered in Berlin around the same time, and that stereophonic broadcasts of opera performances were transmitted via telephone as early as 1914, I have been unable to determine if the two were connected. See “Opernrundfunk auf Draht”; Meyer, “Über das stereoakustische Hören.”



Fig. 4.6. Visitors to the 1889 Paris World's Fair enjoy Ader's stereophonic telephones. From: Fauser, *Musical Encounters*, p. 287.

of performances held at the Opéra, the Opéra-Comique, and the Eden in the evening from 8:30 to 11pm.⁷⁰ The pavilion contained two listening rooms whose walls and windows were fitted with heavy draping in order to dampen potentially disruptive noises. Each of the two rooms included 60 listening stations with dual headphones. Over the course of five months, Ader's display would become one of the most popular at the exhibition, with close to 90,000 paying visitors as well as dignitaries such as the Shah of Persia.

Without the need for instruction, visitors to Ader's stereophonic performance adopted the behavior of experimental subjects. Just as the test subject of acoustic experiments was either blindfolded or instructed to close her eyes, listeners at the World Fair shut out visual phenomena in order to embrace more fully the immersive sounds offered by the dual telephones.⁷¹ "If one closes one's eyes," one reporter observed at the World's Fair, "one might believe oneself to be in the theater of the Opéra-Comique itself. One of the listeners caught by the illusion puts down his receivers in order to applaud; the laughing of his neighbors brings him back to reality."⁷² "[One listener] closed her eyes," another commentator remarked, "and the illusion was so strong that, once the piece was finished, she put down the receivers and applauded noisily, forgetting that the sound of her small clapping hands would never reach the object of her enthusiasm" (fig. 4.7).⁷³ The transmission was so clear and well defined, others noted, that one could hear the

⁷⁰ See Fauser, *Musical Encounters*, p. 284. My account of Ader's exhibition is deeply indebted to Fauser's brilliantly researched study.

⁷¹ On changes in nineteenth-century conceptions of musical spectatorship, which posited the ideal listener as either temporarily or permanently blind, see James H. Johnson, *Listening in Paris: A Cultural History* (Berkeley: University of California Press, 1995), especially pp. 270-80.

⁷² Quoted in Fauser, *Musical Encounters*, p. 286.

⁷³ Quoted in *ibid.*, p. 290.



Une distraction.

Fig. 4.7. An enthusiastic and distracted listener applauds the distant musical performance.
From: Fauser, *Musical Encounters*, p. 291.

steps of ballerina dancers onstage and “the noises of the hall, right down to the voices of the newspaper boys and program vendors.”⁷⁴

Firsthand observations of early users of the stereophonic telephone again emphasized notions of transport, motion, and simulation. Both comments assert that the

⁷⁴ Quoted in *ibid.*, p. 286.

spaces in which one listens and the spaces from which the transmission originates cannot be easily kept apart, as listeners immersed in the simulated spaces of the transmission believe themselves to be present at a performance occurring at a distant location. This slippage is further reinforced by the spectator who claps for the performers, “forgetting that the sound of her small clapping hands would never reach the object of her enthusiasm.” The author’s observation, made from a non-participatory position outside of the performance, at once testifies to the degree of verisimilitude achieved by the transmission—its ability to persuasively transport listeners to other spaces while simultaneously suppressing the impressions of the immediate environment. But it also emphasizes the unbridgeable divide that, in reality, had been erected between performer and telephonic listener as well as between individual listeners and those around them. In this way, the comment additionally points out the novelty of the exhibit for those not listening but rather observing others as they listen in silence. In a manner that harkens back to Kafka’s representations of the protagonist’s self-observations, but also points forward to Musil’s account of World War I in “The Blackbird” (Chapter 5), visitors to the exhibition hall were encouraged to engage in multi-sensory modes of second-order observation, observing visually those who observed acoustically.

Other firsthand reports provide crucial insights into the specific ways in which these medial auditory spaces were received and analyzed by inexperienced listeners. In an article published in the *Scientific American* one writer predictably attempted to explain the strange auditory effects of the stereophonic telephone to his readers in the familiar

language of the stereoscope. Moving beyond this conventional analogy, however, the author now attempted to describe in detail the content of stereophonic sound-space by superimposing a wide range visual terminology onto auditory processes:

Every one who has been fortunate enough to hear the telephones at the Palais de l'Industrie has remarked that, in listening with both ears at the two telephones, *the sound takes a special character of relief and localization* which a single receiver cannot produce. It is a common experience that, in listening at a telephone, it is practically impossible to have even a vague idea of the distance at which the person at the other end of the line appears to be. To some listeners this distance seems to be only a few yards, to others the voice apparently proceeds out of a great depth of the earth. In this case there is nothing of the kind. As soon as the experiment commences the singers *place themselves, in the mind of the listener, at a fixed distance, some to the right and others to the left. It is easy to follow their movements, and to indicate exactly, each time that they change their position*, the imaginary distance at which they appear to be. This phenomenon is very curious, it approximates to the theory of binauricular audition, and has never been applied, we believe, before to produce this remarkable illusion to which may almost be given the name of *auditive perspective*. Having explained this phenomenon, we may consider its cause, which is a very simple one. In order to realize it, we may recall the stereoscope, which allows us to see objects in their natural relief. A similar effect is produced to the ear [...] ⁷⁵

The passage begins with a peculiar comparison between the monaural and binaural telephone. Whereas Ader's stereophonic apparatus allowed listeners to trace out the precise coordinates and movements of the singers' bodies across the stage, the author argued, the single-receiver monaural telephone commonly led to unreliable judgments regarding the distance and location of the voice on the other end. The voice was perceived as coming either from a distance of "only a few yards" or from "out of a great depth of the earth." It was either located in a familiar, neighboring space in close proximity to the user on the other end, or had no localizable point of origin at all, coming instead from the nebulous and all-encompassing space of the planet, somewhere beneath the surface of the earth.

⁷⁵ "The Telephone at the Paris Opera" in *Scientific American*, Vol. XLV, No. 27 (December 31, 1881): 422-23, here p. 422, my emphasis.

The observation is striking in that it assumes that it *should* in principle be possible for a listener to accurately judge the distance between himself and his interlocutor via the telephone. It suggests, in other words, that the signals transduced from sound to electricity and back to sound, often across vast distances, should conform to the properties of sounds perceived by means of direct audition, that the total distance that the sound travels through telephone cables should be reflected in some way in the sound of the voice on the other end. In this way, while still aware of the monaural model's inadequacies, the author subscribes to a conception of the telephone as a neutral conduit, also articulated in Bell's hypothesis for his binaural experiments discussed above. Under the right circumstances (i.e. with stereophonic telephones), the author of this later account implies, the telephone would be able to reproduce the experience of speaking to someone in the unmediated spaces of a house or on the street, with the sound of the speaker's voice imbued with information about their distance and location. According to this vision, telephonic communication would somehow circumvent its own material infrastructure and technical modes of operation, doing away with the cables that connect distant locations and unaffected by processes of filtering or the targeted elimination of certain ranges of frequencies in the transduction of sound into electrical signal. Speaking into a telephone would be like speaking into air. At the same time, the author maintains some critical distance from the idea of total simulation or identification, referring to the "imaginary distance" at which these sounds "appear to be" and labeling the experience of auditive perspective a "remarkable illusion."

The ostensibly unmediated spaces of the binaural telephone are described here according to visual terminology, with Steinhauser's geometric angles and Bell's lines of

longitude and latitude translated into the language of visual aesthetics. Sound transmitted over the multiple telephones “takes a special character of relief and localization” and provides the listener with an “auditive perspective.” In response to the disorienting effects of the stereophonic “experiment,” the author tries to fill in potential conceptual gaps by investing the ear with characteristics normally associated with vision. The result is a language for sound that is thoroughly permeated by visual concepts, but one perhaps better equipped to analyze the complex relationship between listener and three-dimensional sound, and better able to trace out the specific trajectories of sounds as they moved through space.

The article suggests that sound itself comes to possess the status of a material object, as a thing that moves through the invisible concert hall and that can be located at a fixed distance to the right and left side. It is not only that sounds achieve a certain solidity, as they did for Bell, but rather, in their localizability and capacity for movement, they seem to take on a life of their own and stand in for the body of the singer. According to the article, the singers themselves and not merely the sound of their voices “place themselves in the mind of the listener.” Stereophonic sound inhabited not only the external spaces of the performance hall, but also crossed over the boundary separating subjective interiority from the external world, thereby invoking the phenomena of ‘intracranial localization’ analyzed by Purkyne, Pierce, and others. Just as Pierce described the “phantom-sounds” located “within the limits of the skull,” Ader’s stereophonic telephones conjured up auditory bodies that moved effortlessly from the faraway stage, through the wires of the dual telephones, and into the interior spaces of the mind. The binaural telephone transported listeners into the spaces of the opera hall or to

other distant performances. But the sounds on the other end also extended outward and ultimately entered into the listener's head. Singer and listener each moved toward the other, using the spaces of the stereophonic telephone as a complex conduit, shuffling between the performance hall and internal spaces of the body.

Richtungshörer: Robert Musil and the First World War

In March of 1915, Max Wertheimer and Erich Moritz von Hornbostel began a series of experiments on auditory localization at the Institute for Experimental Psychology in Berlin. Drawing on Bell's earlier work, the two researchers made an important breakthrough regarding the underlying processes involved in auditory localization. In contrast to their colleague, Wolfgang Köhler, Hornbostel and Wertheimer concluded that the ability to locate the source of a sound depended not on differences in phase or intensity, but rather a relative difference in wavelength, or, the temporal difference between the moments at which a particular sound was registered by each of the two ears. "All of the experimental results communicated so far speak for the fact that the horizontal angle, in which a sound is heard, is necessarily dependent on the *temporal difference* with which the same stimulus is registered by one ear and the other."⁷⁶

As their use of Bell's experimental setup already indicates, new sound technologies were crucial to the reconceptualization of spatial hearing undertaken by Hornbostel and Wertheimer. In their report they specify that the sound used for the initial experiments consisted in a "sharp knocking (*scharfes Klopfgeräusch*)," which was then

⁷⁶ Hornbostel and Wertheimer, "Über die Wahrnehmung der Schallrichtung," p. 391.

picked up by either two microphones or two sound cones (*Trichter*) and communicated across several rooms by telephone lines. More importantly, the wavelength of the two signals could be easily manipulated by moving the sound source closer or farther away from the microphone, or, by activating “telescopic tubes (*Teleskopröhren*)” between the telephones and ears of the listener, which essentially served the same purpose. By focusing on altering the wavelength of one of the two signals, Hornbostel and Wertheimer were able to create narrow temporal differences, which were impossible without the aid of electro-acoustic technologies.⁷⁷

Their use of telephones and other electro-acoustic devices had three distinct advantages over direct, unmediated audition. First, the use of telescopic tubes to extend the distance between the telephones and the ears allowed for more controlled alterations in wavelength than the slightly more unpredictable and unscientific method of moving the sound source in relation to the microphone or sound cone. Second, by transmitting the sound directly to the listener via microphones, cables, and telephone receivers, the two scientists were able to eliminate superfluous reflections of sound from the walls and other surfaces of the room, which in ordinary life prevented easy localization. Third, the direct transmission of sound to the ears also circumvented the phenomenon known as “head shadow (*Kopfschallschatten*),” whereby a sound perceived in the world was obstructed by the listener’s head and caused filtering effects. Proponents of the intensity theory of sound localization argued that the brain used the filtering effects created by

⁷⁷ Ibid. In his 1922 essay, “Physiological Acoustics,” Hornbostel talked more openly about the extraordinary impact of new sound technologies on studies of hearing. Amplifier tubes and tube transmitters, he explained, were capable of sending tones of extraordinary consistency, whose frequencies could be changed across the entire audible range, while various electric filters helped to eliminate specific overtones. See E.M. v. Hornbostel, “Physiologische Akustik” in *Berichte über die gesamte Physiologie und experimentelle Pharmakologie*, Vol. 3, Issue 1 (1922): 372-96, here p. 372.

head shadow to determine difference and interpret directional information. The telephone, however, eliminated acoustic shadow and therefore the phenomenon could not be appealed to in the construction of a theory of localization based on differences of intensity.⁷⁸ In this way, the telephone functioned as an instrument of *disembodiment* in the laboratory, helping to filter out the body's influence on the perception of sound.

The opening statement of Hornbostel and Wertheimer's report on their earliest experiments reveals the pragmatic and instrumental concerns guiding their research. The impetus behind the experiments, they state explicitly, lay in the "practical need to increase the accuracy of perceptions of acoustic directionality (*das praktische Bedürfnis, die Genauigkeit der akustischen Richtungswahrnehmung zu erhöhen*)" in the name of the German war effort.⁷⁹ The fact of auditory localization was assumed at the outset. The issue now was how to *increase* the ear's precision in determining location. To this end, Hornbostel and Wertheimer extrapolated an extension of the human senses based on their theory of temporal difference. While in cases of ordinary auditory perception, they argued, the distance between the two ears and the temporal disparity that followed enabled a listener to distinguish the approximate location of a sound's source, mechanized warfare demanded an unprecedented degree of precision. The human sensory apparatus had to be supplemented by technological means. According to their theory, expanding the distance between the two ears would increase the temporal difference between sensations registered by each of the two ears and thereby increase a listener's accuracy in locating a sound's source. Scientific theories of spatial hearing were implemented on a technical level by what the two scientists called their

⁷⁸ Hornbostel and Wertheimer, "Über die Wahrnehmung der Schallrichtung," p. 392.

⁷⁹ *Ibid.*, p. 388.

Richtungshörer, a device consisting of two tubes for each of the ears and multiple horns for the reception of sound, all of which was typically situated on a moveable base (fig. 4.8). At the end of May, 1915 they presented their device to the War Ministry.⁸⁰ By the beginning of 1916 the *Richtungshörer* had entered the war as an important tool for sound-ranging units assigned with the task of determining the coordinates of enemy forces based on the sound of artillery fire and distant explosions. The application of auditory research to the war was first and foremost a response to the loss of visual clarity on the modern battlefield, serving to supplement a sensory apparatus deprived of crucial visual data. As Johannes Gaulke asserted in 1916, “This war cannot be depicted in images. No painter can give us the overall impression of vision.”⁸¹

Hornbostel and Wertheimer’s listening tool did not stand alone, but was instead embedded within a complex chain of communication technologies and took its cues from, among other things, the ticking of a stopwatch. While the *Richtungshörer* enabled soldiers to pinpoint the direction of a sound, stopwatches, geometric equations and processes of triangulation helped to determine distance.⁸² In many ways, there is an

⁸⁰ See Hoffmann, “Wissenschaft und Militär.”

⁸¹ “Dieser Krieg läßt sich nit im Bilde schildern: Kein Maler kann uns den Gesamteindruck von den Dingen geben”; Johannes Gaulke, “Kunst und Kino im Kriege” (1916) in *Medientheorie 1888-1933*, ed. Albert Kümmel and Petra Löffler (Frankfurt a.M.: Suhrkamp, 2002), pp. 129-133, here p. 130. My emphasis on the importance of hearing in World War I is by no means an attempt to refute in its entirety a more traditional narrative focused on the coevolution of modern warfare and new visual technologies such as aerial photography and film. Yet, even in his classic study, *War and Cinema*, Paul Virilio was forced to admit the extent to which the experience of war at that time was characterized by darkness and visual obscurity. “Indeed,” he asks, “why should there have been any rest after dark? For the enemy’s presence made itself known only through the flash of gunfire or the glow from the trenches, and daytime blindness was hardly any different from that which set in at nightfall”; Paul Virilio, *War and Cinema: The Logistics of Perception*, trans. Patrick Camiller (1984; London/New York: Verso, 1989), p. 70.

⁸² Martin Bochow, a former member of a sound-ranging unit during the war, explained in detail the complex processes involved in localization: “When they had ‘discovered’ this sometimes hardly audible blast, they adjusted the sound-ranging device so its axis was aimed at the tree behind which the blast seemed to come, and they stuffed the rubber tubes into their ears... Another man sat at the telephone in the dugout and paid attention for whenever the observer who first heard the blast yelled ‘fire!’ into the line...”

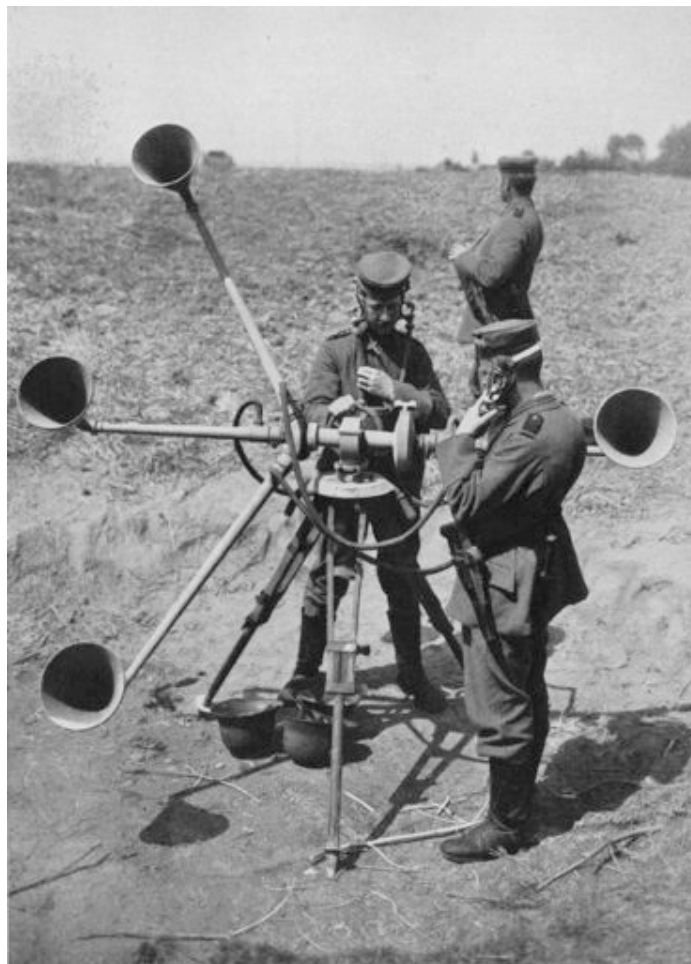


Fig. 4.8. Hornbostel and Wertheimer's *Richtungshörer* in operation during World War I. From: Bochow, *Schallmesstrupp 51*, p. 32.

then he called 'fire!' to the observer standing outside, who nodded and then knew: Now the blast will come back in about four seconds... and then he listened: No, that was something else from the right... we'll turn the left horn closer to the enemy... again, 'fire!' ... Aha! That was a little more to the left... so it was very little to the right!... you see, that was the middle! Then the observer yelled his coordinates through the side window to the man at the telephone, who jotted it down and told it headquarters. And the observer outside continued to listen to the distant, quiet bang (*Wenn sie diesen manchmal kaum noch hörbaren Knall 'entdeckt' hatten, stellten sie den Richtungshörer mit seiner Mittellinie auf jenen Baum etwa ein, hinter dem dieser Knall hervorzukommen schien, und nunmehr stopften sich die Gummischläuche in die Ohren... im Unterstand saß am Telephon ein anderer Mann, der passte auf, wenn die Beobachtung, die den Knall zuerst hörte, 'Schuß!' in die Leitung rief... dann rief er dem draußen stehenden Beobachter ebenfalls 'Schuß!' zu, der nickte und wusste dann: Jetzt kommt in etwa vier Sekunden der Knall wieder... und dann passte er auf: Nein, das war noch etwas von rechts...drehen wir den linken Trichter näher an den Feind... wieder 'Schuß!'... Aha! das war kaum noch links... so, das war ganz wenig rechts!... siehst du wohl, das war Mitte! Dann rief der Beobachter durch das seitlich Fenster dem Mann am Telephon seine Richtkreiszahl zu, der notierte und sagte sie telephonisch der Zentrale durch, und der Beobachter draußen lauerte weiter auf die fernen, leisen Knalle*"); Martin Bochow, *Schallmesstrupp 51: Vom Krieg der Stoppuhren gegen Mörser und Haubitzen* (Stuttgart: Union Deutsche Verlagsgesellschaft, 2. Ed. 1933), p. 19.

overlap between Hornbostel and Wertheimer's explanation of spatial hearing and the broader information network in which the *Richtungshörer* was situated. If auditory localization depended on a temporal difference, and the *Richtungshörer* helped to exaggerate this difference, soldiers also used temporal differences between the time at which specific sound-ranging units heard a single cannon blast or burst of artillery fire in order to calculate distance. Combining rudimentary mathematics with precision instruments of time and space, sound-ranging units devised diagrams and maps detailing the coordinates of enemy forces (fig. 4.9).

In a little over one hundred years, the ear had been transformed from a sensory organ devoid of spatial capabilities to an indispensable cartographic tool. With the eye rendered ineffective by darkness, fog, and distance, the ear translated its newly discovered spatial perspective into auditory topographies of the battlefield and helped to locate the position of enemy forces within clearly defined geometrical regions. If, as I argued above, theorists drew on the imagery of cartography in putting forth their arguments for acoustic space and depicted the ear as the central point in complex spatial geometries, the ear itself was now integrated into the process of mapmaking. Bell had understood the spaces of the laboratory as the surface of a globe and he had plotted the points at which sounds were perceived by experimental subjects according to the conventions of cartography. Now, however, acoustic space and the ear were not merely understood with reference to figures of mapping. They played an integral part in the *production* of maps.

In listening through the tubes of the *Richtungshörer*, individual sounds now acquired characteristics of three-dimensionality and traveled through space according to

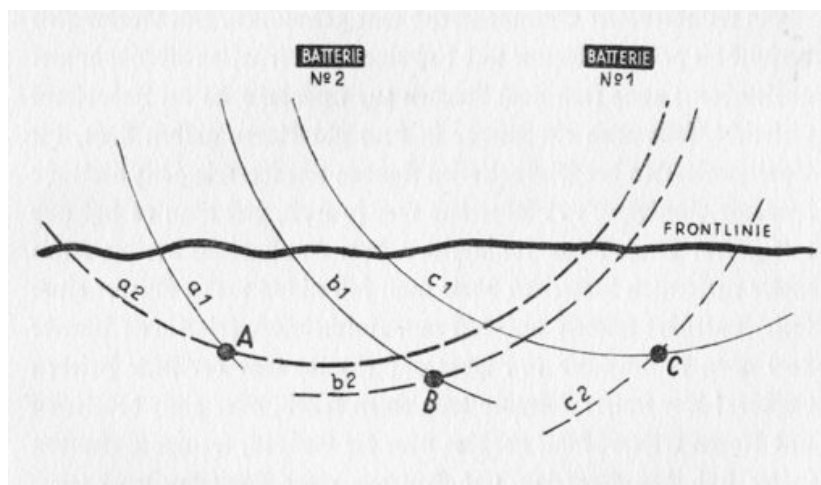


Fig. 4.9. Typical map drawn from information gathered by sound-ranging units during World War I. From: Bochow, *Schallmesstrupps* 51, p. 25.

calculable trajectories. The device not only allowed soldiers to focus on the nuances of a single sound's acoustic composition but additionally framed each sound in a stereophonic field with easily perceptible right and left sides. "In this way one clearly hears the sounds of individual explosions *as they glide across from left to right*," Martin Bochow wrote.⁸³ Bochow's account of his experiences behind the *Richtungshörer* recalls comments made by audience members attending Ader's telephonic opera performances, in which the stereophonic reproduction of sound enabled listeners to follow singers as they crossed from one side of the stage to the other.

But they also resonate with Robert Musil's acoustically sensitive account of the same battlefields in his short text "A Soldier Reports (*Ein Soldat erzählt*)" (1915/16). The story recounts the author's near-death experience in Northern Italy, when a falling

⁸³ Ibid., p. 20, my emphasis.

projectile dropped by enemy aircraft almost killed him. In line with comments made by Gaulke, Musil recorded the event as an exclusively auditory experience with few references to vision. Over the course of the narrative, the protagonist reveals himself to be an attentive listener with a trained ear, tracing out the sound's spatial trajectory and noting its multiple sonic transformations.⁸⁴ What begins as “quiet singing (*leises Singen*)” gradually takes on physical and supernatural characteristics, while retaining its musical qualities, before expiring in the ground as “a terrestrial tone (*ein irdischer Ton*).”⁸⁵

In listening to the weapon, the protagonist analyzes its spatial trajectory according to visual concepts, which, as we saw above, were often transferred from the realm of stereoscopic vision to stereophonic sound. “As it approached me and its perspective became larger (*perspektivisch größer wurde*),” the narrator explains, “it was also as if a silver ray rose from within me.”⁸⁶ The weapon's descent is registered as an expansion of the auditory field, as an opening up of perspective as the sound approaches the listener's body. The text's explicit reference to perspective invokes earlier comments made by visitors to Ader's stereophonic exhibition in 1889, who believed to occupy a similar position with respect to the transmitted sounds of distant musical performances. There, just as here, the ear takes on a form of spatial perception available to the eye, now capable of following the movements of individual sounds, their location and distance from the listener. The protagonist's auditory perspective, however, is accompanied here

⁸⁴ Musil produced several different narrative versions of the text, the last of which famously appears as the second of three stories in his novella, “The Blackbird” (1928), which I turn to in more detail in Chapter 5.

⁸⁵ Robert Musil, “Ein Soldat erzählt” in *Gesammelte Werke*, pp. 752-53.

⁸⁶ “Wie er sich mir näherte und perspektivisch größer wurde, war es doch zugleich als stiege ein silberner Strahl in mir auf”; *ibid.*, p. 753.

by a projection outward of a “silver ray,” a detail that implies a kind of oppositional vitality to the looming death from above at the same time that it underscores a more active form of listening, a listening out into space.

The text additionally replicates the sense of isolation expressed by visitors to Ader’s telephones. “I was amazed that the others didn’t hear it (*ich wunderte mich, dass die andren nichts hörten*)” Musil’s protagonist exclaims, later reading the indifferent expressions on his fellow soldier’s faces as confirming that “only I heard something (*dass nur ich etwas hörte*).”⁸⁷ Similar to listener’s at the Paris World’s Fair, who aroused laughter from their neighbors by clapping for performances audible only between the dual telephones of the apparatus, the protagonist in Musil’s text enters a space distinct from the world occupied by his fellow soldiers. What is described as an auditory perspective therefore offers a kind of privileged access to the nuances of a single sound, as well as information about that sound’s position within space, at the same time that it uproots the listener from his immediate surroundings and encloses him within a more focused and confined space reminiscent of the stereophonic field. “A song that was just for me,” the narrator concludes in a quasi-religious language, “Singled out. On the threshold of the atmosphere a voice sings just for you.”⁸⁸

At the same time, sounds positioned within this personal auditory space take on undeniable physical characteristics. “I waited for him (*ich erwartete ihn*),” the protagonist explains, “He became more corporeal, swelled up, more menacing. But he

⁸⁷ Ibid., pp. 752, 753.

⁸⁸ “Ein Gesang, der nur für mich da war. Auserwählt. An der Grenze der Atmosphäre singt eine Stimme nur für dich”; *ibid.*, p. 754.

did not lose the sense of musicality.”⁸⁹ The straight path from the air to the ground, from enemy aircraft to human target, is a space occupied by sounds with corporeal features, whose bodies swell and expand like a living creature. This personification of sound as an animate body is underscored by Musil’s use of the pronouns “er” and “ihn,” which, on one level, simply refers back to the masculine noun, “Laut,” but, on another, suggests a sense of agency and conjures up images of aural objects as living organisms.

Musil’s falling projectile “swells” like a living body, it is a sound that “sings” like a human being, becoming “more corporeal” as it approaches its target on the ground. This radical conception of sound as a lifeform is absent from Hornbostel and Wertheimer’s 1920 report on their earliest experiments. But by 1923—seven years after Musil’s “A Soldier Reports” and one year before “The Believer”—Hornbostel described binaural sounds as “sharply outlined, dense, in some cases spherical bodies (*scharf umrissene, dichte, unter Umständen kugelförmige Körper*).”⁹⁰ They were, he concluded, “things acoustically perceived (*Dinge, die hörend wahrgenommen werden*).”⁹¹

Clear points of overlap exist between literary and non-literary representations of the ear’s spatial capacity. Musil’s protagonist explicitly invokes the scientific study of sound in comparing the noise of the falling weapon to the tones of a “tuning fork (*Stimmgabel*)”—at that time a common instrument in the acoustical laboratory and one the author would have been familiar with during his days as a student at the Institute for Experimental Psychology in Berlin. More broadly, both Musil’s literary text and

⁸⁹ “Er wurde körperlicher, schwoll an, bedrohlicher. Aber das Musikhafte verlor er nicht”; Musil, “Ein Soldat erzählt”; *ibid.*, p. 753.

⁹⁰ Hornbostel, “Beobachtungen über ein- und zweiohriges Hören,” p. 68.

⁹¹ *Ibid.*, p. 114.

Hornbostel's scientific studies converge in their depiction of a more active and confident listener than those we have seen in previous chapters, one able to listen out into spaces populated by animated, living sounds and "spherical bodies" of sound. The ear is not simply bombarded by a nebulous cluster of sounds that blur together. Individual sounds can be singled out and tracked as they move through space. But for Musil such vivid acoustic experiences are linked to encounters with the supernatural, divine intervention, to a voice on the edge of the atmosphere that talks only to him. As we will see in the next section, they are more specifically bound up with mystical experiences of unity, or, what Musil would come to term "the Other Condition."

The Ear on the Street: Musil's Poetics of Acoustic Space

One year after the publication of Hornbostel's "Observations on Monaural and Binaural Hearing," Musil's "The Believer" appeared in the April 1924 issue of the periodical, *Die Lebenden*. Along with several other acoustically sensitive works such as "Clairaudience (*Hellhörigkeit*)" and "Doors and Portals (*Türen und Tore*)" as well as the novella, "The Blackbird (*Die Amsel*)," which I turn to in the next chapter, a revised version of "The Believer" appeared in a 1936 collection of Musil's short prose works entitled *Posthumous Papers of a Living Author* (*Nachlaß zu Lebzeiten*). The text once again revolves around a powerful auditory experience in which the ear is direct outward in the search of sounds, whose properties suggest autonomous, three-dimensional entities. Musil gestures towards an ecstatic potential underlying this act of spatial hearing, according to which the ear not only perceives space, but itself becomes a kind of spatial

construction, taking on the form of an architectural structure that can be entered into by others.

The text can be read as a domestication of Musil's experiences on the battlefield, with new modes of close-listening and spatial hearing transposed from the battlefield to the domestic sphere. Indeed, the language and imagery of the two texts resonate to an astonishing degree. Whereas in "The Believer" the protagonist describes the colors of the morning sky using the unusual adjective "parrot-feathery (*Papageienfedrig*)," in "A Soldier Reports" the protagonist walks between the dark-green trees as if "between the feathers of green night-parrots (*wie zwischen den Federn grüner Nachtpapagien*)."⁹² If in "The Believer" the protagonist looks out his window early in the morning to find the "crescent moon (*Mondsichel*)" still in the sky, "as if in the deepest hour of night's secret (*als ob es tiefste Stunde des nächtlichen Geheimnisses wäre*)," in his account of the war the narrator notes that "the thin maidenly crescent moon (*die dünne mädchenhafte Mondsichel*)" lay on its back as if swimming in the night sky "in rapture (*in Entzücken*)."⁹³

Both set in environments in which the night sky is featured prominently and invested with an air of magic and the supernatural, the two texts portray intense moments of close listening as quasi-religious experiences. The protagonist of "The Believer" jokes that he has been awoken by God. Similarly, the protagonist of "A Soldier Reports" sets the scene for his near-death experience with the observation: "In this landscape made for more cheerful occasions, I received my baptism by fire (*Feuer Taufe*) and was admitted

⁹² Musil, "Der Gläubige," p. 575; Musil, "Ein Soldat erzählt," p. 752.

⁹³ Musil, "Der Gläubige," p. 575; Musil, "Ein Soldat erzählt," p. 752.

to the invisible church.”⁹⁴ After claiming to have been an atheist his entire life, the protagonist is forced to admit that the strange power of the falling weapon—its seemingly willful decision to single him out as the sole target on the ground and sing only for him at the border of the atmosphere—had awakened the sense of a communion with God in his body. “And at the end of these few moments a new idea was in my body, which had never been sheltered there before: God.”⁹⁵

However, in both texts the solemnity of a transcendent experience is shattered by expressions of skepticism, sarcasm, and ultimately a rejection of God as the root cause. In “A Soldier Reports,” suspicions of God’s presence are immediately explained away through astrology. Soon after his union with the stranger on the street, the protagonist of “The Believer” realizes that the woman is on her way to church and wants nothing to do with her. Thus, the two texts couch their descriptions of intense auditory experiences in a mystical language, while at the same time ultimately rejecting religious practice and belief in God. By introducing, and then dismissing, the possibility of divine intervention, Musil highlights the supernatural, otherworldly characteristics of the two auditory experiences and their departure from the everyday. But he goes on to suggest that conventional recourse to God as an explanation would be insufficient to account for the peculiarity of each episode. Both the battlefield and the domestic sphere are represented

⁹⁴ “In dieser für ein froheres Ereignis geschaffenen Landschaft erhielt ich meine Feuer Taufe und wurde in die unsichtbare Kirche aufgenommen”; Musil, “Ein Soldat erzählt,” p. 752. Paul Plaut’s 1920 report on the psychological effects of World War I mentions that soldiers overwhelmed by the sounds of battle experienced a “spiritual feeling of elation (*ein geistiges Jubelgefühl*)” and “ecstasy (*Ekstase*),” which caused them to “lose control of themselves (*wodurch sie die Herrschaft über sich selbst verlieren*)” and sometimes run madly onto the battlefield with a “dreamlike look in their eyes (*mit einem traumhaften Ausdruck in seinem Blick*)”; Paul Plaut, “Psychographie des Kriegers” in *Beihefte zur Zeitschrift für angewandte Psychologie* 21 (1920):1-123, here p. 33.

⁹⁵ “Und zum Schluß dieser wenigen Augenblicke war eine neue Vorstellung in meinem Leib, die er nie zuvor beherbergt hatte: Gott”; Musil, “Ein Soldat erzählt,” p. 754.

as spaces pregnant with the possibility of transcendence. But these brief moments of allegedly authentic communication with a higher power merely serve to reinforce the inadequacy of such explanations and, while still attesting to the validity of these mysterious phenomena, conclude by substituting belief in God with an embrace of ambiguity, contingency, and a conception of the non-rational that swings free of the Judeo-Christian tradition.

In “The Believer,” the appeal to God and divine intervention initially results from confusion surrounding the cause of the protagonist’s sudden awakening and the lack of alternative explanations. “God woke me up,” he speculates, “I was shot out of sleep. I had no other reason to wake up.”⁹⁶ The passage reinforces Musil’s conception of religious explanation as a last resort in the face of inexplicable phenomena. At the same time, it portrays the protagonist as passive and susceptible to forces beyond his control. For whatever reason, he cannot imagine that he awoke on his own volition but instead assumes from the start that some external force is responsible and, even more surprising, that it is the work of God. He is “shot out” of his sleep, an expression that contains militaristic overtones but at the same time depicts the protagonist as a lifeless, docile mass acted upon by others, a projectile fired from sleep to waking consciousness.

Already in the text’s opening line we find intimations of the protagonist’s lack of agency. “The curtain pushed swiftly aside,” he exclaims, “the soft night!”⁹⁷ The sentence is immediately striking in its lack of a clear subject or mention of any specific agent carrying out the action. Who exactly is pushing aside the curtain? Is it perhaps an

⁹⁶ “Gott hat mich geweckt. Ich bin aus dem Schlaf geschossen. Ich hatte gar keinen andren Grund, aufzuwachen”; Musil, “Der Gläubige,” p. 575.

⁹⁷ “Schob rasch den Vorhang zur Seite:—die sanfte Nacht!”; *ibid.*

unknown element constitutive of “the soft night,” or is this merely what the protagonist finds after he himself draws back the curtain? This ambiguity is further complicated by a series of metaphors linking the protagonist with the darkness of the night sky in the following paragraph. “I was torn out like a page from a book,” he remarks.⁹⁸ Just as the subject remains absent from the opening sentence fragment, the narrator is described here as being metaphorically torn from the text, as being forcefully removed from a book. The abruptness of his awakening, expressed in the first sentence without the use of a grammatical subject, is therefore reinforced through a reference to the narrator’s metaphorical exclusion from the written work. The opening sentence and its lack of a subject can be read as an actualization of this later metaphorical connection, as an initial moment in which the subject is quite literally torn out of the literary work in passing from sleep to waking consciousness.

The lack of agency in the opening paragraphs conjures up popular images of the modern listener as passive and inherently vulnerable to the world outside his window. As Musil would have learned from his *Doktorvater*, Carl Stumpf: “Through auditory impressions we awaken the sleeper and the waking dreamer. The perpetually open organ, the infiltration of sound waves from all sides (one can hear but not see through a wall) and several other factors are the sources of this practical significance.”⁹⁹ Here sound’s ability to disrupt sleep is understood as an inevitable consequence of the ear’s natural openness. According to Stumpf, the sleeper is inherently defenseless against noises from

⁹⁸ “Ich bin losgerissen worden wie ein Blatt aus einem Buch”; *ibid.*

⁹⁹ “Durch Gehörseindrücke wecken wir den Schläfer und den wachen Träumer. Das allezeit offene Organ, das Eindringen der Schallwellen von allen Seiten her (durch die Wand kann man nicht sehen aber hören) und manche andere Umstände sind Ursachen dieser praktischen Bedeutung”; Carl Stumpf, *Tonpsychologie*, Vol. 1 (Leipzig: S. Hirzel, 1883), p. 67.

the surrounding environment, which can at any time travel through the walls of the private sphere and enter the sleeper's ears against his will. Stumpf's comments represent a dominant view of the ear as inherently vulnerable and passive to external stimuli, one reiterated at this time by cultural critics, medical scientists, and literary authors alike. But while Musil's text begins with a similar emphasis on passivity, this conception of hearing is complicated in the concluding paragraphs, where the protagonist now directs his ear to the sounds on the street below his window.

This shift to a more active mode of hearing bears distinct traces of Hornbostel's contemporaneous writings on auditory space. But the final ecstatic moment of spatial hearing is in fact already prefigured through a series of visual experiences which appear earlier in the text, thereby gesturing towards the visual origins of scientific and technological discourse surrounding binaural hearing. Upon waking, the protagonist immediately recognizes a mysterious disparity between the images framed by each of the two windows in his room. From one he sees the moon and the night sky, while from the other he is greeted by a rising sun and the bright colors of the morning:

The crescent moon lies tenderly like a golden eyebrow on the blue page of the night. But at the other window, on the morning side, it is viridescent. Parrot-feathery. Already the bland reddish strips of the sunrise are rising up, but everything is still green, blue and peaceful. I jump back to the first window: is the crescent moon still there? It's there, as if it's the deepest hour of nocturnal secrets.¹⁰⁰

Moving back and forth between the contrasting views offered by the two windows, Musil's protagonist encounters a perplexing temporal disparity. As we have already seen, Hornbostel and Wertheimer's primary contribution to the study of auditory space

¹⁰⁰ "Die Mondsichel liegt zart wie eine goldene Augenbraue auf dem blauen Blatt der Nacht. Aber auf der Morgenseite am anderen Fenster wird es grünlich. Papageienfedrig. Schon laufen auch die faden rötlichen Streifen des Sonnenaufgangs herauf, aber noch ist alles grün, blau und ruhig. Ich springe zum ersten Fenster zurück: Liegt die Mondsichel noch da? Sie liegt da, als ob es tiefste Stunde des nächtlichen Geheimnisses wäre"; Musil, "Der Gläubige," p. 575.

was their discovery that the decisive factor in auditory localization lay not in differences of intensity or phase—as researchers had contended up to that point—but rather the difference between the moments at which each of the two ears registered a single sound. According to Hornbostel’s 1923 essay, spatial hearing depended on “the temporal disparity between sensations (*die zeitliche Disparation der Reize*).”¹⁰¹

The conflicting temporalities of the two windows map the physiology of auditory space onto two competing visual perspectives—a move fully in line with the history of scientific research on spatial hearing, which, as we have seen, borrowed extensively from contemporaneous studies of stereoscopic vision. So while the protagonist remains unable to visually synthesize night and day, this temporal disparity indirectly foreshadows their subsequent reconciliation and merger in the ecstatic moment of spatial hearing depicted in the text’s final paragraphs. Indeed, still situated between the two windows, this temporal disparity soon gives rise to a mobile ear, which is transformed into an architectural structure:

Finally, two legs come through the night. The footstep of two female legs and the ear. I don’t want to look. My ear stands on the street like an entryway. Never was I so united with a woman as with this stranger, whose footsteps disappear deeper and deeper in my ear.¹⁰²

In contrast to Stumpf and others at the time, Musil depicts the ear not as a passive organ bombarded by sound or incapable of blocking out the sensory overload of the external world. The protagonist’s ear instead voluntarily reaches out to the street in order to meet the woman’s footsteps halfway. Similar to the *Richtungshörer*, which artificially

¹⁰¹ Hornbostel, “Beobachtungen über ein- und zweiohriges Hören,” p. 65.

¹⁰² “Endlich kommen zwei Beine durch die Nacht. Der Schritt zwier Frauenbeine und das Ohr. Nicht schau will ich. Mein Ohr steht auf die Straße wie ein Eingang. Niemals war ich mit einer Frau so vereint wie mit dieser unbekanntem, deren Schritte immer tiefer in meinem Ohr verschwinden”; Musil, “Der Gläubige,” p. 575.

extended the distance between the ears, the ear in this final moment moves into spaces previously inaccessible to it, stretching out through the window and positioning itself on the surface of the street below.

The ear's lack of mobility had often served as an argument against the possibility of a distinctly auditory space. "Supply the ear with the possibility of multifarious movements and hearing becomes a spatial sense," Arthur Henry Pierce wrote in his summary of positions held by opponents of acoustic space.¹⁰³ And at the same time that the *Richtungshörer* provided the ear with a form of prosthetic mobility, it also engendered more flexible and dynamic modes of listening. Martin Bochow, for example, frequently employed terms such as "heraus hören" and "lauschen hinaus" to describe his activities behind the device, thereby suggesting a more active form of listening *out into space*.¹⁰⁴ Musil's literary account of acoustic space foregrounds precisely this dynamic quality of the ear. Once static and anchored firmly onto the sides of the listener's head, the ear now moves through space and actively seeks out aural objects.¹⁰⁵

In consonance with the experimental protocols outlined by figures like Hornbostel and Bell, as well as the sensorial nature of the First World War and Ader's stereophonic exhibitions, the protagonist's transcendent encounter with the stranger commences only after he has closed his eyes. From the start the text portrays visual perception as prone to

¹⁰³ Pierce, *Studies in Auditory and Visual Space Perception*, p. 18. See also Silvanus P. Thompson, "On the Function of the Two Ears in the Perception of Space" (1882) in *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, Vol. VIII (January-June): 406-16, especially p. 407.

¹⁰⁴ Bochow, *Schallmesstrupp 51*, pp. 23, 47.

¹⁰⁵ Julia Encke describes Musil's war writings as "stories [...] that make the auditory organ their protagonist." This tendency, I would argue, is most clearly embodied in "The Believer," which in an even more radical way invests the ear with a sense of agency and presents it as an almost autonomous figure. See Encke, *Augenblicke der Gefahr*, p. 171.

disorienting illusions or distortions of the external world. “The houses stand crisscrossed,” the protagonist remarks at one point, “strange outlines, steep sloping walls; not at all arranged according to the streets.”¹⁰⁶ The temporal disjuncture between the two windows in the text’s opening paragraphs has similarly disorienting effects and cannot be resolved without the aid of the ear and the exclusion of all visual impressions. “I don’t want to look,” the narrator asserts immediately before his ear moves out to the street in search of the woman’s footsteps.

By transferring laboratory procedure to the domestic sphere, Musil reveals the ecstatic potential of nineteenth-century science’s separation of the senses. The isolation of a single sense modality was no longer a technique limited to scientific practice, but one that circulated from the laboratory, through the battlefield and sites of popular culture, to the pages of literary modernism. Nor did it assume a purely negative role within aesthetic discourse, as something to fight against or reject in favor of a more integrated sensorium allegedly operative in earlier historical periods. As Musil demonstrates in “The Believer,” the fragmentation of the sensorium instead provides a foundation for exploring the possibility of ecstatic experiences within the confines of modern forms of rationalization.

According to Hornbostel’s 1923 essay, the ecstatic union described in Musil’s text would have been inconceivable within the realm of visual perception. Read alongside Hornbostel’s scientific study, the protagonist’s decision to exclude visual impressions and isolate the ear corresponds to a spatial experience more conducive to the transcendent merger portrayed in the text’s final paragraphs. Indeed, Hornbostel’s affirmation of a

¹⁰⁶ “Die Häuser stehn kreuz und quer, seltsame Umrisse, abstürzende Wände; gar nicht nach Straßen geordnet”; Musil, “Der Gläubige,” p. 575.

uniquely acoustic space is simultaneously a description of the essential differences between the visual and aural objects that occupy these spaces and, perhaps more importantly, an individual's relationship to them. As he argues, visual objects are "more strongly outside of us, more unfamiliar to the self than noises and even tones." What therefore begins as an effort to raise auditory perception to the level of vision ends with a deep division between the two sense modalities. The distant, alien objects of visual space stand in stark contrast to the more intimate objects perceived by the ear. While objects within visual space stand wholly outside of the viewer, the boundary between interiority and exteriority is much less clear in the case of acoustic space. "The Believer" operates according to many of the same binaries, drawing connections between visual perception and feelings of alienation.

By contrast, hearing in Musil's text leads to a blurring of the boundaries between the protagonist's body and that of the stranger on the street. Sound quite literally dismantles the distinction between the spaces external and internal to the listener, as the woman's echoing footsteps enter into the interior spaces of the ear. In doing so, the sound of the footsteps assumes an astonishing three-dimensional form, with the woman's footsteps becoming corporeal sounds that enter into the listener's ear as autonomous, living entities. The protagonist first describes the sounds as "two legs," thus already pointing to a certain physicality. He not only registers the amorphous auditory impressions of the footsteps, but also identifies the sounds as parts of the human body. In the next line he further attaches them to the body of a woman, labeling them "female legs." Although she remains invisible to the protagonist, the footsteps provide a remarkable amount of information about the identity of the figure producing the sounds.

“Binaural sounds are more clearly defined,” Hornbostel remarked in his 1923 essay, “they are things acoustically perceived, which, stationary or moving, are in the same space as the things that we see.”¹⁰⁷ And while only a single ear moves out to embrace the woman on the street, the number two pervades the text; two windows, two temporalities, two legs, the stranger on the street and her undisclosed companion.

Both Musil and Hornbostel present models of a more active listener capable of navigating the spaces occupied by aural objects rather than lost within the caverns of an auditory field perpetually open to attack. But whereas Hornbostel’s theory of spatial hearing primarily seeks to outline the ways in which human beings orient themselves ordinarily, Musil is concerned with the ear’s openness to ecstatic moments of transcendence, to perceptual experiences outside the realm of the everyday. Musil’s literary appropriation of contemporaneous discourse on auditory space therefore takes Hornbostel’s comments one step further, investing sound not only with a material, physical presence in space, but with the capacity to open up mystical, erotic moments of unification with purely auditory bodies.

Sound and the Other Condition

Musil’s portrayal of the transcendent auditory experience in “The Believer” coincides with his earliest formulations of the Other Condition, a concept that would become central to his tale of transgressive love between two siblings on the eve of the Habsburg Empire’s collapse in *The Man Without Qualities* (*Der Mann ohne*

¹⁰⁷ “Die zweiohrigen Schällle sind stärker gestaltet, sie sind Dinge, die hörend wahrgenommen werden, die, ruhend oder bewegt, in demselben Raum sind wie die Dinge, die man sieht”; Hornbostel, “Beobachtungen über ein- und zweiohriges Hören,” p. 114.

Eigenschaften, 1930-1942).¹⁰⁸ Although Musil had explored the intrusion of various hypnogogic and dreamlike experiences into the realm of the everyday as early as his first novel, *The Confusions of Young Törless* (*Die Verwirrungen des Zöglings Törleß*, 1906), it is during the early 1920s that he would attempt to flesh out in more detail the perceptual content and ethical implications of a particular kind of non-rational, quasi-mystical state that he termed ‘the Other Condition (*der andere Zustand*).’ It is during the period surrounding his composition of “The Believer” that Musil explicitly mentions the Other Condition in a diary entry on Ludwig Klages’ mystical treatise, *Cosmogonic Eros* (*Vom kosmogonischen Eros*, 1922).¹⁰⁹ And it is less than one year after the publication of “The Believer” that Musil would compose his essay, “Towards a New Aesthetic: Notes on the Dramaturgy of Film (*Ansätze zu neuer Ästhetik: Bemerkungen über eine Dramaturgie des Films*), considered to be the most definitive account of the Other Condition.¹¹⁰

The notion’s explicit connection to the medium of film, along with later borrowings from Hornbostel’s theoretical writings on visual space and optical inversion, have tended to obfuscate Musil’s concurrent exploration of transcendent experiences

¹⁰⁸ On the Other Condition, see Stefan Jonsson, *Subject without Nation: Robert Musil and the History of Modern Identity* (Durham & London: Duke UP, 2000), pp. 90-96; 260-62; Bernd-Rüdiger Hüppauf, *Von sozialer Utopie zur Mystik: Zu Robert Musils Der Mann ohne Eigenschaften* (München: Wilhelm Fink, 1971), pp. 121-31; Heribert Brosthaus, “Struktur und Entwicklung des ‘anderen Zustands’ in *Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte* 39 (1965): 338-440; Werner Fuld, “Die Quellen zur Konzeption des ‘anderen Zustands’” in *Deutsche Vierteljahrsschrift* 50 (1976): 664-82. For secondary literature discussing the connection between “The Believer” and Musil’s notion of the Other Condition, see Karl Corino, *Robert Musil: Eine Biographie* (Reinbek bei Hamburg: Rowohlt, 2003), p. 1902; Gudrun Brokoph-Mauch, *Robert Musils ‘Nachlass zu Lebzeiten’* (New York/Bern/Frankfurt am Main: Peter Lang, 1985), pp. 59-79.

¹⁰⁹ See Musil, *Tagebücher*, pp. 615-24.

¹¹⁰ On Musil and film, see Christoph Hoffmann, ‘*Dichter am Apparat*’, pp. 139-84; Christian Rogowski, “‘Ein anderes Verhalten zur Welt’: Robert Musil und der Film” in *Sprachkunst* 23 (1992): 105-118.

triggered by auditory phenomena and acts of close listening.¹¹¹ My intention here is to introduce the role of other sense modalities into the concept's development in order to complicate exclusively visual accounts of the Other Condition. An attentiveness to the auditory dimension of the Other Condition helps first and foremost to solidify the precise nature of the interaction between scientific theories of hearing and contemporaneous literary texts. Although Hornbostel concludes his 1923 essay on binaural hearing by praising music as a “gift from heaven (*Geschenk des Himmels*)” and the “strongest, most immediate language of the soul (*es macht die Musik zur stärksten, weil unmittelbarsten Sprache der Seele*),” Musil's emphasis on the ecstatic potential of close listening and spatial hearing is in no way obvious from a reading of the scientific work.¹¹² On the one hand, his literary appropriation remains committed to longstanding characterizations of visual perception as an objectifying force and hearing as inherently subjective and, thus, more prone to hallucinations, perceptual error, and the non-rational. On the other, the possibility of subjective hallucinations—portrayed in Kafka as a source of destabilizing,

¹¹¹ On Musil's engagement with Hornbostel's contemporaneous writings on visual space, see Peter Berz, “I-Welten” in *Robert Musil—Dichter, Essayist, Wissenschaftler*, ed. Hans-Georg Pott (München: Wilhelm Fink, 1993): 171-92; Oliver Simons, *Raumgeschichten: Topographien der Moderne in Philosophie, Wissenschaft und Literatur*, (München: Fink, 2007). For another instance of Musil's interweaving of sound and the ecstatic or supernatural, see his short text “Clairaudience” which, along with a later draft of “The Believer,” appeared in the 1936 collection *Posthumous Papers of a Living Author*. Suffering from fever and confined to his bed, the text's protagonist listens to his lover as she prepares for bed and carries out a series of mundane tasks. The activity of listening leads to insights on her character and reflections on the self, which, he claims, would be inaccessible amidst the flow of everyday life. Similar to “The Believer,” the listener willfully shuts his eyes in order to isolate his acoustic impressions. The text's title, “Clairaudience,” refers both to occult practices of listening across space and time as well as to the porous quality of architectural materials. In the same year that Musil recorded the first draft of the text in his notebook, for example, the anti-noise activist and engineer H. Chr. Nußbaum lamented the “clairaudient rooms (*hellhörige Räume*)” of poorly insulated architectural spaces; Nußbaum, “Geräuschschutz für das Wohnhaus” in *Haustechnische Rundschau*, no. 23 (1913): 267-69, here p. 268. Thus, unlike Kafka who portrayed listening through the wall as an occasion for irritation or paranoia, Musil highlights its supernatural potential and role in opening up previously unseen or inaudible worlds. For another contemporaneous literary representation linking occult practices of clairaudience to porous architectural spaces, see Algernon Blackwood, “A Case of Eaves-Dropping” in *The Pall Mall Magazine*, Vol. XXII (September to December 1900): 558-68.

¹¹² Hornbostel, “Beobachtungen über ein- und zweiohriges Hören,” p. 114.

paranoid terror—is transformed by Musil into intimations of God’s presence and divine intervention.

These supernatural elements, however, are juxtaposed with depictions of the ear as capable of gleaning concrete information about the nature of its source and of tracking its movement through space. Indeed, it is the very act of following sounds through space that gives rise to these ecstatic experiences. In “A Soldier Reports,” the weapon’s gradual descent is accompanied by the sound’s transformation into a living organism and eventually the presence of God within the listener’s body. In “The Believer” the ear extends out onto the street, easily locating the sound of the footsteps and allowing them to enter into the protagonist’s body and, in the process, initiating a brief eroticized union with the stranger. Methods of auditory localization and demonstrations of the ear’s capacity for spatial orientation, become constitutive elements in literary figurations of transcendent perceptual experiences. In migrating from the experimental laboratory to the realm of literature, Hornbostel’s ‘auditory things’ come to life as occasions for altered states of mind that diverge from the everyday.

Finally, a closer examination of sound’s ecstatic potential enables us to move beyond the privileging of a single sense modality as primary or most significant in Musil’s writings and to begin to analyze the commonalities between ecstatic experiences grounded in vision and those tied to listening. Indeed, there is even something that one might be tempted to call ‘cinematic’ about the act of close listening portrayed in “The Believer.” The ear that moves out to meet the sound of the footsteps can be said to imitate the film camera zooming in on a particular figure or object through the close-up. Béla Balázs—whose theoretical reflections on silent cinema stand at the center of Musil’s

filmic conceptualization of the Other Condition in his essay “Towards a New Aesthetic— had identified the close-up as the “poetry of the cinema (*Poesie des Films*),” a technique that “brings us closer to the individual cells of life (*bringt uns die einzelnen Zellen des Lebensgewebes nahe*)” and “allows us to feel the texture and substance of life in its concrete detail (*läßt uns wieder Stoff und Substanz des konkreten Lebens fühlen.*”¹¹³ The moment of ecstatic unification experienced by the protagonist of Musil’s literary narrative is likewise triggered by the isolation and magnification of the sounds of the woman’s footsteps, which are heard at such proximity that they actually cross over and enter into the sense organ perceiving them. But it is not only the movement of the ear and efforts to isolate a single sound that invokes the cinematic close-up, it is also the image of the ear itself as both detached from the listener’s body and large enough to stand on the street as an “entryway.” “The pathos of the large,” Balázs observed, “is an effect in which the film has no equal.”¹¹⁴

More straightforwardly, Musil’s representation of visually and acoustically induced altered psychological states coincide in their isolation of a single sense modality. In “The Believer” the protagonist’s union occurs in total blindness with his eyes willfully closed. As we have seen, the exclusion of visual impressions was also central to scientific research on spatial hearing, but it was also a listening technique that visitors to Ader’s stereophonic exhibition intuitively settled on without instruction or the explicit stipulations of an experimental protocol. In Musil’s essay on film it is conversely the

¹¹³ Béla Balázs, *Der sichtbare Mensch oder die Kultur des Films* (Frankfurt a.M.: Suhrkamp, 2001), pp. 53, 49; *Early Film Theory: Visible Man and The Spirit of Film*, ed. Erica Carter, trans. Rodney Livingstone (New York/Oxford: Berghahn Books, 2010), pp. 41, 38. See also Gertrud Koch, “Bela Balazs: The Physiognomy of Things,” trans. Miriam Hansen, in *New German Critique* 40 (Winter 1987): 167-77.

¹¹⁴ “Das Pathos der Größen ist eine Wirkung, die keine andere Kunst so wie der Film ausüben kann”; Balázs, *Der sichtbare Mensch*, p. 53; *Early Film Theory*, p. 41.

silent image and the exclusion of sound that are implicated in giving rise to the Other Condition. According to Musil, the awakening of the symbolic face of things within the “silence of the (cinematic) image” constitutes a distinctly “wordless experience (*ein wortloses Erlebnis*).”¹¹⁵ Thus, it is not only sound but the more specific acoustic phenomenon of language that is barred from entering the film frame.

In the next and final chapter I continue my examination of the interplay between vision and hearing in Musil’s literary works and contemporaneous scientific research on the senses. In the novella, “The Blackbird (*Die Amsel*, 1928), Musil would return to perceptual issues surrounding the experience of sound-space, but its representation was now embedded within synaesthetic couplings of sound and vision and the translation of optical and acoustical data between the senses. In doing so, Musil imagines the interconnectivity of the senses in a manner that comes strikingly close to Hornbostel’s essay, “The Unity of the Senses” (1925), which Musil had read and quotes in length in *The Man without Qualities*. Similar to “The Blackbird,” Hornbostel’s essay juxtaposes a discussion of auditory space with broader arguments for the existence of a more unified sensorium long abandoned by psychophysics and positivist physiology. As we will see, the essay helps to shed light on the functioning of Musil’s synaesthetic visualizations of sound, while at the same time complicating understandings of early twentieth century scientific practices and the surprisingly enduring currency of more romantic notions of a unified sensorium.

¹¹⁵ Musil, “Ansätze zu neuer Ästhetik,” p. 1144.

Chapter 5

Narration as Acoustical Experiment:

Musil's "The Blackbird"

It is very difficult to describe, but when I think back, it is as though something had turned me inside out; I was no longer a solid, but rather a something sunken in upon itself.

Robert Musil, "The Blackbird"

A sound may be round, spherical like a drop, right or left from me, far or near, point-shaped or spread out.

E.M. Hornbostel, "The Unity of the Senses"

In "The Believer," the sounds of a woman's footsteps are described as gradually descending into the protagonist's ear, which stands on the street below his home "like an entryway (*wie ein Eingang*)."

While the woman remains hidden from view and the protagonist actively closes his eyes to block out additional visual stimuli, their brief ecstatic encounter is staged as an intermingling of body parts with surprisingly well-defined contours and spatial characteristics. The mysterious figure first appears on the scene as simply "two legs (*zwei Beine*)," which are then linked to a distinctly female body (*Frauenbeine*) before eventually being swallowed up by the enormous ear. The encounter between dismembered legs and a lone ear, figured here as a kind of architectural space, gives rise to an ecstatic moment of unification.

At the same time that the text foregrounds the physicality of the protagonist's ear in a concentrated act of listening, it presents the pure *sound* of the footsteps as an autonomous entity capable of moving through external spaces and occupying the internal spaces of the auditory organ. This physicality of sound was similarly highlighted in Musil's account of the falling weapon on the battlefields of World War I, which was

described as becoming “more corporeal (*körperlicher*)” as it fell from above, and was denoted textually with pronouns such as “he” and “him,” thereby reinforcing the sound’s status as a living organism.

In the previous chapter I juxtaposed literary representations of the plasticity of sound with scientific theories of spatial hearing espoused by Musil’s longtime friend, Erich Moritz von Hornbostel, as well as the technical simulation of auditory space by means of the telephone and *Richtungshörer*. This final chapter continues to explore the topic of corporeal sound across the domains of literature and the experimental sciences, serving as the second half of a larger story about acoustical embodiment. Rather than being grounded in the listener’s experiences of his or her body, this second aspect of modern acoustical embodiment occurs on the side of the object. It is a figurative mode of representing sound and auditory experience, more generally, as the perception of ‘auditory things,’ which occupy and move through space like three-dimensional visual objects. Turning my attention to Musil’s later novella “The Blackbird (*Die Amsel*)” (1928), which integrates a revised version of his war narrative and contains numerous thematic resonances with “The Believer,” I am more specifically interested in how the depiction of corporeal, auditory things takes place *to the exclusion of* the listener’s body. If “The Believer” had depicted sound as an autonomous entity alongside close-ups of the ear’s rich physicality, its newfound mobility, adroitness, and spatial orientation, “The Blackbird” emphasizes sound’s thingness to an even greater extent, while simultaneously obscuring the listener’s body.

The absence of the listener’s body in Musil’s literary narrative must be viewed at least in part against the backdrop of the proliferation of new acoustic technologies and

techniques of mediated listening, which assumed an unprecedented importance and ubiquity in the second half of the 1920s. As recent studies of Weimar radio have convincingly demonstrated, it was this period that marked a veritable revolution in sound recording, one rivaled only by the initial invention of the phonograph in the late 1870s. Through the introduction of more sensitive microphones and more sophisticated means of transmitting sound via electro-acoustic rather than pre-electric devices, mediated sound took on qualities of “spatiality, depth and plasticity” and, in doing so, “qualitatively changed the nature of sound representation.”¹ Discussions surrounding the aesthetic possibilities of radio in the late 1920s were pervaded by notions of “plastic listening (*plastisches Hören*),” “sound space (*Klangraum*),” “acoustic space (*akustischer Raum*),” and calls for “stereoacoustics (*Stereoakustik*).”² Explicitly citing Hornbostel and Wertheimer’s theory of auditory localization as dependent on temporal differences, and corroborating their assertion that binaural sounds were in fact “more like objects (*gegenständlicher*),”³ critics enthusiastically embraced the technological reproduction of auditory space as crucial for the medium’s aesthetic development.

Despite calls for the production and widespread distribution of stereophonic radios, however, the technical implementation of scientific theories of spatial hearing

¹ Brian Edgar Hanrahan, “The Art of Actuality: Radio, Realism and the *Hörfilm*, 1924-1932” (PhD Dissertation, Columbia University, 2009), p. 100.

² See for example “Plastisches Hören von Rundfunkdarbietungen” in: *Funk*, Heft 20 (1925): 240; Ludwig Kapeller, “Der stereophonische Rundfunk” in *Funk*, Heft 27 (1925): 317-319; Hermann Schütze, “Raumhören (Stereoakustik)” in *Kosmos. Gesellschaft der Naturfreunde*, Heft 5 (1926): 155-57; Rudolf Leonhard, “Die Situation des Hörspiels” (1928) in *Radio-Kultur in der Weimarer Republik*, ed. Irmela Schneider (Tübingen: Gunter Narr Verlag, 1984), p. 161 Erwin Meyer, “Über das stereoakustische Hören” in *Elektrotechnische Zeitschrift*, Heft 22 (28. Mai 1925): 805-807; Aloys Christian Wilsmann, “Zur Dramaturgie des Hörspiels: Eine Studie über Klangprobleme im Rundfunk” in *Der deutsche Rundfunk*, Heft 16 (1925): 994-96; Wilsmann, “Probleme des Hörspiels” in *Der deutsche Rundfunk*, Heft 31 (1925): 2542-44.

³ Meyer, “Über das stereoakustische Hören,” p. 809.

remained largely speculative and were not put into practice, although several articles cite scattered experiments involving the stereophonic transmission of operas from Munich and Berlin.⁴ Because it failed to become a common practice at the time, the early history of stereophonics has remained largely absent from scholarly work on Weimar radio. Yet it is important to note that, in a period in which aesthetic practices surrounding the medium had yet to become solidified, achieving a kind of sonic plasticity and demonstrating the spatiality of sound were regarded as legitimate and desirable goals. Left with the spatially limited monaural model as the industry standard, critics transferred many of the same spatial categories to descriptions of contemporaneous aesthetic practices and radio plays that were broadcast over the airwaves. Aloys Christian Wilsmann, for example, analyzed the radio play in an article from 1925 in terms of an “acoustic perspective (*akustische Perspektive*),” “sound scaffolding (*Klang-Gerüst*),” “sound buildings (*Klangbauten*),” along with a corresponding mode of “listening through (*ein Hindurch-Hören*),” all of which, combined, were intended to lend broadcasts a “spatial depth effect and plasticity (*räumliche Tiefenwirkung und Plastizität*).”⁵ Although stereophonics would not become a widespread form of sound reproduction until decades later, practitioners in the late 1920s conceived of radio art as deeply spatial and composed of plastic sound objects.

As we saw in the previous chapter, Musil represents intense sonic experiences by investing sounds with physical and organic characteristics, while his acoustically

⁴ On recommendations for the construction of stereophonic radios, see Kapeller, “Der stereophonische Rundfunk.” On early experiments with stereophonic radio transmissions, see Meyer, “Über das stereoakustische Hören”; “Plastisches Hören von Rundfunkdarbietungen.”

⁵ Wilsmann, “Zur Dramaturgie des Hörspiels,” p. 996. On Wilsmann’s aesthetics of sound-space, see also Dominik Schrage, *Psychotechnik und Radiophonie. Subjektkonstruktionen in artifiziellen Wirklichkeiten 1918-1932* (Munich: Wilhelm Fink, 2001), p. 239.

sensitive protagonists appear capable of searching out their locations and tracking their trajectories through space. In this way, both his account of the falling weapon in “A Soldier Reports” and the mobile ear in “The Believer” resonate with insights on auditory perception produced in the acoustical laboratory and distributed across the battlefield, airwaves, and performance hall. Nowhere is sound’s plasticity and spatiality more clearly on display than in Musil’s “The Blackbird,” which portrays individual sounds without accompanying visual data as “coming closer (*Töne kamen näher*),” as again becoming “more corporeal (*körperlicher*),” as “leaping into the air (*sprangen dort in die Luft*)” and “sinking to the earth like great silver stars (*sanken wie große Silbersterne in die Tiefe*).”⁶

Now, however, instances of spatial listening and the perception of corporeal sounds are situated within the framework of mediated sound. Indeed, as Christoph Hoffmann and others have argued, the novella can be read as a kind of “communications system (*Übertragungssystem*),” which places readers under the same conditions as “speakers and listeners on the technical media of telephone and radio.”⁷ Not only is the sound of the mysterious blackbird described in explicitly technical language, as a “signal (*Signal*)” (*A* 139/133), which strikes the protagonist from afar. The text also concludes by highlighting the unstable distinction between the static and interference of technical

⁶ Robert Musil, “Die Amsel” in *Nachlaß zu Lebzeiten* (1936; Reinbek bei Hamburg: Rowohlt Taschenbuch Verlag, 1962), pp. 131-54. My English translation is based on *Posthumous Papers of a Living Author*, trans. Peter Wortsman (Hygiene, Colorado: Eridanos Press, 1987), pp. 127-45. Alterations to Wortsman’s translation will be marked with an asterisk after the page number. All future references to the text will be indicated with the abbreviation *A* followed by the page numbers for the German and for the English respectively.

⁷ “Wer dort spricht oder zuhört, ist vielmehr denselben Bedingungen unterstellt wie Sprecher und Hörer an den technischen Medien Telephon und Radio”; Christoph Hoffmann, *Dichter am Apparat: Medientechnik, Experimentalpsychologie und Texte Robert Musils, 1899-1942* (München: Fink, 1997), pp. 188, 211. See also Bernhard Siegert, “Rauschfilterung als Hörspiel” in *Robert Musil—Dichter, Essayist, Wissenschaftler*, ed. Hans-Georg Pott (München: Fink, 1993), pp. 193-207.

media, on the one hand, and the successful communication of a signal to an intended receiver, on the other. “It’s like hearing a whisper and a rustling (*Rauschen*) outside,” the protagonist explains to his interlocutor, “without being able to distinguish between the two!”⁸

The “rustling” that serves to disrupt the signal’s transmission is decidedly not the noise of the body in operation, as was suggested in Kafka’s “The Burrow.” As I show in this final chapter, the body of the human listener is repeatedly obscured and covered over in “The Blackbird” in a way that exceeds even Kafka’s often delusional mole-like creature, who, as we saw in Chapter 3, regarded the sounds of its body as a liability and attempted to listen through or externalize such corporeal noises by means of various architectural structures. Although Musil’s text again thematizes the possibility of subjective hallucinations against the backdrop of attentive listening practices, there is no acknowledgement of the body’s potential role in generating sound. I contrast the non-corporeal quality of the listener’s body with what might be described as the increasing corporeality of sound itself, its thingness and alleged organic properties. Thus, I conclude the dissertation by examining the ways in which conceptions of an embodied listener were accompanied, and partially superseded by, forms of embodiment on the side of objects.

In Musil’s novella, the corporeality of sound is demonstrated through two interrelated trajectories. The first expands upon experiences documented in Musil’s war writings, which I discussed in Chapter 4. Here, in consonance with Hornbostel’s contemporaneous scientific work on spatial hearing, concentrated techniques of listening

⁸ “Aber es ist, wie wenn du flüstern hörst oder bloß rauschen, ohne das unterscheiden zu können!” (*A* 154/145).

enable the protagonist to perceive sounds as three-dimensional entities capable of moving and being tracked through space. The second process of embodiment emerges gradually over the course of the novella and involves the similarities between the three individual stories of which the embedded narrative is composed. Although, in the end, the attempt to determine the shared meaning of the three stories is acknowledged to be a failure, there are significant analogies and commonalities between the auditory experiences related in each. At the center of the first story stands the sound of what the protagonist believes to be a nightingale near his home in Berlin, which he never sees and eventually admits might in fact be a more common blackbird. The second involves a falling weapon, which is again perceived largely by means of listening. In the third text, which makes multiple allusions back to the first two, another blackbird appears at the window but this time speaks in the voice of the protagonist's mother—a figure who looms in the background of the novella as a whole.

The three sounds—the first of a blackbird or nightingale's song, the second from a weapon dropped from a plane, and finally the voice of his mother emanating from the mouth of a bird—clearly bear structural similarities with one another, a fact that puzzles the narrator but one that he nonetheless stresses throughout. In addition, however, the final story figures a process of embodiment, whereby the now deceased mother finally materializes and is given an organic body through which to communicate. At the same time, the ambiguous messages communicated in the first two stories are replaced by an articulate human voice that speaks to the listener in complete sentences. The mother, whose absence casts a shadow over the entire novella, is finally made present, albeit as a pure voice confined to an animal's body. In a sense, then, the final episode can be read

as a radicalized version of acoustical embodiment and sonic corporeality portrayed elsewhere in the novella, in that the voice of the dead mother speaks not from beyond the grave but rather from the visible and tangible body of an animal that can, moreover, be caged and confined rather than fade away into the night like a lost vision. In this final chapter, I examine how these two forms of corporealized sound are related to one another and how they are positioned with regard to the narrator's own body and his attempts to narrate his past experiences.

Noise, Architectural Space, and Ecstatic Experience

The first of the three stories contained in "The Blackbird" begins with a familiar narrative exercise, which, as I have stressed throughout the dissertation, was made possible and encouraged by the advent of acoustical modernity. An attentive narrator listens to the cacophony emanating from the individual rooms of an urban apartment building and attempts to impose order onto the chaotic noise by means of narrative and vivid description. "Among the most extraordinary places in the world," the protagonist explains of his surroundings around 1912,

are those Berlin courtyards where two, three, or four buildings flash their backsides at each other, and where in square holes set in the middle of the walls, kitchen maids sit and sing. You can tell by the look of the red copper pots hung in the pantry how loud their clatter is. From far down below a man's voice bawls curses up at one of the girls, or heavy wooden shoes go clip clop back and forth across the cobblestones. Slowly. Heavily. Incessantly. Senselessly. Forever. Is it so or isn't it?⁹

⁹ "Zu den sonderbarsten Orten der Welt [...] gehören jene Berliner Höfe, wo zwei, drei, oder vier Häuser einander den Hintern zeigen, Köchinnen sitzen mitten in den Wänden, in viereckigen Löchern, und singen. Man sieht es dem rotten Kupfergeschirr auf den Borden an, wie laut es klappert. Tief unten grölt eine Männerstimme Scheltworte zu einem der Mädchen empor, oder es gehen schwere Holzschuhe auf dem klinkernden Pflaster hin und her. Langsam. Hart. Ruhelos. Sinnlos. Immer. Ist es so oder nicht?"; *ibid.*, p. 134/130*.

Similar to Musil's war writings and "The Believer," the passage is characterized by an obfuscation of vision along with a simultaneous intensification of sound and aural experience. The narrator limits his account of the building almost entirely to its auditory elements, isolating individual sounds and drawing the reader's attention, first, to the singing of the cooks and, second, to the sound of crashing dishes and, finally, the abusive words issued by a male voice.¹⁰ The loss of a visual perspective on this architectural arrangement is emphasized, even parodied, through the narrator's observation that one can tell by the outward visual appearance of a set of dishes just "how loud their clatter is." Thus, one of the passage's few references to vision serves only to provide information about the object's acoustic properties. Vision is mobilized merely to aid the protagonist in imagining the sound of one of the only objects that remains silent throughout the scene.

The cacophony of the courtyard, while offering an opportunity to employ modes of close listening unaffected by visual impressions, presents unique challenges on the level of narration. Although the first half of the passage employs concise, onomatopoeic verbs such as "bawl (*grölen*)" and "clatter (*klappern*)" to portray the specific sonic properties of objects and the human voice, by the end this succinctness and specificity dissolves into one-word sentences and a corresponding loss of confidence in the validity of the textual account being offered. The string of single words, each punctuated by a period, suggests the breakdown of language into its barest components and depicts the

¹⁰ It is unclear to me why Breuer and Kassung characterize the auditory environment of Musil's Berlin courtyard as one in which "individual tones and sounds do not stand out (*einzelne Klänge oder Geräusche nicht hervorstecken*).” See Ingo Breuer and Christian Kassung, "Epistemologie und Poetologie zur Struktur des Naturwissenschaftlichen Wissens in Robert Musils Die Amsel" in *Robert Musil, Die Amsel: kritische Lektüren, Materialien aus dem Nachlass*, ed. Walter Busch und Ingo Breuer (Bozen: Sturzflüge, 2000): 95-130, here p. 109.

narrator as so overwhelmed by the noise that he is no longer capable of formulating entire sentences. As we saw in Chapter One, the rise of mechanized noise and the aural chaos of urban centers were frequently implicated in the breakdown of conventional linguistic utterances, with Altenberg's account of an aggressive drum performance, for example, being told by means of onomatopoeic bursts of nonsense that disrupted coherent sentences and did away entirely with lexically defined words. While Musil chooses not to take up naturalistic or avant-garde textual strategies to the same extent as Altenberg, both authors establish connections between the experience of noise and the breakdown of conventional narrative. Moreover, Musil concludes his initial sketch of the Berlin courtyards by transferring the narrator's sensory and representational confusion to the act of interpretation. "Is it so or is it not?" he asks at the end of the sequence of one-word utterances. The tension contained in the question introduces elements of ambiguity and indeterminacy that shape the novella as a whole, especially in its final lines which pose the question of how to distinguish noise from meaning.

One of the most glaring differences between accounts of modern noise put forth by authors like Altenberg and Kafka and the one with which Musil begins his novella, is the absence of the body in the experience of sound. Although the description of the Berlin courtyard hints at the presence of violence—especially in the aggressive tone of a man's voice as he shouts and curses at a woman upstairs and, more subtly, in the sound of clattering dishes and heavy footsteps—the intensity and chaotic qualities of the noises are at no point registered on the body of the listener, as was the case in texts by Kafka and Altenberg. Instead, whole sentences gradually break apart into individuated elements and the listener is left with interpretative, epistemological confusion: "Is it so or not?"

Rather than tearing apart the listener's eardrum or reducing him to the state of an animal, the human body remains seemingly untouched by the aggressive noise, as a spectral figure exorcised from the text.

The absence of references to the listener's body in experiences of noise follows the more general logic of the novella, which conspicuously aims to obscure the protagonist's body and hide it from view. While we are given detailed information about Atwo's physical characteristics during his childhood, as recounted in the text's opening pages, the body is subsequently and quite intentionally removed from the space of representation in the present. We discover that, as a child, Atwo's "narrow smallish head sat atop his torso, with eyes like lightning bolts wrapped in velvet, and teeth that one would sooner have associated with the fierceness of a beast of prey than the serenity of a mystic."¹¹ However, as Atwo prepares to begin the first of his three stories the frame narrator is forced to admit his own incapacity in adequately portraying the figure's corporeal qualities by means of the text:

It matters little under the circumstances how [Aone] responded, and their exchange can perhaps best be related in the form of a monologue. It would be far more important to the fabric of the tale were it possible to describe exactly what Atwo looked like at the time (which is easier said than done), for this raw impression of the man is not without bearing on the gist of his words. Suffice it to say that he brought to mind a sharp, taut, and narrow riding crop balanced on its soft tip, leaning up against the wall; it was in just such a half-erect, half-slouching posture that he seemed to feel most at ease.¹²

¹¹ "Ein schmaler, ziemlich kleiner Kopf saß darauf, mit Augen, die in Samt gewickelte Blitze waren, und mit Zähnen, die es eher zuließen, an die Blankheit eines jagenden Tiers zu denken, als die Sanftmut der Mystik zu erwarten" (*A* 133/128).

¹² "Es kam unter diesen Umständen wenig darauf an, was [Aeins] erwiderte, und es kann ihre Unterredung fast wie ein Selbstgespräch erzählt werden. Wichtiger wäre es, wenn man genau zu beschreiben vermöchte, wie Azwei damals aussah, weil dieser unmittelbare Eindruck für die Bedeutung seiner worte nicht ganz zu entbehren ist. Aber das ist schwer. Am ehesten könnte man sagen, er erinnerte an eine scharfe, nervige, schlanke Reitgerte, die, auf ihre weiche Spitze gestellt, an einer Wand lehnt; in so einer halb aufgerichteten und halb zusammengesunkenen Lage schien er sich wohl zu fühlen" ; *ibid.*, p. 134/129.

Over the course of the frame narrator's introduction, then, in moving from childhood to the present, the protagonist's body is acknowledged to be both meaningful for understanding his narrative as well as an object difficult to visual and represent textually. The passage enacts a double disappearing act, according to which the bodies of both Aone and Atwo recede into obscurity. First, the frame narrator emphasizes that the conversation between the two old friends "can perhaps best be related in the form of a monologue." In this way, the description effaces the protagonist's interlocutor, neutralizing Aone's significance to the story and exorcising his physical presence from the narrative.

Second, in a much more dramatic way, Atwo's vanishes behind the metaphor of a riding crop. Although the frame narrator acknowledges that his appearance bears directly on the stories he will go on to tell, the act of representing him physically is too difficult to carry out. Thus at the same moment that the body is observed to be a legitimate object of interpretation crucial for understanding the text to follow, that same body is obscured. In its place the frame narrator employs an unusual analogy between the protagonist's outward appearance and a riding crop. Whereas in the earlier account of Atwo's childhood, his body was likened to another living organism—namely that of a wild animal—here it is compared to an inanimate object. The analogy is apt, the frame narrator continues, due to the protagonist's "half-erect, half-slouching posture," according to which he leans "against the wall" and is balanced on a "soft tip." In addition to transferring human characteristics to an inanimate object, this inanimate object bears traces of passivity and docility, precariously positioned in the corner of the room and slouched over.

Indeed, “The Blackbird” is a text populated by docile bodies rendered immobile and seemingly controlled by unconscious impulses and external forces. Echoing the textual image of the half-erect, half-slouching riding crop (*in so einer halb aufgerichteten und halb zusammengesunkenen Lage*), the protagonist’s response to the falling weapon in his account of the war is characterized by a similar mixture of passivity and loss of control over his own body. After the deadly weapon strikes the earth beside him, he realizes that, “[He] hadn’t budged an inch but [his] body had been violently thrust to the side, having executed a deep, one hundred-and-eighty degree bow.”¹³ As if awakening “from a trance (*aus einem Rausch*),” the protagonist gains consciousness and finds that, on the one hand, his body has not moved from its original location, while, on the other, it has been forced to the ground over the course of the weapon’s gradual descent. Again, the protagonist’s body remains immobile, tied to a fixed location, much like the image of the riding crop leaning against the wall. In addition, due to forces beyond his conscious control, his body takes on the appearance of a object collapsing under its own weight, this time marked even more explicitly as a subservient bow to the ground.

Space and Aural Plasticity

These images of physical docility occur against the backdrop of sound’s increasing dynamism and its investment with organic qualities. If the listener’s body is thrown to the side like a passive, inanimate object, the sound of the weapon he hears “becomes more corporeal” as it falls towards the ground. This transformation is subsequently registered through the narrator’s confusion over the proper pronoun he

¹³ “Ich stand am gleichen Fleck, mein Leib aber war wild zur Seite gerissen worden und hatte eine tiefe, halbkreisförmige Verbeugung ausgeführt”; *ibid.*, p. 145/138.

should use to describe the sound: “He—it—was here (*Er, es war da*)” (A 145/138).

Thus, textual accounts of the protagonist’s physical exorcism from the text, the obfuscation of his body, along with images of physical docility and passivity, appear alongside sounds with seemingly organic characteristics. The contrast between narratives by Altenberg and Kafka, on the one hand, and Musil’s later novella, on the other, trace out a trajectory of auditory embodiment that shifts from the side of the listener to the side of aural objects.

If the body remains absent from the protagonist’s experience of noise, elements of human anatomy are projected onto the architectural spaces in which he listens.

Immediately after posing the question about the meaning and accuracy of his narrative while listening to the cacophony of the Berlin courtyard, his description moves from the acoustic dimension of the buildings to their spatial layout. “The kitchens and bedrooms look outwards and downwards on all this,” he notes, “they lie close together like love and digestion in the human body.”¹⁴ Presumably referring to the proximity of the digestive and reproductive systems in human anatomy, by drawing a comparison between architectural and corporeal arrangements the passage portrays the building as a living organism. The layout of the apartment not only bears a resemblance to the structure of the human body. Musil underscores this anthropomorphism by describing the two rooms as “looking[ing] outwards and downwards on all this.” The building is invested with corporeal characteristics at the same moment that it is attributed with the ability to visually perceive its surroundings, a capacity that was, moreover, precluded from the protagonist’s own experience of the space in the preceding paragraph.

¹⁴ “Da hinaus und hinab sehen nun die Küchen und die Schlafzimmer; nahe beieinander liegen sie, wie Liebe und Verdauung am menschlichen Körper“; *ibid.*, p. 134/130*.

In the paragraphs that follow Musil's anthropomorphic account, the building's agency is intensified and exposed to be a guiding force in the lives of its inhabitants. The chaotic sounds that fill the courtyard and transgress spatial boundaries now give way to an image of architectural space as uniform, highly rationalized and predictable, but simultaneously affective and controlling, inspiring comparisons with a sandwich automat and a Chicago slaughterhouse. "All the bedrooms occupy the same space in each building—window wall, bathroom wall, and closet wall *determine* the placement of each bed almost down to the half meter."¹⁵ The protagonist's emphasis on the ways in which the homogeneous spaces of the Berlin apartment building actively determine the forms of life that emerge within them, is then explicitly transferred to the realm of human action: "In middle-class apartments like these your personal destiny is already settled the moment you move in."¹⁶ In a manner that recalls Kafka's burrow and its alleged influence on structuring the mole-like creature's perception of its environment, Musil's apartment prescribes not only the uniform placement of furniture throughout the space, but, even more radically, dictates the life trajectories of its inhabitants. Thus, the move from the chaotic soundscape outside the apartment to its interior spaces reveals a structure that is both *predictable*, in that it adheres to a uniform arrangement and layout, and *predictive*, in that the life paths of individuals residing in the building can be inferred from the space itself. Underlying both is a sense of agency not on the part of the subject but rather that of the architectural structure.

¹⁵ "Alle Schlafzimmer haben im Haus die gleiche Lage, und Fensterwand, Badezimmerwand, Schrankwand *bestimmen* den Platz des Bettes fast auf den halben Meter genau"; *ibid.*, p. 134/130*, my emphasis.

¹⁶ "Das persönliche Schicksal ist in solchen Mittelstandswohnungen schon vorgerichtet, wenn man einzieht"; *ibid.*, p. 135/130*.

The effect of these uniform and highly rationalized domestic spaces is ultimately disrupted by, and thrown into relief against, the protagonist's subsequent encounter with a mysterious bird and the transformation of space that accompanies its appearance. In this first of three auditory experiences that make up the novella, the protagonist is roused from his sleep by the sound of tones coming closer, which he initially believes must emanate from a nightingale. The episode begins with the protagonist hovering precariously between states of sleep and waking consciousness, thereby resonating both with the either/or structure of the question that concludes the protagonist's account of the cacophonous Berlin apartment building ("Is it so or is it not?") as well as the temporal disparity between night and day that stands at the center of Musil's earlier mediation on sound in "The Believer." "This might have been my last waking impression," Atwo remarks with regard to his unusual state of mind the night of his encounter with the bird, "or a suspended dream vision."¹⁷ In both cases, the emergence of ecstatic experiences outside the logic of the everyday is preceded by the coexistence of polar opposites, the refusal or incapacity to resolve contradictions. In this way, Musil does in fact imbibe scenes of attentive listening with various degrees of epistemic confusion and lingering ambiguity, as was even more visibly on display in various texts by Kafka.

However, in both "The Believer" and "The Blackbird" these tensions, though never entirely resolved in some neat and permanent reconciliation, lead not to terrified anxiety or panic such as we find in "The Burrow" and "The Trial," but instead give rise to mystical experiences of wonder and a sense of being united with the world. "Then I experienced a magical state" (*ich empfand jetzt einen zauberhaften Zustand*)" (*A* 137/132), Atwo describes as he listens to the bird's song. Moments of indeterminacy and

¹⁷ "Es kann mein letzter wacher Eindurck gewesen sein ode rein ruhendes Traumgesicht"; *ibid.*, p. 137/132.

synchronicity engender ecstatic and transcendent experiences that unsettle the determinate influence of the apartment's uniform domestic space.

Indeed, as the coexistence of sleep and waking consciousness gives way to this “magical state,” the protagonist's experience of space is radically reconfigured:

It is very difficult to describe, but when I think back, it is as though something had turned me inside out; I was no longer a solid (*keine Plastik mehr*), but rather a something sunken in upon itself. And the air was not empty, but of a consistency unknown to the daylight senses, a blackness I could see through, a blackness I could feel through, and of which I too was made. Time pulsed in quick little fever spasms. Why should something not happen now that normally never happens?¹⁸

In the process of listening to the tones of the mysterious bird, the protagonist's material being undergoes a transformation, which inverts inside and outside and seems to dissolve the body into its surroundings. In contrast to the text's earlier emphasis on the seemingly irresolvable coincidence of opposing elements, the scene portrays the protagonist as merging with surrounding spaces.

At the same moment of the body's dissolution, empty space becomes permeated by an unidentifiable material substance. The protagonist soon comes to realize that he too consists of the same material and in this way his own body melts effortlessly into the empty spaces of his environment. The passage therefore enacts a series of inversions, which render the body fluid and invest previously empty spaces with a strange materiality. Elements of the domestic sphere such as the bed and walls, which had been said to exert an inexorable influence on the lives of inhabitants, recede into oblivion and are replaced by the palpability of fluid, empty space. If, earlier, architectural spaces were described as determinately imposing a life path onto inhabitants, that sense of necessity is

¹⁸ “Es ist sehr schwer zu beschreiben, aber wenn ich daran denke, ist mir, als ob mich etwas umgestülpt hätte; ich war keine Plastik mehr, sondern etwas Eingesenktes. Und das Zimmer war nicht hohl, sondern bestand aus einem Stoff, den es unter den Stoffen des Tages nicht gibt, einem Schwarz durchsichtigen und Schwarz zu durchfühlenden Stoff, aus dem auch ich bestand. Die Zeit rann in fieberkleinen schnellen Pulsschlägen. Weshalb sollte nicht jetzt geschehen, was sonst nie geschieht?”; *ibid.*, p. 137/132.

now transformed into an acknowledgement of contingency. “Why should something not happen now that normally never happens?” the protagonist asks as his body becomes immaterial and merges with the dark fluid of empty space.

Thus, it is no coincidence that, in observing his wife sleeping shortly before he walks out on her, Atwo describes her body as having “the color of pale bricks (*blaß ziegelfarben*)” (A 138/133). If the mysterious experiences triggered by the sounds of the nearby bird had enabled a kind of spatial inversion and rendered empty space perceptible to the protagonist as a material substance, his wife continues to symbolize the confining boundaries of the private sphere, with her body likened to bricks. In his earlier account of the building’s interior, the protagonist had invested the walls of the apartment with an ability to determine inhabitants’ lives. While somehow transcending the ordinary functioning of space and time, such deterministic structures vanish into the background, giving rise to a new sense of possibility. Now watching his wife as she sleeps, the protagonist equates her body with the restrictive features of the apartment he was able to temporarily escape. His sudden decision to leave the woman with no explanation signals an effort to put into action his realization regarding the openness of possibilities, which could happen now but which “normally never happens.” But in subtly alluding to the common architectural material in his description of her body, Atwo codes his shocking decision to leave as a departure from a particular experience of space and of spatial boundaries, which prevent the union of body and environment and greatly restrict the protagonist’s horizon of possibilities.

The “magical state” that Atwo recounts to his interlocutor foregrounds a transformation in both the perception of space and the materiality of the body. Indeed, at

the same time that the protagonist seemingly transcends the restrictive walls and architectural barriers prescribing his life path, he describes a process of dematerialization, as the solidity of the body gives way to a more fluid experience of both the self and the surrounding environment. “I was no longer a solid,” he observes as the hollow space of the bedroom becomes turbid and viscous. Of particular importance is the way in which Musil situates this dissolution of the listener’s body alongside the unusual corporeality of sound. Immediately before his transition to a “magical state” in which his body loses its solidity, Atwo portrays the sounds he hears as autonomous, three-dimensional entities moving through space:

Then I was awakened by something coming closer (*etwas Näherkommendes*); tones were coming closer. Once, twice I drowsily perceived them. Then they sat on the adjacent building, and from there leaped into the air like dolphins. Or I might have said like star flares, for the impression of spheres of light lingered. When they fell back down they burst softly against the windowpanes and sank slowly into the depths like great silver stars. I now entered a magical state.¹⁹

Preceding the protagonist’s own loss of solidity, pure tones are described in a language that invests the sounds with elements of plasticity and three-dimensionality, drawing the reader’s attention to the way in which the sounds themselves, and not merely the physical source from which they emanate, are perceived by the listener as material entities.

Indeed, it is only at the end of the paragraph after the protagonist’s sense of a mystical union has already begun to ebb, that he offers his first hypothesis regarding the sound’s source. Throughout the detailed account of his auditory impressions the sounds retain an ambiguous identity, remaining pure tones with no stable accompanying characteristics.

¹⁹ “Da wurde ich durch etwas Näherkommendes erweckt; Töne kamen näher. Ein-, zweimal stellte ich das schlaftrunken fest. Dann saßen sie auf dem First des Nachbarhauses und sprangen dort in die Luft wie Delphine. Ich hätte auch sagen können, wie Leuchtkugeln beim Feuerwerk; denn der Eindruck von Leuchtkugeln blieb; im Herabfallen zerplatzten sie sanft an den Fensterscheiben und sanken wie große Silbersterne in die Tiefe. Ich empfand jetzt einen zauberhaften Zustand”; *ibid.*, p. 137/132*.

The passage begins by portraying Atwo registering impressions of mere movement devoid of visual or acoustic properties. He is awakened by “something coming closer,” though initially it is not clear which of the senses he is employing to detect this movement. In the second half of the sentence he then specifies that it is a sound that appears to be coming nearer, thereby attaching a specific sense modality to the previously ambiguous impression of movement. In what follows these tones carry out a number of activities commonly attributed to living organisms, although the protagonist refrains from providing any information about the identity of the sound’s source.²⁰ In turn, when encountering descriptions that the tones “sat on the adjacent building” and “leaped into the air like dolphins,” readers are confronted with a paradoxical combination of acoustical embodiment and disembodiment. The sounds are in one sense remarkably *disembodied*, in that they cannot be traced back to the body from which they originally emanate. At the same time, the protagonist’s manner of describing their movements and actions without specifying their point of origin forces the reader to imagine the tones themselves as “sitting” or “leaping into the air,” thereby implying a necessary corporeality or material presence not typically associated with individual tones.

Analogy, Gestalt Qualities, and the Unity of the Senses

In foregrounding the transfer of information between the senses, Musil’s literary text resonates with contemporaneous conceptions of the human sensorium articulated by his friends and former colleagues at the Berlin Institute for Experimental psychology. In

²⁰ On the transfer of visual and acoustic characteristics throughout the scene, see also Eva-Maria Thüne, “Töne wie Leuchtkugeln. Zur Sprachlichen Repräsentation akustischer und optischer Wahrnehmung in Robert Musils *Die Amsel*” in *Robert Musil, Die Amsel: kritische Lektüren, Materialien aus dem Nachlass*, ed. Walter Busch und Ingo Breuer (Bozen: Sturzflüge, 2000), pp. 77-95.

particular, Musil's novella draws on the rhetoric and empirical claims contained within Erich Moritz von Hornbostel's 1925 essay "The Unity of the Senses (*Die Einheit der Sinne*)."²¹ Evidence that Musil was familiar with the text can be found in an unambiguous reference to a key passage from the essay in the first book of his *Man Without Qualities* (1930), and is further supported by a direct quotation in undated notes for the novel contained in his literary archive.²² Hornbostel's essay provides a polemic against the anatomization and instrumentalization of the senses by insisting on their necessary interconnectedness, rejecting the theories of nineteenth-century physiologists such as Hermann von Helmholtz and Johannes Müller in favor of Classical notions of a unified sensorium. From the perspective of the history of science, then, Hornbostel's essay then attempts to provide an alternative, competing conception of the senses, one that diverges from mainstream positivism and its emphasis on the separation of nerve fibers and the mechanical nature of sensory processes.

Hornbostel's essay begins with a discussion of the applicability of adjectives associated with one sense modality to sensory experiences related to another. His initial example addresses the extent to which non-auditory forms of art such as dance can be described as 'music.' From the start, Hornbostel seeks to distinguish his position from more fantastical claims of synaesthesia and the actual transfer of data between vision and hearing, or, the cross-wiring of the senses. In one of the text's opening paragraphs, in

²¹ Erich Moritz v. Hornbostel, "Die Einheit der Sinne" in *Melos: Zeitschrift für neue Musik*, Vol. IV (1925): 290-97.

²² See Thomas Sebastian, *The Intersection of Science and Literature in Musil's Man Without Qualities* (Rochester: Camden House, 2005), pp. 42-45; Musil, "Aufbau (Romanteil 'Seinesgleichen geschieht'—Vorstufe)" from *Robert Musil Klagenfurter Ausgabe: Kommentierte Edition sämtlicher Werke, Briefe und nachgelassener Schriften, mit Transkriptionen und Faksimiles aller Handschriften*, DVD-ROM, ed. Walter Fanta, Klaus Amann und Karl Corino (Klagenfurt: Robert Musil-Institut, 2009).

which he characterizes a particular dance performance as “pure music (*reine Musik*),” he writes:

I am not claiming to have seen tones or heard colors. I am fairly musical and not deaf. I know what is properly meant by ‘music’ and it is this proper sense that I mean. When someone calls a dolphin a fish it may be offensive to the zoologist but it is no metaphor. An African tribe has a particular word for ‘see,’ but only one for ‘hear, touch, smell, and taste.’ Through which sense I notice that I’m in the dark in a pigsty is essentially unimportant. The French *sentir* means ‘smell,’ ‘taste’ and ‘feel’ more generally. A child who prefers the ‘bright’ trumpet to the muffled one spontaneously reverts to the word’s original meaning, which was still its only meaning in Middle High German. The transfer to light was so natural that today we call it ‘transferred (*übertragen*).’ Nevertheless everyone understands what lightness means with sound; not equivalent to light but rather the same.²³

In this introductory passage, Hornbostel asserts a necessary interconnectedness between the senses without insisting on the existence of synaesthetic transfers between vision and hearing, experiences of hearing colors and visualizing tones. What is of greater interest to the author is the aptness of a description like “bright (*hell*),” which easily crosses over the boundaries separating individual sense modalities. Individuals can consistently detect the differences between bright and muffled tones, he argues, in much the same way that they distinguish between light and dark colors. According to Hornbostel, this does not mean that there exists some kind of acoustic *equivalent* to visual phenomena involving light, a corresponding auditory experience comparable to degrees of light and darkness.

²³ “Ich behaupte ja nicht, Töne gesehn oder Farben gehört zu haben. Ich bin nicht taub und leidlich musikalisch, weiß, was mit ‘Musik’ eigentlich gemeint ist, und habe eben dieses Eigentliche gemeint. Wenn einer den Delphin einen Fisch nennt, so ist das kränkend für den Zoologen, aber keine Metapher. Ein Negerstamm hat ein besonders Wort für ‘sehen,’ für ‘hören, tasten, riechen, schmecken’ aber nur ein gemeinsames,—durch welchen Sinn ich merke, dass ich im Dunkeln in den Schweinestall geraten bin, ist eigentlich gleichgiltig. Französisch *s e n t i r* heißt ‘riechn,’ ‘tasten’ und ‘empfinden’ überhaupt. Ein Kind, das die ‘helle’ Trompete lieber haben will als die dumpfe, kehrt spontan zur ursprünglichen Bedeutung des Worts zurück, die noch im Mittelhochdeutschen die ausschließliche war. Uns gilt sie heute als ‘übertragen,’ so natürlich war die Übertragung auf Licht. Dennoch versteht jeder, was Helligkeit bei Schall meint; nicht Entsprechendes wie bei Licht, sondern dasselbe“; Hornbostel, “Die Einheit der Sinne,” p. 290.

Rather the suitability of the adjective in describing both visual and acoustic experiences reveals that the same sense of the adjective is intended and applied in both cases.

As evidence for his claims Hornbostel turns to etymology and linguistic conventions, drawing his examples from African and European languages as well as the utterances of the naïve child. In asserting that an unspecified African tribe uses a single verb to refer to hearing, taste, smell, and touch, Hornbostel links the existence of a more unified sensorium with notions of the primitive in order to suggest that the individualization of the senses is by no means a necessary condition for the organization of sensory experience.²⁴ This link between wholeness, coherence, and pre-modern societies, is disrupted by the example of the French verb *sentir*, which, Hornbostel claims, functions in a similar manner. What is important to note is the way in which, already in these early paragraphs, Hornbostel draws on both forgotten etymologies and modern linguistic practices in order to make his case for a theory of sense perception that still assumes an undifferentiated sensorium at its foundation. For Hornbostel, processes of vision and hearing are inextricably bound up with the way in which sensory experience is articulated using language.

In the protagonist's account of the mysterious tones, "which come closer," there is an analogous transfer between auditory stimuli and visual language. The sounds are described through both the imagery of flares and bursts of light as well as the more concrete figure of the dolphin, thereby placing emphasis on the commonalities between acoustic and visual experience as expressed through both literal and figurative language.

²⁴ On connections between Stumpf and Hornbostel's research in ethnomusicology and discussions of primitivism related to evolutionary theory, see Eric Ames, "The Sound of Evolution" in *Modernism/Modernity* 10.2 (April 2003): 297-325.

However, the figure of the dolphin not only serves to bind together vision and hearing but also indicates points of overlap between the individual episodes making up the novella as a whole. In the third and final story in which the protagonist returns to his childhood home after the death of his mother and father, he finds an old oil lamp, “whose chain was decorated with three dolphins (*deren Ketten drei Delphine im Maul trugen*)” (A 152/143), a conspicuous invocation of the figurative image used to describe the approaching tones in the first story. So while the scene from the opening story compares the corporeal sounds with both the figure of the dolphin and an exploding flare, in the final story the protagonist discovers three dolphins adorning an oil lamp, thereby presenting an image that quite literally juxtaposes light with the figure of the animal. The dolphin initially serves as a way to process the complex acoustic encounter with the bird in optical terms, investing the sounds with a corporeality and a localizable trajectory through space. Later it reappears as a concrete, material object attached to the protagonist’s childhood lamp as a way of indicating possible connections between the three stories. The dolphin, in other words, not only occupies a position at the threshold between sound and hearing, it also helps to conjoin the content of the experiences related in each of the three stories. In this way, the dolphin comes to play a significant role in the protagonist’s narrative experiment, which seeks to establish connections between the three events as part of an effort to extract the meaning produced by their interconnectedness.

In a gesture towards the basic tenets of Gestalt psychology, the protagonist’s goal in narrating his experiences aims precisely at uncovering a common meaning, the recognition of the whole underlying and connecting each story, not the accumulation of meaning extracted from each individual story as the cumulative result of individual parts.

In Musil's narrative the possibility for determining meaning depends on recognizing the larger pattern binding them together, in the ability to draw meaningful connections between them rather than focusing merely on the content of each isolated event. "But aren't you implying," Aone asks with some impatience, "that all this is supposed to have a common meaning?"²⁵ Atwo, however, is capable only of pointing out vague similarities between the mental condition in which he experienced each of the three auditory events: "I can say no more than that the state I now found myself in bore a great resemblance to my awakening on that night when I left my house, and to the moment of my anticipation of the singing arrow from above."²⁶ After finishing his second story about the falling projectile, he describes the last story about the talking bird as a repetition of his experiences on the battlefield: "I did by the way experience it one more time, but not more vividly."²⁷ Atwo identifies points of overlap and repetition between the three stories, while simultaneously acknowledging his limitations in elaborating further on the precise nature of the underlying structure that links them together.

Although the overarching meaning made possible by the juxtaposition of the three stories ultimately eludes the storyteller, a desire to locate this overarching structure resonates with concurrent discussions of 'Gestalt qualities' in the constitution of human experience examined by Musil's former colleagues in the field of experimental psychology. Indeed, just as Musil's literary text presents three seemingly unrelated events and then raises questions about their possible "common meaning," Gestalt

²⁵ Aber du deutest doch an [...] dass dies alles einen Sinn gemeinsam hat" (*A* 154/145).

²⁶ "Ich kann nicht mehr sagen, als dass der Zustand, in dem ich mich von da an befand, viel Ähnlichkeit mit dem Erwachen in jener Nacht hatte, wo ich mein Haus verließ, und mit der Erwartung des singenden Pfeils aus der Höhe"; *ibid.*, p. 150/142.

²⁷ "Ich habe es übrigens noch einmal erlebt, aber nicht deutlicher"; *ibid.*, p. 146/139.

psychologists like Erich Moritz von Hornbostel and Max Wertheimer sought to challenge a positivist scientific tradition, in which experience and consciousness were understood in terms of isolated bundles of sense data, or sensory elements, instead paying careful attention to the ways in which the objects we perceive and the relationships between them are always located in broader, more dynamic contexts structured by an ambiguous ‘togetherness.’²⁸ “The fundamental question,” Max Wertheimer proclaimed in a 1924 lecture before the Kant Society of Berlin, “can be very simply stated: Are the parts of a given whole determined by the inner structure of that whole, or are the events such that, as independent, piecemeal, fortuitous and blind the total activity is a sum of the past-activities?”²⁹

The target of Wertheimer’s attack was a conception of the contents of human consciousness as merely summative, as a series of isolated sensations that only secondarily gave rise to the whole. The whole, in other words, was only made clear after the fact, composed of individual elements that occupied the primary role in the constitution of consciousness. By contrast, Wertheimer and his colleagues wanted to show the ways in which the whole often preceded the parts and could be grasped even before individual elements entered consciousness. The whole, or Gestalt, already

²⁸ See Mitchell G. Ash’s thorough study, *Gestalt Psychology in German Culture, 1890-1967* (Cambridge: Cambridge UP, 1995). On Musil and Gestalt psychology, see Silvia Bonacchi, *Die Gestalt der Dichtung: Der Einfluss der Gestalttheorie auf das Werk Robert Musils* (Bern/New York: P. Lang, 1998); Peter Berz, “I-Welten” in *Robert Musil—Dichter, Essayist, Wissenschaftler*, ed. Hans-Georg Pott (München: Wilhelm Fink, 1993): 171-92; Julia Encke, *Augenblicke der Gefahr: Der Krieg und die Sinne (1914-1934)* (München: Fink, 2006), pp. 162-81.

²⁹ “Die Grundfrage, von der wir ganz simpel und ganz klar, ganz streng immer handeln wollen, ist diese: Bestimmt sich ein Teil sinnvoll von innen, von seinem Ganzen, von der Struktur des Ganzen her oder geschieht mechanisch, stückhaft, zufällig, blind, das was im ganzen geschieht auf Grund der summierten Geschehnisse im einzelnen Stück“; Max Wertheimer, “Gestalt Theory” in *A Source Book of Gestalt Psychology*, ed. Willis D. Ellis (London: Kegan Paul, Trench, Trubner & Co., LTD., 1938), pp. 1-11, here p. 7. Quotes from the German original come from an online version of the essay without pagination: <http://gestalttheory.net/gta/Dokumente/gestalttheorie.html>, accessed February 2013.

structured how those individual elements were received and understood by the subject and were somehow already related to one another according to a hierarchical system in which the subject played an active role in their organization.

One of the most common examples cited by Gestalt psychologists, and one described in detail in Wertheimer's 1924 talk, involved the recognition of melody despite a change in key, originally discussed by Christian von Ehrenfels in his foundational text on Gestalt qualities.³⁰ How is it possible, Wertheimer asked his audience in 1924, that listeners are able to recognize a melody even after it has been transposed from one key to another, considering the fact that not a single note remains the same. In shifting from the key of C to D minor, for example, not a single individual element from the original melody stays the same. Yet listeners have no problem recognizing the transposed melody as the same one they heard before. Ehrenfels proposed a deceptively simple explanation to the phenomenon, one that was reiterated by Wertheimer in his talk: "I play a familiar melody of six tones and employ six *new* tones, yet you recognize the melody despite the change. There must be a something *more* than the sum of six tones, viz. a seventh something, which is the form-quality, the *Gestaltqualität*, of the original six. It is this *seventh* factor or element which enabled you to recognize the melody despite its transposition."³¹ Later in his talk, Wertheimer went on to outline the theoretical implications of Gestalt qualities and the ways their very existence challenged dominant theories of sense perception at that time:

³⁰ Christian von Ehrenfels, "Über Gestaltqualitäten" in *Vierteljahresschrift für wissenschaftliche Philosophie* 14 (1890).

³¹ "Wenn eine Melodie aus sechs Tönen besteht, und ich reproduziere sie, indem ich sechs ganz andere Töne spiele, und sie wird wiedererkannt—was bleibt übrig? Diese sechs Elemente sind zunächst sicher als Summe da...; aber *neben* diesen sechs Elementen sei ein Siebentes anzunehmen, das die Gestaltqualität. Das siebente, das ist das, was es mir es möglich macht, die Melodie wiederzuerkennen"; Wertheimer, "Gestalt Theory," p. 4.

Is it really true that when I hear a melody I have a *sum* of individual tones (pieces) which constitute the primary foundation of my experience? Is not perhaps the reverse of this true? What I really have, what I hear of each individual note, what I experience at each place in the melody is a *part* which is itself determined by the character of the whole. What is given me by the melody does not arise (through the agency of any auxiliary factor) as a *secondary* process from the sum of the pieces as such. Instead, what takes place in each single part already depends upon what the whole is.³²

While Wertheimer's positing of a Gestalt quality as the explanation for why listeners were able to recognize transposed melodies leaves many questions unanswered—the most basic of which would be, what exactly *is* this Gestalt quality, what kind of substance is it, and to what extent can it be explained in neurological terms—it provides one of the clearest examples of the group's broader conceptions of sense perception as well as the object of their attack. As was already evident in the passage cited earlier, Wertheimer and his colleagues coded the whole positively, going so far as to suggest its superior ethical value, while the fragmentary was coupled with notions of ignorance and blindness, the mechanical, something less human and somehow less capable of providing individuals with meaning.³³ The Gestalt quality proposed by Ehrenfels, and later confirmed by Wertheimer, helped to recast sense perception as constituted by something significantly more than a bundle of sensory data or sequential impressions, as somehow inherently more coherent and organized than the positivists had assumed up to that point. It is precisely this organizing Gestalt that is demanded by Aone

³² "Ist es denn überhaupt wahr, dass, wenn ich eine Melodie höre, ich dann die *Summe* der einzelnen Töne als primär zu sehende Grundlage—die einzelnen Töne als Stücke—jedenfalls habe; ist es vielleicht nicht umgekehrt so, dass das, was ich da überhaupt habe, was ich auch an dem Ort der einzelnen Töne habe, was da in mir entsteht, ein *Teil* ist, *der sich auch in sich bestimmt von dem Charakter des Ganzen?* Dass das, was mir in der Melodie gegeben ist, sich nicht irgendwie aufbaut (durch irgendwelche Hilfsmittel) *sekundär auf* der Summe der einzelnen Stücke an sich, sondern dass das, was im einzelnen vorhanden ist, entsteht, schon radikal abhängt von dem, wie sein Ganzes ist"; *ibid.*, p. 5.

³³ As Jonathan Crary has pointed out, this ethical dimension was something absent in Ehrenfels' original conception of Gestalt, added later by Wertheimer and his colleagues in Berlin. See Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge: MIT Press, 1999), pp. 156-58.

at the end of Musil's novella, the "common meaning (*gemeinsamer Sinn*)" that continues to elude Atwo even after he has successfully carried out his narrative experiment. Just as alongside the six tones making up the melody in Ehrenfels' original example, there was alleged to be an additional seventh quality, which rendered them recognizable as a structured whole, the narrator of Musil's text searches for the organizing principle behind the three individual stories. To be capable of perceiving this quality would allow both figures to decode the related experiences as something more than a series of random coincidences, as indicative of a message transcending the significance of each individual whole.

It is important to note that assumptions about 'Gestalt qualities' also informed Hornbostel and Wertheimer's theory of spatial hearing. As Mitchell G. Ash observes, their writings on acoustic space in the early twentieth century were distinguished from those that came before not only in that they identified time differences rather than intensity or phase as the basis for auditory localization. Also important was the fact they stressed the importance of 'stimulus gradients.' The perception of such gradients, Ash summarizes it, "cannot result from an indifferent mixture of localizations to the left and right ears, but must be central in origin."³⁴ Physiological processes underlying spatial hearing, in other words, functioned as physical Gestalten in the sense of Gestalt theory. In the same essay in which he proposed the 'unity of the senses,' Hornbostel spoke of a verifiable "acoustic space (*Hörraum*)" and argued that, like visual objects, "a sound may be round, spherical like a drop, right or left from me, far or near, point-shaped or spread

³⁴ See Ash, *Gestalt Psychology in German Culture*, p. 236.

out.”³⁵ Representations of three-dimensional, auditory objects appeared alongside, and were supported by, conceptualizations of a more unified sensorium.

Similarities with both the narrative structure and depiction of sound in Musil’s novella are difficult to ignore. In a text pervaded by sounds that “come closer” and that occupy space as three-dimensional entities, we also find the effortless transfer of sensory information across the modalities of vision and hearing. Additionally, the open-ended nature of the narrative project undertaken by Atwo overlaps with Gestalt psychology’s insistence on a more dynamic field of sensory experience, in which the individual subject plays an active role in organizing and centering the contents of consciousness into a coherent whole. Musil’s literary work therefore borrows from contemporaneous challenges to scientific positivism by depicting a kind of literary experiment, in which knowledge is produced in the course of conducting the experiment, not in the confirmation or rejection of a preconceived hypothesis. The goal remains the discovery and recognition of a message binding together the three stories, a “common meaning” that eludes both figures over the course of the novella, but which corresponds to Wertheimer’s emphasis on Gestalt qualities as organizing, and giving meaning to, the particulars of sensory experience.

Narration as Acoustical Experiment

As Christoph Hoffmann has argued, Musil’s novella portrays the act of narration as an “experimental operation.”³⁶ Already in the novella’s opening line, which alludes to

³⁵ “Ein Schall mag rund sein, kugelig wie ein Tropfen, rechts oder links von mir, weit oder nah, punktförmig oder ausgebreitet”; Hornbostel, “Die Einheit der Sinne,” p. 296.

the beginning of Goethe's original 'experimental novel' *Elective Affinities* (1809),³⁷ the text signals its appropriation of an updated scientific register by identifying the two main characters as anonymous combinations of letters and numbers. "The two men whom I must mention in order to relate three little stories, which depend on who tells them, were friends from youth: let's call them Aone and Atwo."³⁸ Such designations were at the time much more prevalent in the context of an experimental protocol than in a modernist novella. As historians of science have pointed out, modern experiments involving human beings differed from earlier modes of scientific writing through the former's frequent rendering of the experimental subject as anonymous, often replacing full names of people and places with abbreviated forms of only a few numbers or letters.³⁹ In choosing not to give full names to his characters, Musil alerts the reader to the text's heterogeneous combination of scientific and literary modes of writings. If in "The Burrow," Kafka had depicted the activities of an experimental scientist without incorporating the style of the

³⁶ See Christoph Hoffmann, "Drei Geschichten: Erzählen als experimentelle Operation bei Musil (und Kleist)" in *Es ist ein Laboratorium, ein Laboratorium für Worte: Experiment und Literatur III, 1890-2010*, ed. Michael Bies and Michael Gamper (Göttingen: Wallstein Verlag, 2011), pp. 162-80. On the literary experiment more generally, see *Literarische Experimentalkulturen: Poetologien des Experiments im 19. Jahrhundert*, ed. Marcus Krause and Nicolas Pethes (Würzburg: Königshausen & Neumann, 2005).

³⁷ The opening line of Goethe's novel reads: "Eduard—let that be the name we give to a wealthy baron in the best years of his life—Eduard had spent the loveliest hours of an April afternoon in his nursery grafting young trees with shoots newly arrived for him (*Eduard—so nennen wir einen reichen Baron im besten Mannesalter—Eduard hatte in seiner Baumschule die schönste Stunde eines Aprilmittags zugebracht, um frisch erhaltene Pfropfreiser auf junge Stämme zu bringen*)"; Johann Wolfgang von Goethe, *Elective Affinities: A Novel*, trans. David Constantine (Oxford/New York: Oxford University Press, 1994), p. 3; Goethe, "Die Wahlverwandschaften: Ein Roman" in *Goethes Werke. Band VI*, ed. Erich Trunz (Munich: Verlag C.H. Beck, 1973), pp. 242-490, here p. 242. At the end of the nineteenth century, the popular science writer and literary author, Wilhelm Bölsche, argued that the seeds of the experimental novel had already been planted by Goethe, who prefigured Zola and therefore discredited the modern French author's claim to originality. See Wilhelm Bölsche, "Goethes 'Wahlverwandschaften' im Lichte moderner Naturwissenschaft" in *Die Gesellschaft* 5 (1889): 1330-40.

³⁸ "Die beiden Männer, deren ich erwähnen muss—um drei kleine Geschichten zu erzählen, bei denen es darauf ankommt, wer sie berichtet—waren Jugendfreunde; nennen wir sie Aeins und Azwei" (*A* 131/127*).

³⁹ Nicolas Pethes, Birgit Griesecke, Marcus Krause and Katja Sabisch, "Vorwort" in *Menschenversuche*, ed. Nicolas Pethes et al. (Frankfurt a.M.: Suhrkamp, 2008), pp. 11-30-, here p. 26.

protocol into his literary narration, Musil's opening line suggests a more radical appropriation of the formal elements of science into the body of the literary work.

The narrator's introduction of the two figures in the text's opening line is further characterized by a precarious oscillation between necessity and contingency regarding the manner in which their stories will be told. On the one hand, the narrator acknowledges that he "*must*" introduce the two characters in order to tell his story, thereby indicating the limitations of his control over the novella's structure and composition. There are, in other words, necessary, unalterable conditions for the successful telling of his tale. On the other hand, the narrator quickly highlights the ways in which the unfolding of the three stories within the main narrative will ultimately "depend on who tells them." The narrator's creative power, his ability to shape the trajectory of the literary experiment that follows, therefore lies in merely choosing a teller for his tale, a decision that functions as a necessary precondition for narration but one that simultaneously introduces a remarkable degree of contingency into the direction the experiment will take.

The experimental setup of Musil's literary novella overlaps with Wertheimer's theory of Gestalt qualities in that both emphasize the importance of the observer as an active contributor to the dynamic field constituting consciousness. In an early summary of his views, one of Wertheimer's students explicitly pointed to the significance of the observer in the act of observation as a constitutive element of Gestalt theory. "The entity that results from the knowledge process," she wrote, summarizing Wertheimer's lectures at the time, "depends in many respects *not only on the object, but also on the observer*." Thus there are several ways of grasping many phenomena but generally and derivable

from the central ‘idea’ and thus gives meaning (*Sinn*) to the entire given.”⁴⁰ What Wertheimer’s student sought to highlight in her summary of Gestalt theory was its conception of the individual as a more active participant in perceiving and processing the world, as a figure firmly situated in a dynamic field of sensory impressions and given the task of centering and structuring particular aspects which promised to provide the key to an orderly whole.

Musil’s literary experiment draws on, but significantly deviates from, earlier Naturalist notions of experimental literature. In his essay, *Le Roman Expérimental* (1880), Émile Zola famously discussed the similarities between the methods employed by literary authors and those dominant in the sciences.⁴¹ Just as the scientist used observations of natural phenomena to determine the conditions under which his experiment would take place, Zola argued, any competent writer was required to observe human behavior, everyday speech, and social customs before constructing the plot of his or her novel. The possibility for conducting such literary experiments rested on a deterministic view of the human being. By first placing a set of fictional characters in a particular setting and subjecting them to a series of problems and challenging them to confront various social forces, the author had only to sit back and describe the ways in which human nature took its course and determined the paths of each of the figures. The author’s task of outlining the experimental conditions under which the experiment would take place was used to counter critics of Zola’s methods, who saw Naturalist writers as

⁴⁰ The passage originally appears in an early footnote in Gabriele Gräfin von Wartensleben’s *Die christliche Persönlichkeit im Idealbild: Eine Beschreibung sub specie Psychologica* (1914), quoted in Ash, *Gestalt Psychology in German Culture*, p. 124.

⁴¹ Émile Zola, “The Experimental Novel” (1880) in *The Experimental Novel and Other Essays*, trans. Belle M. Sherman (New York: Cassel Publishing, 1893), pp. 1-57.

nothing more than passive observers of the external world, offering mechanical recordings of sensory impressions without processing or actively organizing that information in any creative way. For Zola, setting the conditions for the experiment after detailed observation constituted precisely this subjective element of the work, demonstrating the author's 'genius' and helping to distinguish experimental literature's methods from the mere objective recording of data associated with photography.⁴²

Musil's novella maps Zola's experimental procedure onto the frame narrative of the literary text. Rather than presenting a prefabricated literary experiment whose pieces have already been chosen and arranged by the author prior to the novel's opening lines, Musil's text begins as a blank slate with the direction of the experiment still open and indeterminate.⁴³ The experimental protocol is composed before the reader's very eyes. We first watch the narrator introduce the two figures he will need in order to communicate the content of his story and are then exposed to the arbitrary practice of naming that accompanies this process. The act of determining the protocol from which the experiment will proceed is no longer confined to the pages of a programmatic essay

⁴² On Zola and photography see Irene Albers, *Sehen und Wissen: Das Photographische im Romanwerk Émile Zolas* (Munich: Wilhelm Fink, 2002).

⁴³ In his notebooks, Musil expressed great skepticism towards Naturalism as a literary movement, one that he recognized as no longer valid by the first decade of the twentieth century. Under the title "The Unsolved Problem of Naturalism (*Das ungelöste Problem des Naturalismus*)" from an entry dated 1904/05, he observed: "Today we no longer think from the point of view of Naturalism. We have other coordinate systems, to which we relate the psychological (*Wir denken heute nicht mehr unter dem Gesichtspunkte des Naturalismus, wir haben andere Koordinatensysteme, auf die wir alles Seelische beziehen*)"; Musil, *Tagebücher I*, ed. Adolf Frisé (Reinbek bei Hamburg: Rowohlt, 1976), p. 118. Five years later he similarly remarked: "Naturalism: remembering my earliest impressions of modern literature, this word always seemed to me like a promise never fulfilled (*Naturalismus: In Erinnerung meiner ersten Eindrücke von moderner Literatur will mir dieses Wort immer noch als ein niemals eingelöstes Versprechen erscheinen*)" Musil, *Tagebücher I*, p. 217. Musil did not, as Thomas Sebastian has misleadingly claimed, discuss Zola's *roman experimental* in particular as a "promise never fulfilled." To the best of knowledge, there are no direct references to the notion of experimental literature in Musil's notebooks. See Sebastian, *The Intersection of Science and Literature in Musil's Man Without Qualities*, p. 2.

on how to write experimental literature and largely covered over within the body of the literary works, as was the case with Zola. Instead, it is brought inside the text and shown to readers. Musil's narrator takes one step back from the story he seeks to tell, demonstrating the basic structure of the experiment that is then superimposed onto the text.

Finally, Musil abandons the deterministic view of the human being dominant in works by Zola and other Naturalist writers. Instead of following a predictable path guided by social forces and human nature, the three stories that make up the body of Musil's novella are alleged to be contingent on who tells them (*bei denen es darauf ankommt, wer sie berichtet*). Absolute control over the structure of the experimental protocol, along with a confidence in predicting characters' responses to social and genetic forces, gives way to a loss of authorial power on the part of the narrator, according to which elements of the experiment begin to take on a life of their own and are presented as actors guiding the path that the story will ultimately take.

The element of contingency acknowledged by the narrator in setting the scene for the novella as a whole intensifies with the start of Atwo's narration, which transfers elements of the scientific experiment from the frame narrative to the three embedded stories that follow. This second, more explicitly thematized literary experiment centers on Atwo's attempt to find meaning in the three stories he tells and to determine the nature of their interconnectedness in the process of their narration. "I want to tell you my stories to find out if they ring true," he explains after concluding the first story.⁴⁴ This same coupling of narration with an exploration of truth and meaning remains largely

⁴⁴ "Ich will meine Geschichten erzählen, um zu erfahren, ob sie wahr sind" (A 140/134*),

unchanged by the end of the novella, where the protagonist again remarks to Aone: “And if I knew the point of it all, then I wouldn’t need to have told it in the first place.”⁴⁵

Christoph Hoffmann has described Atwo’s narration as “a proto-scientific practice of producing experience (*eine protowissenschaftliche Praxis des Erfahrungen-Machens*),” a process that seeks to bring into experience the truth hidden within the three stories.⁴⁶ The novella therefore complicates and expands on Zola’s deterministic studies of human nature and the influence of social milieu on individual behavior, taking as its object the question of how sense can be salvaged from a series of temporally and spatially disparate experiences from an individual’s past. Narration becomes an experimental procedure aimed at establishing truth and a meaningful explanation of the connections between isolated events. The frame narrator’s self-reflective gesture of integrating into the body of the text the experimental procedure omitted from Zola’s deterministic novels appears alongside a conception of narration as itself a constitutive element of the experiment and an object of reflection for experimental literature.

The protagonist’s various interjections while telling the three stories further attribute to his narrative experiment characteristics commonly associated with what has been termed an ‘exploratory’ rather than a ‘demonstrative experiment.’⁴⁷ Instead of

⁴⁵ “Und wenn ich den Sinn wüßte, so brauchte ich dir wohl nicht erst zu erzählen”; *ibid.*, p. 154/145.

⁴⁶ Hoffmann, “Drei Geschichte,” p. 176.

⁴⁷ This distinction has been analyzed and elaborated on in recent years by scholars working in the related fields of Science Studies and the history of science. Whereas philosophers of science had traditionally discussed the experiment as merely a confirmation or negation of hypotheses, as an event characterized by the scientist’s passive observation of natural phenomena, figures like Hans-Jörg Rheinberger and Bruno Latour have shown the ways in which natural phenomena can be *produced* in the laboratory as well as in the process of writing up experimental reports. See Hans-Jörg Rheinberger, *Towards a History of Epistemic Things: Synthesizing Proteins in the Text Tube* (Stanford: Stanford UP, 1997); Bruno Latour, “The Force of Reason in Experiment” in *Experimental Inquiries: Historical, Philosophical and Social Studies of Experimentation in Science*, ed. Homer LeGrand (Dordrecht: Kluwer Academic Publishers, 1990), pp. 48-79.

beginning with a clear hypothesis and then testing those claims by means of a preconceived experimental procedure, Atwo expresses perpetual confusion over the data he has gathered, a sense of disorientation regarding the direction the experiment will take, as well as an ongoing openness to the possible conclusions that might be gleaned from the experiment. There is not, in other words, a sense that the experiment is intended to instruct Aone or the reader on the details of how something operates in the natural world, nor to experimentally repeat and confirm what has been proven elsewhere. “You’re probably thinking that this was the end of the story,” Atwo remarks in the middle of one of the stories, “But it was only the beginning, and I have no idea what end it will take!”⁴⁸ Similarly, in the text’s concluding lines, he states: “This is the third story, and I don’t know how it’s going to end.”⁴⁹ In line with the characteristics of exploratory rather than demonstrative experiments, Atwo appears to have no preconceived knowledge of how the experiment will end or what kinds of results he can expect. He is not telling his story in order to prove a set of previously formulated claims. Instead, we witness the use of narration as part of an open-ended experimental procedure aimed at finding the elusive meaning of three ambiguously connected experiences from his past. The knowledge to be gained from the act of narration, if it is to be found at all, will therefore have to emerge spontaneously and unexpectedly over the course of the experiment.

The protagonist’s quasi-scientific experiment in narrating his own life simultaneously depends on self-observational practices, or what I termed in Chapter 3 ‘narrative self-auscultation.’ Upon finishing the first of his three stories, Atwo remarks

⁴⁸ “Du wirst annehmen, dass die Geschichte damit zu Ende ist?—Erst jetzt fing sie an, und ich weiß nicht, welches Ende sie finden soll!” (*A* 138/133).

⁴⁹ “Das ist die dritte Geschichte, wie sie enden wird, weiß ich nicht”; *ibid.*, p. 154/145.

to his childhood friend and sole member of his audience: “I just want to tell you my stories to find out if they ring true. For years I haven’t been able to tell them to anyone, and had I heard myself talking to myself, it would have frankly struck me as uncanny.”⁵⁰ Once again, he emphasizes the open-endedness of his narrative, claiming that it will be in the act of narration that any truth can possibly emerge. At the same time, his self-reflexive experiment is cast as an attempt to *hear* himself tell it. The passage therefore once again offers a counterpoint to Derrida’s account of phonocentrism, since the protagonist characterizes listening to his own voice alone as “uncanny,” an act that he has avoided for years and looked upon as deeply unsettling. Similar to “The Burrow” and in opposition to Derrida’s account, listening-to-oneself-speak results not in referential grounding and stability but rather in unsettling the speaking subject. Yet all that is required to assuage this anxiety is the introduction of an interlocutor into the scene of narration. It is here that Aone is revealed to play a much more important role than one might originally assume. Far from a monologue, the conversation constituting the main body of the novella, while lopsided, would be impossible without Aone’s role as a patient and familiar listener, one who helps to dispel the uncanny elements of self-auscultation while not interfering with the protagonist’s narrative experiment.⁵¹

Over the course of the narrator’s three stories we see a gradual transformation in his views on narrative self-auscultation as well as its effects. If in the context of the first

⁵⁰ “Ich will dir meine Geschichten erzählen, um zu erfahren, ob sie wahr sind; ich habe mich jahrelang mit keinem Menschen aussprechen können, und wenn ich mich darüber laut mit mir selbst sprechen hörte, wäre ich mir, offen gestanden, unheimlich”; *ibid.*, p. 140/134*. On the novella’s thematization of the voice, see also Elmar Locher, “Die Stimme der Amsel in den Stimmen der ‘Amsel’ Robert Musils” in *Robert Musil, Die Amsel: kritische Lektüren, Materialien aus dem Nachlass*, ed. Walter Busch und Ingo Breuer (Bozen: Sturzflüge, 2000), pp. 131-58.

⁵¹ On this point, see also Encke, *Augenblicke der Gefahr*, p. 170; Hoffmann, ‘*Der Dichter am Apparat*’, p. 215.

story he had emphasized the unsettling consequences of listening to his own narration, by the second story we find a slightly modified model grounded in the language of dreams. “I’m not making this up,” he asserts following the tale of the falling projectile, “I’m trying to put it as plainly as I can. I believe I’ve held to a sober physical description so far, though I know of course that to a certain extent *it’s like in a dream where it seems as though you’re speaking clearly, while the words come out all garbled.*”⁵² The narrator begins the passage by attesting to the veracity of his tales, to their status not as fiction but as empirical fact. He is not, he stresses, simply making things up in order to embellish his narrative but instead believes to speak soberly, grounding his stories in the facts of physical reality.

At the same time, this perceived sobriety is challenged in the second half of the passage, where he appeals to the dream state and an inherent disconnect from reality. If he believes to hear only sober facts in his own narration of events, he simultaneously acknowledges the unbridgeable gap that seems to separate his own perception of the narrative from that of his interlocutor. With the insertion of Aone into the scene of narration, the protagonist appears to gain some confidence in his abilities to tell his tales. The “uncanny” effects of listening to his narration have been mitigated and replaced by a sense of certainty regarding the truth of what he is attempting to relate to his old friend. Yet this sense of coherence and assurance of sober description is ultimately revealed to depend on a subjective perspective, as perceivable only from the inside occupied by the narrator. To the listener, by contrast, his words are nothing more than garbled noise. So

⁵² “Ich erfinde das nicht, ich suche es so einfach zu beschreiben das nicht, ich suche es so einfach wie möglich zu beschreiben; ich habe die Überzeugung, dass ich mich physikalisch nüchtern ausgedrückt habe; freilich weiß ich, dass das bis zu einem Grad *wie im Traum ist, wo man ganz klar zu sprechen wähnt, während die Worte außen wirr sind*“ (A 144/137, my emphasis).

although the passage suggests that the narrator has grown more comfortable with the act of listening to his own narrative voice, this comfort relies on a kind of self-delusion, on remaining in the realm of dreams and not hearing the reality of what he is saying.

By the beginning of his third story the protagonist dispenses with the language of dream states and now actively desires to hear his own voice: “He seemed to grow suddenly unsure of himself, but you could see that for that very reason he was dying to hear himself tell the story.”⁵³ The frame narrator’s observation establishes a connection between a sense of orientation and the act of self-auscultation. Precisely *because* he has grown “unsure of himself,” he feels compelled to continue his story. Moreover, he is “dying” not only to continue narrating his story, but more specifically *to hear himself* narrating the story. A sense of confidence can allegedly be ensured by means of narrative self-auscultation. In this way, questions of meaning and truth are of secondary importance to the possibility of listening to himself in the act of narration, an opportunity that can only arise in the presence of an almost undetectable but acoustically attentive interlocutor. This final iteration of narrative self-auscultation conforms to the model of phonocentrism outlined by Derrida, in that hearing one’s own voice is directly tied to a sense of orientation and referential stability.

In the end, however, the orientation he gains through self-observational narrative practices is challenged by the text’s invocation of early information theory and the precarious threshold separating noise from meaning. Neither the speaker nor the interlocutor is capable of perceiving the underlying meaning of the three stories. “It’s like hearing a whisper or rustling,” he concludes, “without being able to distinguish

⁵³ “Er schien unsicherer geworden zu sein, aber man konnte ihm anmerken, dass er gerade deshalb darauf brannte, sich diese Geschichte erzählen zu hören”; *ibid.*, p. 146/139.

between the two!” (*A* 154/145*). Thus, the binary between meaning and noise that had formerly corresponded to the perspectives of the narrator and listener respectively, is now mapped onto a single sense of indeterminacy confronted by both figures. The distinction between the intelligibility of an internal perspective, on the one hand, and the noise perceived from the outside, on the other, ultimately collapses and remains irresolvable for both Aone and Atwo. Changing practices of narrative self-auscultation do imply a sense of orientation, but this experience is short-lived, swallowed up by the unstable border between rustling static and intimations of a singular, underlying meaning. The aim of the protagonist’s narrative experiment might therefore be more precisely identified as achieving some comfort with the act of narrative self-auscultation, the synchronization of voice and ear, rather than the discovery of some overarching meaning demanded by his interlocutor.

Interestingly enough, this positive coding of self-auscultation, although only temporary, occurs in conjunction with the exclusion of the listening body. Whereas Kafka’s “The Burrow” foregrounded the audibility of the body at the same time that it portrayed the act of listening to one’s own voice as destabilizing, Musil’s novella conceals the body while alluding to self-auscultation’s potential as a means of grounding the speaking subject. The shift in emphasis from corporeal noises and the body’s audibility to forms of embodiment on the side of objects and auditory ‘things’ runs parallel to a recoding of narrative self-auscultation as potentially therapeutic and empowering. My account of acoustical self-observation demonstrates the unintended side effects and epistemic lacunae opened up by practices of self-observation in the literature of the early twentieth century. Musil’s novella additionally suggests the

therapeutic power of exorcising the body's audibility and remapping questions of meaning and its disturbance by noise onto external frameworks, at the same time that it foregrounds the ways in which the production of meaning remains inextricably bound to the subject.

Concluding the dissertation with texts by Musil and early Gestalt psychologists may lead us to falsely identify some kind of resolution to the problematic of modern auditory experience articulated by Altenberg and Kafka. As we saw earlier with Altenberg, conceptions of embodied listening and the corporeal effects of the urban soundscape and modern battlefield were implicated in the dissolution of narrative and conventional representational strategies. Amidst the perceptual confusion of the violent drum, the narrator's utterances are broken apart and rendered fragmentary, incomplete, by nonsensical noise. This notion of modern noise as 'interruption' was carried through but significantly modified in Kafka's *The Trial* and "The Burrow," which though less experimental on the level of textual representation, still drew connections between auditory embodiment and the disruption of coherent narrative structures as well as a pronounced sense of epistemic and ontological confusion on the part of the listener.

By contrast, my analysis of Musil's "The Believer" in Chapter 4 stressed an almost idiosyncratic confidence and clarity on the part of the listening subject, which I tied to contemporaneous theories of spatial hearing. There, unlike in texts by Kafka and Altenberg, the listener actively reached out with the ear in order to make contact with the external world rather than retreating in surrender amidst a barrage of unwanted sound. Moreover, the presence of the ear's physicality in the narrative was no longer tied to vulnerability and the incapacity to properly distinguish inside and outside. Instead, it

functioned as the medium of an erotic encounter and a celebrated escape from the confines of ordinary experience.

Musil's "The Blackbird," however, encourages us to temper any notion of increasing legibility, clarity, and autonomy in the continued unfolding of acoustical modernity. Similar to the narrative difficulties outlined in earlier chapters of the dissertation, the novella portrays the complex, cacophonous soundscape of the urban apartment building as both a perceptual and narrative challenge. Coherent sentences are reduced to single words punctuated by periods, stuttered and broken to pieces. Added to this problem of coherent expression and its interruption by noise, is now an issue of indeterminacy and the seemingly fluid boundary between noise and meaning. "Is it so or is it not?" Is it a "whisper" or "merely noise?" So while the novella gestures toward Gestalt psychology's assumption of a persistent, unified sensorium, it is this sense of indeterminacy that remains after the narrative experiment has come to a nominal conclusion.

Moreover, Gestalt psychology's own conceptualizations of a unified sensorium and more active listener were grounded in the instrumentalization of the listener's ears in the service of war. Hornbostel and Wertheimer's *Richtungshörer* perhaps most clearly demonstrates the extent to which their theories of spatial hearing, aural objects, and a more confident listener were inseparable from the vulnerability and sensory derangement experienced by soldiers on the modern battlefield. "This war cannot be depicted in images," Johannes Gaulke stated in 1916, highlighting the modes of obfuscation and visual obscurity operative on the modern battlefield and the corresponding significance of

the ear in protecting the vulnerable body of the blinded soldier.⁵⁴ Musil's "The Blackbird," while by no means reducible to the war, reminds us that, just as the modern battlefield challenged conventional modes of visual representation, so too did it significantly alter the status and techniques of the modern listener, its textual representation and narrative function.

⁵⁴ Johannes Gaulke, "Kunst und Kino im Kriege" (1916) in *Medientheorie 1888-1933*, ed. Albert Kümmer and Petra Löffler (Frankfurt a.M.: Suhrkamp, 2002), pp. 129-133, here p. 130.

Conclusion:

Auditory Embodiment and the Historical Avant-Garde

Readers may find my emphasis on canonical modernist authors such as Kafka and Musil, and my passing over of the historical avant-garde, a surprising approach to changes in the textual representation of modern acoustic experience around 1900. Surely, one could argue, the noise of the modern metropolis and battlefield were most clearly registered and put to use within aesthetic practice in the related movements of Futurism and Dada. In conclusion, I would like to speak briefly to this possible argument and examine the continuities and discontinuities between what I have traced out over the course of this dissertation and contemporaneous developments within the avant-garde. In doing so, I hope both to make a case for the texts I have chosen to include and to indicate avenues for future research on the avant-garde based on the historical and theoretical frameworks I have employed in my study of literary modernism. More specifically, I would like to explore the extent to which notions of auditory embodiment circulated not only through scientific, technical, and modernist texts, but also through the poetic, performative, and musical practices of the avant-garde.

In his apocryphal summary of the origins of Futurism, F.T. Marinetti identified the noises of the modern metropolis as the impetus for a new aesthetic paradigm. Amidst descriptions of how he and his friends had stayed up all night “filling up masses of paper with our frenetic writings,” the noises of Milan suddenly burst through the boundaries of the domestic sphere. The group is “startled by the terrifying clatter of huge, double-decker trams jolting by.” And while a brief and “somber” silence ensues, punctuated by sounds of the past (“mumbled prayers of an ancient canal and the creaking bones of

dilapidated palaces on their tiresome stretches of soggy lawn”), the group’s enthusiasm is regenerated by “the sudden roar of ravening motorcars, right there beneath our windows.”¹ “Come on! Let’s go!” Marinetti commands his friends, “At long last, all the myths and mystical ideals are behind us. We’re about to witness the birth of a Centaur and soon we shall witness the flight of the very first Angels!... We shall have to shake the gates of life itself and to test their locks and hinges!... Let’s be off!”² In contrast to the protagonist of Rainer Maria Rilke’s *The Notebooks of Malte Laurids Brigge* (1910), who in the novel’s opening pages desperately attempts to fight off the noise of the street traffic infiltrating his room, Marinetti presents the same noise as a pleasant occasion to take to the streets and observe the wonder of its mechanical source at a closer distance.

According to Marinetti, the aesthetic program he will go on to lay out for his readers finds its inspiration in the cacophony of the metropolis and its disregard for conventional distinctions between public and private.

Strengthened by what the Futurists saw as the even more abrasive soundscapes of World War I, their poetics (*vers libre*) and musical practices continued to develop an aesthetic program with experiences of modern noise at their core. Marinetti’s poetic works, for example, employed “onomatopoetic cacophony” as a means for investing the printed page with the dynamism of war and giving voice to the pervasive “noise (*Lärm*)” of modern life, which, the author claimed, had been entirely absent from literature until that point.³ His literary texts, which were accompanied by typographical experiments

¹ F.T. Marinetti, “The Foundation and Manifesto of Futurism” (1909) in *Critical Writings*, ed. Günter Berghaus, trans. Doug Thompson (New York: Farrar, Straus and Giroux, 2006), pp. 11-17, here p. 11.

² *Ibid.*, p. 12.

³ See F.T. Marinetti, “Supplement zum technischen Manifest der Futuristischen Literatur” (1912) in *Futurismus. Geschichte, Ästhetik, Dokumente*, ed. Hansgeorg Schmidt-Bergmann (Beinbek bei Hamburg:

with font size, style, and the position of words on the page, combined rushed strings of nouns and little punctuation with vivid, often onomatopoeic invocations of war and technology. “Tatatata rifle-fire pic pac pun pan pan tangerine tawny-wool machine guns” he wrote in the literary appendage to his “technical manifesto.”⁴ Drawing on Marinetti’s poetics and what he termed “the noises of language,” Luigi Russolo incorporated many of the same elements from urban and military soundscapes into the realm of musical aesthetics. Dispensing with traditional instruments, he constructed noise instruments such as the ‘crackler,’ ‘hummer,’ ‘rubber,’ and ‘burster,’ the last of which reproduced the noise of an automobile engine and could vary its pitch within the limits of two octaves.⁵ His noise compositions aimed to dismantle earlier distinctions between “sound” and “noise” and to capture what Russolo perceived as the infinitely rich harmonics of electric trams and machine-gun fire.

If modernist authors such as Musil and Kafka had only indirectly gestured toward the emergence of a modern listener, Russolo explicitly conceived of his music as satiating a distinctly modern audience that had been reared on the complex sounds of the city and battlefield. The modern listening public, Russolo argued, desired to hear harmonic structures that were more intricate than those generated by traditional instruments

Rowohlt 1993), p. 291; Marinetti, “Technical Manifesto of Futurist Literature” (1912) in *Critical Writings*, ed. Günter Berghaus, trans. Doug Thompson (New York: Farrar, Straus and Giroux, 2006), pp. 107-119, here p. 111.

⁴ *Ibid.*, p. 118.

⁵ See Luigi Russolo, *The Art of Noises* (1916), trans. Barclay Brown (New York: Pendragon Press, 1986), p. 32. On Russolo and bruitist music, see Rodney J. Payton, “The Music of Futurism: Concerts and Polemics” in *The Musical Quarterly*, Vol. 62, No. 1 (Jan. 1976): 25-45; Barclay Brown, “The Noise Instruments of Luigi Russolo” in *Perspectives of New Music*, Vol. 20, No. 1/2 (Autumn, 1981 – Summer, 1982): 31-48; Douglas, Kahn, *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge: MIT Press, 2001), pp. 45-67. For original recordings of works by Marinetti and Russolo, see *Musica Futurista: The Art of Noises* (Audio CD, Salon Recordings, 2004).

because their senses had been educated through the variegated noises of modern life.⁶ In this way, the composer's musical aesthetics assumes an inherent historicity of hearing that is in keeping with my own project. If I have attempted to show the ways in which literary texts were shaped by, and actively participated in, the emergence of modern soundscapes and techniques of listening, Russolo saw his own art as made possible by an evolution of hearing that was set in motion by nineteenth-century industrialization and the primacy of mechanical noise.

Futurism's modern listener is characterized by both a capacity for harmonic complexity as well as an attentiveness to sound that was based on the threat of perpetual danger and experiences of trench warfare.⁷ However, references to the physiology of the ear, the corporeal impact of noise, or the subjective noises suffered by returning soldiers—which were well-documented at the time⁸—are almost non-existent in Futurism or the appropriation of *bruitism* within Dada. While my survey of literary and programmatic works within the avant-garde has been by no means exhaustive, a thorough look at the primary anthologies of both Futurism and Dadaism suggests that the two

⁶ “This evolution towards ‘noise sound’ was not possible before now. The ear of an eighteenth-century man could never have endured the discordant intensity of certain chords produced by our orchestras (whose members have trebled in number since then). To our ears, on the other hand, they sound pleasant, since our hearing has already been educated by modern life, so teeming with variegated noises. But our ears are not satisfied merely with this, and demand an abundance of acoustic emotions”; Russolo, *The Art of Noises*, p. 24.

⁷ “In modern warfare, mechanical and metallic, the element of sight is almost zero. The sense, the significance, and the expressiveness of noises, however, are infinite”; *ibid.*, p. 49. Such claims regarding the importance of sound on the battlefield were corroborated by Musil's war narratives and by testimony given by other returning soldiers. See Paul Plaut, “Psychographie des Kriegers” in *Beihefte zur Zeitschrift für angewandte Psychologie* 21 (1920): 1-123, here pp. 30, 31; Walter Ludwig, “Beiträge zur Psychologie der Furcht im Kriege” in *Beihefte zur Zeitschrift für angewandte Psychologie* 21 (1920): 125-172, here pp. 135, 136.

⁸ See Julia Encke, *Augenblicke der Gefahr: Der Krieg und die Sinne (1914-1934)* (München: Fink, 2006), pp. 153-56.

forms of acoustical embodiment that I have discussed throughout this dissertation—one on the side of the subject and the other on the side of objects—are largely absent and instead replaced by broader notions of a ‘retraining’ or ‘recalibrating’ of the senses that both devalues the ear’s physicality and ignores sound’s spatiality. In place of aural objects, one finds an emphasis on connections between noise and temporal simultaneity. Rather than foregrounding the ear’s anatomical structure and the physical effects of noise, many of these texts posit a competent listener eager to absorb the cacophony of war and the city, without, however, exhibiting modes of ‘spatial hearing’ thematized in texts by Robert Musil.

These observations are, admittedly, somewhat premature and intended to provoke future research rather than serve as the final word on the topic. In direct opposition to my claim, for example, Arndt Niebisch asserts that Dadaism was in fact aware that “noise can have the power to affect the perceiving subject physically.”⁹ Yet his only example comes from a 1920 quotation from Richard Hülsenbeck, who noted that “the screeching of a brake (*Geräusch einer Bremse*)” could “give you a toothache (*Zahnschmerzen*).”¹⁰ Interestingly enough, the physical effects of noise are portrayed as circumventing the ear and instead acting on the mouth. I would suggest—again, rather cautiously—that this unexpected correlation indicates a broader tendency, especially within Dadaism, to privilege the mouth over the ear, theories of articulation and the production of speech over listening and hearing.

⁹ Arndt Niebisch, "Distorted Media: The Noise Aesthetics of Italian Futurism and German Dadaism" (PhD dissertation, Johns Hopkins, 2006), p. 53.

¹⁰ Quoted in *ibid.*

Despite this apparent privileging of speech over listening, in closing I would like to indicate at least one point at which I believe the avant-garde does make reference to the physicality of listening, albeit indirectly—namely, in the figure of the tympanum. Although there is no direct connection between textual forms of noise and invocations of a damaged eardrum as was the case in Altenberg’s “The Drummer Belin,” it is no coincidence, I would argue, that the aesthetic appropriation of noise within the domain of textual representation was accompanied by the perpetual banging of drums. While Luigi Russolo constructed his famous noise instruments by stretching taut diaphragms over ordinary drum frames and manipulating the skins with wires to vary the pitch,¹¹ Hülsebeck arrived at the Zurich Cabaret Voltaire wielding his large tom-tom and dispensing his bruitist sound poems with onomatopoetic exclamations such as “rataplan rataplan.”¹² Referring to Hülsebeck, fellow Dadaist Hugo Ball noted in a diary entry from February 11, 1916: “He would prefer to drum literature into the ground.”¹³

The pervasive use of the drum by the historical avant-garde signified a challenge to traditional poetic forms and modern rationality, an elevation of the physical over the cerebral, and an attempt to incorporate African rhythms and the sounds of mechanized warfare into aggressive oral recitations. But the banging of the instrument and the manipulation of taut diaphragms also serve to thematize the physical violence inflicted directly onto the eardrum by the cacophony of the modern soundscape, indicating an aesthetic at least partially grounded in tympanic processes and percussive effects. Thus,

¹¹ See Barclay Brown, “The Noise Instruments of Luigi Russolo.”

¹² See Karin Füllner, “Richard Huelsenbeck: ‘Bang! Bang! Bangbangbang,’ the Dada Drummer in Zurich,” trans. Barbara Allen in *Dada Zurich: A Clown’s Game from Nothing*, ed. Brigitte Pichon and Karl Riha (New York: G.K. Hall & Co., 1996), pp. 89-103.

¹³ Quoted in *ibid.*, p. 89.

Dada, in particular, complicates the paradigm shift traced out by Jonathan Sterne from models of sound reproduction based on imitations of the mouth around 1800 to a ‘tympanic regime’ of sound reproduction around 1900.¹⁴ The combination of oral and percussive elements in Dadaist sound poetry instead indicates the continual coexistence and mutual state of influence between mouth and ear, articulate speech and nonsense, textual noise and figurations of embodied listening.

¹⁴ See Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham & London: Duke UP, 2003), p. 33.

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