From the holdings of the Department of Special Collections , Princeton University Library, Princeton, NJ

These documents are either in the public domain, or can only be used for educational and research purposes (Fair use) as per U.S. Copyright law (text below). By accessing this file, all users agree that their use falls in the public domain or within fair use as defined by the copyrightlaw. We do not charge any permission or usage fees for the publication of images of material inour collections, including those provided by Princeton University Library, via our website, catalog, or directly from staff.For more information regarding copyright, credit, and citation please review the information onthe Copyright, Credit and Citation Guidelines page of our website.
https://library.princeton.edu/special-collections/policies/copyright-credit-and-citation-guidelines. If you have any questions, including how to order higher-quality images from the collection, contact Special Collections Public Services via our Ask Us! Form. https://library.princeton.edu/special-collections/ask-us

Doctoral Dissertations, 2011-2026 History of Science

2021

The Lives of the Mind: Scientific Concept and Everyday Experience from Psychophysics to Psychoanalysis

Bauchner, Joshua

Princeton, NJ : Princeton University

http://arks.princeton.edu/ark:/88435/dsp01sf2688232

U.S. Copyright law: The copyright law of the United States (Title 17, §108, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be used for any purpose other than private study, scholarship, or research. If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of fair use that user may be liable for copyright infringement. This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve a violation of copyright law. https://www.copyright.gov/title17/title17.pdf

THE LIVES OF THE MIND

SCIENTIFIC CONCEPT AND EVERYDAY EXPERIENCE FROM PSYCHOPHYSICS TO PSYCHOANALYSIS

Joshua Bauchner

A DISSERTATION

PRESENTED TO THE FACULTY

OF PRINCETON UNIVERSITY

IN CANDIDACY FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR ACCEPTANCE BY

THE PROGRAM IN HISTORY OF SCIENCE AND

THE INTERDISCIPLINARY DOCTORAL PROGRAM IN THE HUMANITIES

Advisers: D. Graham Burnett and Katja Guenther

September 2021

© Copyright by Joshua Bauchner 2021

All rights reserved

ABSTRACT

"The Lives of the Mind" offers a historical account of the mind-body relationship across the sciences of nineteenth-century Germanophone Europe. It centers on the lives of two figures, the physicist Gustav Theodor Fechner (1801–1887) and the physician Josef Breuer (1842–1925), and their major scientific contributions: Fechner's psychophysics, an "exact science of the relations between body and soul," and Breuer's "talking cure," a method for removing hysterical symptoms and attendant explanatory theory of their psychogenesis. The dissertation approaches the mind-body relation as subject *and* object of their lives; they pursued this ineffable relationship in adjoined contexts, vocational and personal, rendering it graspable in the idiom of each: scientific concepts in the vocational and everyday experiences in the personal. For Fechner, these were *the threshold* and *taking a walk*, and for Breuer, *balance* and *having a conversation*.

Part I deals with Fechner and psychophysics. Chapter 2 analyzes how the concept of the threshold was *the* keystone for the new science, leading to its famous logarithmic relation of stimulus and sensation and a new view of God and the universe. Chapter 3 turns to his everyday walks, thickly describing three modes of walking as they stepped through the major conjunctures of psychophysics. Part II centers on Breuer's encounter with Bertha Pappenheim, the patient later known as Anna O. who coined the "talking cure." Chapter 4 considers the type of talk—centered on the self—common to duos such as Pappenheim and Breuer, as it grew from and struggled against Viennese conversational culture. Chapter 5 connects the psychical balance reached via the "talking cure" to Breuer's physiological investigations of the inner ear and the sense of balance, framed by the personal balance between patient and physician.

Against the backdrop of the rising Germanophone research university and professionalizing laboratory science, my account meets the unending complexity of both

the mind-body relation and the daily demands of the scientific life. In so doing, I show exactly how the life of the mind really worked: in the minute construction and transit of scientific concepts and in the mundane but variegated repetition of daily experiences.

CONTENTS

	Abstract	iii
	List of Figures	vi
1	Introduction: Mind and Body in the Lives of Science	1
I	*Gustav Theodor Fechner and an "Exact Science of the Relations between Body and Soul"*	27
2	Fechner at the Threshold	48
3	Fechner on a Walk	110
II	*Josef Breuer, Bertha Pappenheim, and the "Talking Cure"*	172
4	Breuer in Conversation	204
5	Breuer on Balance	299
	Acknowledgments	365
	Abbreviations and Archives	369
	Bibliography	370

LIST OF FIGURES

1.1 "Where are we when we think?" 25

2.1 Experimental consistency of ocular proportionality 72
2.2 Integrals of the generalized measurement principle, dependent on the threshold 83
2.3 The first wave schema of psychophysical continuity and discontinuity 97
2.4 The second wave schema of psychophysical continuity and discontinuity . . . 98
2.5 Judgments of sound intensities by Theodor Renz and Augustus Wolf 105

3.1 The first wave schema of psychophysical continuity and discontinuity 160
3.2 The second wave schema of psychophysical continuity and discontinuity . . . 162

5.1 The enlarged semicircular canals of a pigeon 311
5.2 The nonhorizontal planes of the semicircular canals of a pigeon 314
5.3 Athanasius Kircher's hypnotic hen 344

1 INTRODUCTION: MIND AND BODY IN THE LIVES OF SCIENCE

In November 1917, the political economist Max Weber gave the first of his two famed lectures on "intellectual work as a vocation": "Wissenschaft als Beruf." The war was grinding on, and Weber's analysis befit the dour situation: Occidental history at large was characterized by a long process of disenchantment, and regardless of what his student audience wanted to hear, modern science offered no aid. In fact, science was both a recent component and major driver of this process. It offered a certain control over life, yes, an ability to distinguish fact and value. But it could not give sense to life; it could not answer the most basic questions: "What shall we do? How shall we live?"[1]

For Weber, the answer was to deflate the pretenses of science while also avoiding the temptation of religion. This meant an *embrace* of its senselessness with regard to life, a commitment to meet such senselessness head on. The technical work of science was difficult—doing it openly and honestly *was* the challenge. "We should learn this lesson—that yearning and awaiting alone are not enough—and do otherwise," he concluded. "We should go about our work and meet the 'demand of the day'—as humans as well as in our vocation. This however is plain and simple if we all find and obey the daemon who holds the threads of *our* lives."[2]

This dissertation examines such demands of the day as they were met by two particular adherents to science as a vocation: the Leipzig physicist Gustav Theodor Fechner (1801–

1 Weber, *Wissenschaft als Beruf*, 21. {" 'Was sollen wir tun? Wie sollen wir leben?' "} Weber cited these questions (and the negative answer) to the novelist Leo Tolstoy, though the specific source remains unknown. All translations mine unless otherwise noted.

2 Weber, *Wissenschaft als Beruf*, 37. {"Daraus wollen wir die Lehre ziehen: daß mit dem Sehnen und Harren allein nicht getan ist, und anders machen: an unsere Arbeit gehen und der 'Forderung des Tages' gerecht werden—menschlich sowohl wie beruflich. Die aber ist schlicht und einfach, wenn jeder den Dämon findet und ihm gehorcht, der seines Lebens Fäden hält."}

1887) and the Viennese physician Josef Breuer (1842–1925). Fechner and Breuer each played a notable role in the history of science in the period and place leading up to Weber's lecture—the ever professionalizing and institutionalizing world of nineteenth-century Germanophone science.[3] Viewed from today, this notability rests primarily on one book for each man: Fechner's *Elemente der Psychophysik* (1860; *Elements of Psychophysics*) and Breuer's *Studien über Hysterie* (1895; *Studies on Hysteria*, coauthored with his younger colleague Sigmund Freud). This notability can be further still specified in really one element of each book: Fechner's formula mathematically relating stimulus and sensation and Breuer's introduction of the "talking cure" in the case history of Anna O., named first by the patient, real name Bertha Pappenheim.

My account of these scientific contributions—Fechner's psychophysics and Breuer's "talking cure"—takes Weber's vision of scientific vocation quite seriously.[4] What in fact composed the various demands of the day—scientific and otherwise—and the attempt to fulfill them? Who else participated in meeting these demands? Where did the technical scientific work end and the fulfillment of everyday wants begin? And how did they deal with the omnipresent lure of religion, belief, and God? Midway through "Wissenschaft als Beruf," Weber specified exactly the flux constituting such a scientific vocation: "A

3 There is often discussion in the Anglophone literature about the translation of Weber's title and its two linked nouns: *Wissenschaft* and *Beruf*. For my purposes, it's mainly important to note simply that Fechner and Breuer were surely (as we'll see) participants in the world of *Wissenschaft* and that "science" was at the time and remains a perfectly suitable translation for the systematic organization of knowledge and its production (beyond the specifically "natural" branches). See the discussion, and differing translations, in the editorial apparatus of two different English editions: Weber, *The Vocation Lectures*; Weber, *Charisma and Disenchantment*.

4 Weber's lecture has stood for a number of wider questions in European history, intellectual history, and the history of science: on the shadow of the Great War and the diminished scholarly fervor for it, on ideals of Bildung and the German university, on racial and national chauvinism. Some of what makes the essay so powerful and lasting, however, is simpler and informs my approach: The willingness to look straight-on at some of the hardest questions (how shall we live?), being vocally asked by an audience of hungry students, and at once deny your ability to answer it *and* commit yourself to such a vocal and repeated denial every day. For another use of this essay to introduce a history of science, emphasizing instead disenchantment and holistic science, see Harrington, *Reenchanted Science*.

person of culture, however, set with thoughts, knowledge, and problems in the incessant enrichment of civilization—he can become 'tired of life' but not satiated with it. For he catches only the tiniest part of that to which the life of the mind invariably gives birth anew, and always only something temporary, nothing final."[5] What did it mean for Fechner and Breuer to catch something temporary from the life of the mind and transform it into something so lasting? Who were their daemons?

WHICH SCIENCE? MEDICINE–PHILOSOPHY–PHYSICS–PSYCHOLOGY–PHYSIOLOGY–PSYCHOPATHOLOGY–MEDICINE

Both Fechner and Breuer undertook university training in medicine, the former in Leipzig from 1817 to 1822 and the latter in Vienna from 1859 to 1864. Their studies bookended one of the major scientific transformations of the nineteenth century: the rise of the research university in the Germanophone world and the concomitant emergence of the experimental laboratory at those universities.[6] While the broader transformation was complex, lengthy, and far from uniform across universities and states, it did entail a highly particular form of vocational life: at once looking up to the lofty ideal of Bildung and

5 Weber, *Wissenschaft als Beruf*, 16. {"Ein Kulturmensch aber, hineingestellt in die fortwährende Anreicherung der Zivilisation mit Gedanken, Wissen, Problemen, der kann 'lebensmüde' werden, aber nicht: lebensgesättigt. Denn er erhascht von dem, was das Leben des Geistes stets neu gebiert, ja nur den winzigsten Teil, und immer nur etwas Vorläufiges, nichts Endgültiges."} Though Weber's contrast here was specifically between the biblical Abraham or any past farmer and the current person of culture (*Kulturmensch*), his conception of culture and the West was distinctly marked by racist and imperialist political commitments. For a challenge to incorporate these in contemporary readings of Weber, see Zimmerman, "Decolonizing Weber."

6 The exact causes, unfurling, and periodization of this transformation remain a topic of debate, but the rise of the research university and the emergence and ultimate centrality of the experimental laboratory therein is well documented. See, on the history of the Germanophone university broadly, McClelland, *State, Society, and University in Germany, 1700–1914*, esp. part 2, 3; Turner, "Professorial Research in Prussia"; on the transformation of scientific work around 1800, Turner, "Great Transition"; on the changes in medical faculties, where Fechner and Breuer started, Huerkamp, *Der Aufstieg der Ärzte*, chap. 2, 3; Lesky, *Vienna Medical School*; on those in physics, where Fechner ended up, see Jungnickel and McCormmach, *Intellectual Mastery of Nature*, vol. 1; on experimental practice and the emergence of the laboratory in these earlier years, Lenoir, "Laboratories, Medicine and Public Life in Germany"; Otis, *Müller's Lab*.

down to the grubby work of experimentation, all highly conditioned by the overwhelming demands of teaching and competition for resources.[7] As George McClelland writes of this time, "In an era of generally restricted career opportunities, the route of self-education through work in seminars and laboratories—'living for scholarship'—achieved a certain attraction for a growing minority of well-qualified students."[8]

In many ways, Fechner and Breuer were emblematic of this vocation. Their lives were fundamentally shaped by this new university, its experimental practices and significant material demands, and the particular ideology of reliable knowledge production embodied in it. The new vocation was most prominent in the realm of experimental physiology,[9] and it was there that both Fechner and Breuer received some of their earliest scientific stimulation: Fechner from the physiological lectures of Ernst Heinrich Weber and Breuer from those of Ernst Brücke.[10]

Fechner was quickly turned off from practical medicine during his studies, but through Weber's lectures and a job translating a textbook by the Parisian physicist Jean-Baptiste Biot in 1824, "it became clear to me that only via such a route could clear, sure, and fruitful results in natural science be reached."[11] Via his own meticulous work on electricity, Fechner became a professor extraordinarius of physics at Leipzig in 1830 and

7 See, on this new vocation in physics and physiology, the two most pertinent fields for my project, Jungnickel and McCormmach, *Intellectual Mastery of Nature* 1: esp. chap. 1, 2, 4, 9; Otis, *Müller's Lab*; and on the ideal of Bildung, Koselleck, "Structure of *Bildung*." Steven Shapin offers a longer view of the "scientific life," seeing the nineteenth-century version as a part of a continuous history with a difference more in degree than kind; yet this particular species of the Germanophone experimental academic, part *Gelehrter* (man of letters), part *Naturforscher* (natural researcher), all committed to Bildung and dependent on the university, clearly sticks out from his narrative. Shapin, *The Scientific Life*, chap. 2

8 McClelland, *State, Society, and University in Germany, 1700–1914*, 202.

9 Physiology was the central discipline in much of the earliest historical work on the transformation and rise of Germanophone science. For a summary and reconsideration of this work, see Turner, Kerwin, and Woolwine, "Careers and Creativity in Nineteenth-Century Physiology."

10 Both Fechner and Breuer remembered the early stimulation from Weber's and Brücke's lectures later in life. "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers, p. 17; Fechner, "Lebensabriss," 37.

11 Fechner, "Lebensabriss," 39. {"Mir dadurch zum Bewußtsein kam, daß nur auf solchem Wege zu klaren, sicheren und fruchtbaren Resultaten in der Naturwissenschaft zu gelangen sei."}

then the ordinarius in 1834; continued physically demanding experimentation, along with an extraordinary load of literary work necessary to support his family, exhausted him and forced him to take a leave in 1839. Exact experimentation nevertheless remained his self-declared hallmark throughout his career, with his new science of psychophysics being "briefly an exact science of the relations between body and soul."[12]

Just before Fechner introduced this new science, Breuer arrived at the so-called Second Vienna Medical School centered on Carl Rokitansky, his pathological anatomy, and a medicine rooted in laboratory investigation. Breuer cut his experimental teeth with the physiologist Ewald Hering, publishing jointly a significant work on the regulation of respiration in 1868. Despite a variety of professional struggles, Breuer continued his physiological work, and it ultimately gained him admission to the Viennese Akademie der Wissenschaften in 1894. Overall, he took very seriously the physician's empirical conundrum, navigating between clinic and lab, though he leaned toward the former: "I regard hysteria as a clinical picture, empirically discovered and originating in observation, in just the same way as tubercular pulmonary phthisis. Such empirically obtained clinical pictures are refined, deepened, and made clear by the progress of our knowledge; they however shall not and cannot be destructed by it."[13]

And yet! Both Fechner and Breuer spent the majority of their professional lives *outside* of the university. Fechner ultimately left his position in 1843 due primarily to health issues and pursued psychophysics entirely from home over the next several decades; Breuer was never able to secure a permanent academic position and worked mainly as a private

12 Fechner, *Elemente der Psychophysik*, 1:v. {"Kurz eine exakte Lehre von den Beziehungen zwischen Leib und Seele."}

13 Breuer, "Theoretisches," in *GW* suppl.:246 / *SE* 2:187 (translation modified). {"Ich halte Hysterie für ein empirisch gefundenes, der Beobachtung entstammendes Krankheitsbild, geradeso wie die tuberkulöse Lungenphthise. Solche empirisch gewonnene Krankheitsbilder werden durch den Fortschritt unserer Erkenntnis geläutert, vertieft, erklärt; sie sollen und können dadurch aber nicht zerstört werden."} See notes to the introduction of part 2 on translation from Freud's *Gesammelte Werke*.

physician from 1871 onward, making house calls to patients during the day and performing physiological experiments at night. What's more, their most lasting achievements—Fechner's psychophysics and Breuer's "talking cure"—were not only physically extramural but intellectually so, unconfined by institutes, disciplines, or established doctrines. Thus one of the major contributions of this dissertation is to offer a view of significant scientific lives on the sidelines.

So while the university, professional identity, and disciplinary formation provide crucial context for what follows, the main contextual thread is instead the object under investigation: the mind-body connection. In pursuing this connection, Fechner moved from medicine through speculative Naturphilosophie and exact empirical physics before hitting on psychophysics in the 1850s. Breuer's path started with his physiological investigation of the sense of balance and then detoured through a psychopathology of hysteria. Neither was much occupied with what went under the banner of psychology at the time; psychiatry was likewise only a minor interlocutor for part of Breuer's work on hysteria. In this way, I take a different tack than the two standard tomes that tell a version of this history: Edwin Boring's *A History of Experimental Psychology* and Henri Ellenberger's *The Discovery of the Unconscious*, both of which prominently feature Fechner and Breuer.[14] The organizing principle for both Boring and Ellenberger is discipline formation, of experimental psychology and dynamic psychiatry, respectively. While this made sense in the mid-twentieth-century context when they wrote, it seems to greatly miss the cacophony of voices and approaches animating the works of Fechner, Breuer, and the like.

It would moreover be mistaken to take the object of study linking this story as solely mind or the unconscious. While there is much to be gained from thinking through

14 N.b., Boring added Breuer and psychoanalysis as part of a new chapter on dynamic psychology to the second edition of his history (the first was published in 1929, the second in 1950).

Fechner and Breuer as figures in an "interdisciplinary" history of the mind sciences, they did not see the mind as an object unto itself. For them, the mind was irrevocably bound to the body, the two linked and inextricable from each other;[15] even where one aspect was emphasized, mind or body, this was simply one perspective on the connection or relations as the heart of the object.[16] In this way, my dissertation builds directly on much recent work in the historiography of the sciences of mind and body that has rethought the place of the mind-body beyond institutions, disciplines, and sites. This work has brought to the fore the fluidity of ideas and practices that was the hallmark of the period. These works have not only shown how the mind-body relation as an object troubled scientific boundaries but also the variety of ways in which this object was "investigated," via, for example, visual technologies, physical exercises, and even social insurance laws.[17]

TWO SIDES TO THE LIVES OF THE MIND

The plurality of "The Lives of the Mind" thus makes a number of double references: To Fechner's and Breuer's lives, as humans and vocationally, and to the many forms that the mind—always in fact connected to the body—took as both subject and object of study. That is, the mind-body as subject undertook the everyday activities making up life, both human and vocational, while the mind-body as object was put under investigation, again human and vocational.

15 This linked view, enunciated most explicitly by Fechner, was named by others *psychophysical parallelism*. Fechner didn't use the term, which Michael Heidelberger traces to the philosopher Alexander Bain and its popularization to the psychologist Wilhelm Wundt. Heidelberger furthermore explains how Fechnerian parallelism differs from other possible forms. Heidelberger, *Nature from Within*, 169–70.

16 Fechner explicitly framed psychophysics as a perspectival science with an outer and inner view of the mind-body connection; Breuer echoed this approach in *Studien über Hysteria*, distinguishing between "psychological" and "physiological" terminology for the psychophysiological and neurological processes under consideration as a matter of framing rather than fundamental distinction. Fechner, *Elemente der Psychophysik* 1:1–12; Breuer, "Theoretisches," in *GW* suppl.:244–45 / *SE* 2:185–86.

17 These three "methods" are featured in, respectively, Schmidgen, *Helmholtz Curves*; Guenther, *Localization and Its Discontents*; Killen, *Berlin Electropolis*; see also Brain, *The Pulse of Modernism*; Hui, *The Psychophysical Ear*; Canales, *A Tenth of a Second*; Smith, *Inhibition*.

Weber's invocation of the phrase also drew on this double aspect,[18] which is in fact baked into the two primary senses of the phrase: On the one hand, the world of intellectual projects, pursuits, and even playthings, for Weber the "thoughts, knowledge and problems in the incessant enrichment of civilization"; and on the other, the world of imagination, ideation, and psyche itself, for Weber the invariable birth of the new and the catching of "only the tiniest part."[19] The two are obviously linked, with each implying the other, and we might think of them as taking two different perspectives on the matter: the former external and the latter internal. The external view lends itself to concrete description of everyday undertakings and cumulative achievements; the internal view tends toward abstract analysis of complex processes and aesthetic yearnings.[20] Despite their link, these two views are mostly approached separately from each other. This bifurcation can be seen in two different works that take the phrase as title: a biography of the philosopher and writer Henry David Thoreau and the political theorist Hannah Arendt's incomplete philosophical testament—the former dealing with *a* life of the mind and the latter *the* life.[21]

My dissertation attempts to offer both views at once. I approach Fechner's and Breuer's earthly lives from two perspectives: everyday experiences and scientific concepts. Everyday

18 Weber's phrase was "das Leben des Geistes," literally *the life of the mind*. The newest popular translation translates this as "intellectual life," but this seems wrong, better suited for *geistiges Leben* or *Geistesleben*. Weber, *Charisma and Disenchantment* (epub). For contemporary uses, see, of *das Leben des Geistes*, Jaspers, *Psychologie der Weltanschauungen*, chap. 3; of *Geistesleben*, Simmel, "Die Großstädte und das Geistesleben." Regarding the translation of *Geistesleben* for Simmel's famous essay, usually "mental life," note that the editor of the original volume had expected a contribution about the collective intellectual life of the metropolis rather than Simmel's analysis of the *effect* of the metropolis on *mental life*, giving clue to the complicated use of these terms. Petermann, *Die Großstadt*, preliminary remark.

19 These are the two senses given in the *OED*. *OED*, s.v. "life, *n.*, P14.b," accessed 4 June 2020, https://www.oed.com/view/Entry/108093.

20 As we'll see, such perspectivism is informed by Fechner's delineation of his new science of psychophysics into outer and inner parts.

21 Richardson, *Henry Thoreau*; Arendt, *The Life of the Mind*. For other examples in line with this bifurcation, see, on *a* life of the mind à la Thoreau's, Burnett, "Life of the Mind Dept."; Lopate, "The Life of the Mind"; on *the* life à la Arendt's, Jaspers, *Psychologie der Weltanschauungen*, chap. 3, esp. 241.

experiences are the very stuff that made up the human side of Weber's definition, where the mind-body undertook and underwent activity and reflection apart from specific vocational questions. For Fechner, it's *taking a walk*, and for Breuer, *having a conversation*. The scientific concepts are correspondingly the linchpins that made up the vocational side, at once naming, explaining, and choreographing various elements of the technical investigation of the mind-body. For Fechner, it's *the threshold*, and for Breuer, *balance*. Through these concepts and experiences, I give an account of their meeting the demands of the day, of the daemon who guided their lives.

SCIENTIFIC CONCEPT, EVERYDAY EXPERIENCE

What is a scientific concept? Georges Canguilhem offers the clearest answer to this question in his history of the concept of reflex, forcefully articulating the role such concepts can play in the historiography of science. He postulates that a concept has three sides: the thing, the word, and the notion. In the case of the reflex, he argues, it only truly became a concept with the physician Thomas Willis rather than the philosopher René Descartes, despite the broad attribution of the concept to the latter. But the point is not merely to identify when and where concepts gained a full form (all three parts) but rather to see what sorts of research they opened up or closed off: so what the reflex *did* in nineteenth-century mechanistic physiology and then more broadly in French culture in the twentieth. In their ability to move between contexts (temporal, spatial, cultural, disciplinary, etc.) and produce different research in each (or not), concepts are *polyvalent*.[22]

My approach takes Canguilhem's basic description of a scientific concept but applies it to a very specific context: the life and work of a researcher. So rather than looking at how *the threshold* or *balance* worked more broadly in the nineteenth-century sciences of mind

22 Canguilhem, *Concept de réflexe*; for a helpful introduction to the work in English, with an emphasis on the stratification of concepts as the prerequisite to their polyvalence, see Schmidgen, "The Life of Concepts."

and body or in the cultures of Leipzig and Vienna, I focus on how these concepts allowed Fechner and Breuer to pursue their investigations into the mind-body. The starting point for the concepts was simple: The threshold was for Fechner the level at which an increasing stimulus first generated (or a decreasing one ceased to generate) a corresponding sensation; balance was for Breuer the sense whose seat was found in the semicircular canals of the aural labyrinth. Yet for each, the concept in question was ultimately much more: the threshold led Fechner to the establishment of the measurement formula and the expansion of psychophysics beyond natural science; balance led Breuer from the function of the inner ear to psychical balance achieved via the "talking cure" and beyond. And while both concepts traveled far beyond Fechner's and Breuer's work, those other contexts altered bits of the concepts (mostly the thing or the notion rather than the word); both of them critiqued such alteration when it didn't accord with their use.

In this sense, I am interested in concepts at a middle level: neither limited to one specific text or experimental apparatus, nor moving across a number of contexts beyond the source. Mid-level concepts challenge, orchestrate, and ramify across one researcher's work; they make that work possible and allow us to understand how the work came to be. A recent similar approach is taken by Norton Wise in his account of the physiologist Hermann Helmholtz's *Spannkraft* (lit., "tensioning force"); starting in 1847, Helmholtz deployed this pedestrian term in a new way, as the *quantity of force*, which Wise identifies as crucially coordinating force, work, potential, and vis viva in the development of the conservation of energy into a Kantian principle.[23] Wise attributes more purposeful control to Helmholtz over the concept at hand than I do, which probably stems from the broad stakes of the debate around the conservation of energy at the time. By contrast, I'm

23 Wise, *Aesthetics, Industry, and Science*, chap. 7.

concerned with where mid-level concepts can take researchers even when those researchers aren't aiming to use them as such and the stakes are not necessarily heightened.

And what of everyday experience? I use *everyday experience* in an ecumenical sense: discretely nameable aspects of life that happen most days; that can be large or small, overtly meaningful or not, and recognized as such by participants or not; and that one undergoes *and* undertakes, equally affecting participants and surroundings.[24] This last point is what's key about analyzing experience: The subject, the one who has an experience, is in constant negotiation with the surroundings; effects run in all directions, emerging from the interplay of the simultaneous undertaking and undergoing of the experience by the subject.[25]

My thinking on this topic builds on two sources: Michel de Certeau's science of the everyday and Gayle Salamon's recent work in critical phenomenology. These sources inform both what constitutes an experience and how to go about giving a critical and

24 As concepts, *the everyday* and *experience* have seeded significant historiographical debates. My use of *everyday* is relatively distant from the primary socio-political aspects of those debates, which include, notably, *Alltagsgeschichte* (history of the everyday) as it emerged in Germany in the 1980s and broader postwar French approaches to the everyday, both historical and sociological (represented most prominently by Ferdinand Braudel, Henri Lefebvre, and Michel de Certeau). See, on the former, Steege et al., "The History of Everyday Life"; on the latter, Schilling, "Everyday Life and the Challenge to History." By contrast, my use of *experience* has been greatly informed by the major debates stemming from the linguistic turn in history; these debates concern the relation of meaning and experience, whether *experience* must be an essentialist term, and what this all means for the historian. These debates, however, are mainly concerned with the importance of experience as evidence for the historian, questions that have mainly receded along with the linguistic turn; I have found much more to build on from Michel de Certeau and phenomenology, which deal with the same problems but in a different register. Two major positions in the debate are Toews, "Intellectual History"; Scott, "The Evidence of Experience"; see, for a highly-partisan summary, Zammito, "Reading 'Experience' "; for a greatly different perspective, one that revives and surpasses the older historiographical debate, Ankersmit, *Sublime Historical Experience*.

25 Though my use of the term *everyday experience* is meant to provide flexibility and breadth, it is also important to note that something like this version of the concept came about historically in the period under study: over the (very) long nineteenth century. Though both terms have important early modern roots, *everyday experience* joined together late Enlightenment shifts in epistemology, aesthetics, and religious thinking, reorganization of public and private ways of living following the political changes around 1800, and the slower emergence and spread of industrial technologies. See, on the intellectual aspects of this history, Jay, *Songs of Experience*; for various aspects of its *lived* history, Corbin, *The Foul and the Fragrant*; Schivelbusch, *The Railway Journey*; Williams, *Notes on the Underground*.

interpretive account of it. In *The Practice of Everyday Life*, Certeau elaborates "*a science of singularity*; that is to say, a science of the relationship that links everyday pursuits to particular circumstances."[26] With these everyday practices, ordinary people appropriate what is before them in the world and enunciate themselves into it. Certeau calls these practices "tactical" in contrast with the "strategic" practices of institutions and the powerful. The task of his science is not to provide a systematic and exhaustive semiotics of the everyday but merely to initiate a set of approaches to its various modes and occurrences.[27] In *The Life and Death of Latisha King*, Gayle Salamon gives a phenomenology of the walk and gestures of Latisha King, a trans teen murdered in 2008.[28] She emphasizes one of phenomenology's primary notions: "That all of human experience is characterized by a fundamental ambiguity. Its significance cannot be resolved into one determined and self-evident meaning. It is always something, and also always inescapably this other thing, and it can never be perceived as both of these things at one and the same moment, even though it must contain them both within its horizon."[29] Building on this, Salamon shows how the attendant competing meanings of an experience, notably King's walk, arise from the intersection of different people's "horizons" of perspective.[30]

For both Certeau and Salamon, experience is neither just a fundamental building block of cultural expression nor its mere particular example but both at once. They teach how to read everyday experiences as they intervene in and are imbued by morphing

26 Certeau, *The Practice of Everyday Life*, ix.

27 Certeau, *The Practice of Everyday Life*, 39–42. See, for an more thorough elaboration of Certeau's method in action, the second volume of the project, Certeau, Giard, and Mayol, *The Practice of Everyday Life*, vol. 2; on the challenges of empirically implementing the method, see Giard, "Times and Places," in ibid., xxxv–xlv.

28 Salamon is working within critical phenomenology, a recent turn in phenomenology that emphasizes critical intersubjectivity, moving away from the transcendental subjectivity at the center of classical phenomenology. Salamon, "What's Critical about Critical Phenomenology?" In *The Life and Death of Latisha King*, Salamon draws on a huge number of sources through the history of phenomenology, from Edmund Husserl through midcentury social-scientific thinkers to recent critical phenomenologists, detailing many of the intricacies of phenomenology pertinent to my approach.

29 Salamon, *Latisha King*, 106.

30 Salamon, *Latisha King*, 92.

circumstances; these readings are not merely contextual but embedded directly in the action, and they draw meaning from the perpetually renewing tension between the on-the-ground kaleidoscope of experience and the author's later analytical perspective, which emphasizes a counterpart discourse to the experience (the political self for Certeau, gender and sexuality for Salamon).[31] It's notable that walking is a prime example in each, as it is for me, in part because of its richness for this mode of analysis. My analysis of everyday experience—walking with Fechner and conversing with Breuer—works in the vein of Certeau and Salamon, while adding a new discursive counterpart to the experience: the production of scientific knowledge.[32]

GRASPING THE MIND-BODY: TOWARD A HISTORICAL PHENOMENOLOGY

With regard to this production of scientific knowledge, both concept and experience are at once explanandum and explanans, lock and key: they pose certain questions while answering others, iteratively moving through the various lives in question. They open up

31 While both Certeau and Salamon build partly on their own first-person experiences, they also draw on written and other second-hand sources; what's more, both methods are built around an explicit suspicion of the immediate, simple, and habitual perspective of that first person (and are equally rigorous when it comes to reported and recorded sources). Giard, "Times and Places," in Certeau, Giard, and Mayol, *The Practice of Everyday Life*, xxxvi–xli; Salamon, *Latisha King*, 15–19. So while my historical approach cannot of course use any such first-person participation or observation, my efforts and approach to sources are still in line with theirs.

32 It goes without saying that elements of everyday life and its experiences have long been a major part of the historiography of science, and this literature is the foundation upon which my work stands. Yet most of these works focus on everyday experiences as they were directly and immediately related to scientific work as backdrop or propaedeutic or on the explicit use of these experiences as objects or tools of scientific inquiry. Three major examples of such a direct connection between the scientific and the everyday, all also historically pertinent to this dissertation, are Peter Galison on Einstein's and Poincaré's daily challenges at work, *Einstein's Clocks and Poincaré's Maps*; Deborah R. Coen on the everyday intersection of leisure and education in the Exner family's country retreat, *Vienna in the Age of Uncertainty*; and Alexandra Hui on the role of everyday musical skill, training, and enjoyment in the science of sensation, *The Psychophysical Ear*. On the use of experiences as objects or tools in scientific work, see Shigehisa Kuriyama on *feeling the wind*, *Expressiveness of the Body*; E. C. Spary on *keeping a diet*, *Eating the Enlightenment*; Jimena Canales on *watching a movie*, *A Tenth of a Second*. In addition to Galison, who animates Einstein's walk through the clocks in Bern, there are two notable recent works on the specific experience of walking, though they too hew to the approach of experience as tool or object: Reidy, "Mountaineering, Masculinity"; Mayer, *Wissenschaft vom Gehen*.

distinct but related routes into this production: technical-vocational with the concept, everyday-human with the experience. These routes ultimately made the object under investigation—the ineffable relationship between mind and body—*graspable*. While the concept named and traced it vocationally, the experience brought its complexities forward on an everyday basis.[33]

To frame this interrelation of concept and experience in making the mind-body graspable, I return to phenomenology, here classical. In *The Crisis of European Sciences and Transcendental Phenomenology*, Edmund Husserl emphasizes repeatedly that objective science, no matter its remove from the world at large, operates within the lifeworld: "The sciences build upon the life-world as taken for granted in that they make use of whatever in it happens to be necessary for their particular ends. But to use the life-world in this way is not to know it scientifically in its own manner of being."[34] Despite being built upon ground of the lifeworld, the objective-scientific world works to become separate, valid in and of itself. Yet, paradoxically, it remains completely within the lifeworld: "The concrete life-world, then, is the ground soil [*der gründende Boden*] of the 'scientifically true' world and at the same time encompasses its own universal concreteness."[35] It's not hard to see Weber's two aspects of the "demand of the day"—vocational and human—in Husserl's objective-scientific world and concrete lifeworld.[36]

33 The idea that concept and experience worked in tandem to make the mind-body graspable builds on Hans-Jörg Rheinberger's work on epistemic things, which come into being when epistemology and technique become blurred. Where he uses the term *concrete*—concrete practices, instruments, organisms, even concepts—I find *graspable* more apt for the sciences of mind and body. Rheinberger, *An Epistemology of the Concrete*; Rheinberger, *Toward a History of Epistemic Things*.

34 Husserl, *Crisis of European Sciences*, § 34b.

35 Husserl, *Crisis of European Sciences*, § 34e (editor's interpolation).

36 One need not take up Husserl's entire phenomenology to build on its many insights. Thus I set aside Husserl's particular conception of science and the subject and his proposed method to grasp the lifeworld (a series of reductions or epoches). Ian Hacking makes a similar point about learning from Husserl without fully participating in his very total project. Hacking, "Husserl on the Origins of Geometry," in Hyder and Rheinberger, *Science and the Life-World*, 66. See also, on fitting Husserl's *Crisis* and phenomenology writ large into other approaches in the history of science, Rheinberger, *On Historicizing Epistemology*, 39–42; Hyder and Rheinberger, *Science and the Life-World*.

In using concept and experience to excavate the historical workings of science, I think of this dissertation as an attempt at a historical phenomenology.[37] Like phenomenology itself, historical phenomenology could be a broad tent and need not employ the specific approach that I do nor engage with all permutations of phenomenology. It would simply take seriously the relation of the vocational and the human, the scientific and experiential, and the fundamental *ambiguity* of each for those under study and for us; it would approach this relation and ambiguity at once holistically and critically.

Historical phenomenology of course plays on historical epistemology, another varied project with less technical emphasis than the philosophical domain from which it takes part of its name. Historical epistemology broadly gives the history of specific domains of knowledge, often with concepts as the anchoring matter (with Daston and Galison's treatment of *objectivity* possibly the most well-known such concept); historical phenomenology joins those concepts with the experiences that tie them to the lifeworld.[38] Ian Hacking sees historical epistemology (which he calls "historical meta-epistemology" in part due to this loose connection to the philosophical domain proper) as one part of a broader project of historical ontology, taking the phrase from a less emphasized passage by Michel Foucault: It's all about the coming into being *and* effectivity in the world of scientific categories, concepts, objects, things, and so on. What's important is that these new things affect Foucault's three main axes of subject constitution: knowledge, power, and ethics.[39]

37 Another dissertation that greatly informed my thinking about the possibility of such a historical phenomenology is Daniela Helbig's "The Known and the Lived." Though she doesn't use the term, she excavates the broader debate around the scientific and the experiential in the years leading to Husserl's *Crisis* (including the astronomer Arthur Eddington and the physicist Carl Friedrich von Weizsäcker), using this then in her analysis of the conjoint experimental and experiential life of Melitta Schiller, a German physicist and test pilot during the Nazi era.

38 See, on historical epistemology, Hacking, "Historical Meta-Epistemology"; Rheinberger, *On Historicizing Epistemology*.

39 Hacking, *Historical Ontology*, chap. 1.

In this sense, historical phenomenology would be concerned with providing a fine-grained analysis of the objects of historical epistemology or ontology. It has always seemed to me axiomatic that, if you assert that some scientific object has a specific history and did not in fact exist as such outside of this history, you should be able to continually zoom in on this history, giving finer and finer accounts of its coming into being. There are of course many such examples of finer accounts in historical epistemology and ontology (e.g., Hans-Jörg Rheinberger on soluble RNA).[40] As a historical phenomenology, my approach builds on these close histories, at once taking the wider view of the grounding lifeworld and offering more textured readings of the experiences tying the emerging science to that lifeworld.

Such an approach has two major *historical* features, which brings us back to grasping the mind-body. One, it takes individual scientific works as primary historical objects, and does so very seriously. That is, one of my motivating questions is how do these publications *work*, here the publications being Fechner's *Elemente der Psychophysik* and Breuer and Freud's *Studien über Hysterie*. Historians in general take the widest view possible, dealing with any and all materials (published and not) that impinge upon the matter at hand. There are likewise numerous critiques and accounts of the particular construction of such individual works, in reception by the audience and otherwise.[41] Yet individual works nonetheless have an internal logic of their own while also bearing a particular relationship to the author. And it is in that logic and relationship, read via specific concepts, that Fechner and Breuer worked to technically grasp the mind-body relation. It seems highly unlikely that many people closely read the entirety of Fechner's *Elemente*, a dense work of nearly one-thousand pages; similarly, Breuer's theoretical

40 Rheinberger, *Toward a History of Epistemic Things*. See also, for Daston's two major collections on the coming-into-being of specific scientific objects and things, Daston, *Biographies of Scientific Objects*; Daston, *Things That Talk*.

41 See most prominently, on the history of the book and the history of science, Secord, *Victorian Sensation*.

contribution to *Studien* sat strangely after four entrancing narrative case histories by Freud and only prompted minor notice in reviews and since. Both works are primarily remembered for only a few points, points that often have unclear relations to the work's dense particulars let alone its stated aims. Here I try to show that understanding these "historically significant" ideas *requires* spending lots of time with these individual publications.

Two, it pays equally close attention to source material from the everyday human side, including most prominently diaries and correspondence. This material, however, is not used to simply to flesh out the characters or worldviews of the main actors, to contextually frame the scientific work, or to narrate their conjoint "life and work." It is rather approached as evidence of the grounding lifeworld. Just as concepts lead me through the individual scientific publications, experiences do so in these everyday materials. And again, it is in close readings of this material that the work of grasping the mind-body becomes evidence. These readings are along the lines of Clifford Geertz's conception of *thick description*: for Geertz, ethnographic accounts and analysis of human phenomena consists in sorting through many layers of signification, a sorting that is only possible with the ethnographer's deep knowledge of the complex context in which the phenomena occur.[42] Here I recur to the scientific work as the context that allows for a decoding of the everyday experiences: Fechner's psychophysics for walking, Pappenheim and Breuer's "talking cure" for conversing.

ROAD MAP

Before going further into some objections and consequences, I want to outline what in fact constitutes the dissertation, giving some detail to what such a historical phenomenology

42 Geertz adapts the term from the philosopher Gilbert Ryle in order to show how thick description is the prime activity of ethnography. Clifford Geertz, "Thick Description."

looks like. The dissertation has two major parts following directly from the basic approach: one each for Fechner and Breuer, with both parts having similarly paired chapters.

Part I starts in Leipzig with the physicist Gustav Theodor Fechner and his new science of psychophysics. Introduced in 1860 with a thousand-page tome, *Elemente der Psychophysik*, psychophysics was "an exact science of the relations between body and soul." Concerned first with the challenge of empirically and exactly measuring the relation between stimulus and sensation, psychophysics was an crucial part of the experimentalization of the mind-body resulting in the psychological laboratory.

Chapter 2, "Fechner at the Threshold," excavates the extended elaboration of this science in *Elemente* via the concept of *the threshold*. *Elemente* was a complex work that split psychophysics into an outer and then inner approach to the mind-body, before opening into broader questions of religion and Naturphilosophie. The "fact of the threshold"—that a sensation was noticed only once its precipitating stimulus reached a certain level rather than at or immediately after null—was only introduced partway through the first volume but was ultimately crucial to the project. It led first to the measurement formula, a logarithmic relation of stimulus and sensation: $y = k \log \frac{\beta}{b}$, with y the sensation, k a constant, β the stimulus, and b the threshold value for that stimulus-sensation pair. The threshold was then the crucial element that allowed for psychophysics to move from its outer approach, focused on the measurement of stimulus-sensation pairs, to its inner one, focused on immeasurable phenomena such as dreams, hallucinations, and afterimages. Lastly, it opened psychophysics up into the realm of belief and the soul of the universe. I turn finally to the question of representing the threshold, which drew Fechner into the realm of everyday phenomena.

The third chapter, "Fechner on a Walk," moves to this realm of the everyday, building primarily on Fechner's extensive diaries. I show how important walking was for him as a

daily experience but also how it was generic for the time and place and didn't necessarily command any special attention from him. Then I give an extremely close reading of the walking as it appeared in the diaries; this reading recurs to *Elemente* and psychophysics as the context rendering these walks legible as a parallel everyday investigation into the mind-body. Just as psychophysics bifurcated into outer and inner, approaching the mind-body relation externally and internally, Fechner's walking took an alternatively outer and inner standpoint on the same object. Ultimately, I describe three "modes" of walking, each with its own specific outer-inner standpoints on the mind-body, that stepped serially through the three major conjunctures in *Elemente*: from measuring the individual sensorium in outer psychophysics, through the question of attention in inner psychophysics, to broader psychophysical continuity and discontinuity throughout the universe. In conclusion, I turn to the question of God, showing how Fechner's new psychophysical view of God and the universe played out on an everyday basis.

Part II moves to Vienna and an encounter between a physician and a patient, between Josef Breuer and Bertha Pappenheim, from 1880 to 1882. The encounter led to the "talking cure," ultimately a "therapeutic-technical procedure" that removed hysterical symptoms by talking them back to their first appearance. Named first by Pappenheim, the "talking cure" served in 1895 as the centerpiece of the case of Anna O. and launching point for *Studien über Hysterie*, Breuer's collaboration with Freud that established many of the fundamental precepts of psychoanalysis.

Chapter 4, "Breuer in Conversation," starts with the conversational culture that undergirded the talk of the "talking cure." Conversation was one of the tentpoles of Vienna's Bildungsbürgertum; it was the highly regimented form through which the class socialized and defined itself and yet was aimed primarily at its own empty sociability. Out of this culture emerged *duo-talk*, a close exchange of two members of the class, that

at once drew on the skills and awareness demanded by the larger culture and struggled against that culture's intense strictures and empty sociability. I argue that duo-talk was *the* fundamental experience through which Pappenheim and Breuer's encounter happened outside of any *curative* aspects. Analyzing Pappenheim's children's stories and Breuer's long correspondence with another patient, the author Marie von Ebner-Eschenbach, I trace this experience in form and content: in form, it was open-ended and exploratory, while in in content, it centered on the intersection of the self and thinking. Finally, I consider Breuer's last publication on telepathy, where duo-talk moved from the private to the public realm.

The fifth chapter, "Breuer on Balance," turns back to the cure of the "talking cure." In the narrative of Anna O., the "talking cure" ultimately led to Pappenheim's again finding "her psychical balance" after years of illness. This chapter thus approaches the question of cure through the concept of *balance*, which was in fact the object of Breuer's lifelong scientific project: on the physiology of the inner ear and the sense of balance. I argue that Breuer elaborated a three-sided concept of balance—physical, psychical, and personal—united as a holistic concept of balance as *process*, perpetually working via compensation and adjustment. I trace this concept as it moved Breuer from his early physiological investigation on the function of the aural semicircular canals during the 1870s through his encounter with Pappenheim and attendant theoretical psychopathology of hysteria in the 1880s and 90s. I then turn to his daily work as a practicing physician, showing how personal balance underlay his relations with patients, leading to a new view of his encounter with Pappenheim. In conclusion, I consider an analogy, used by both Breuer and Pappenheim, between the "talking cure" and Catholic auricular confession, once again pointing beyond the limits of scientific knowledge into the realm of the sacred.

WHY FECHNER AND BREUER?

This project was originally conceived as the story of a particular vision of the mind-body, starting with Fechner and then moving through a number of those working in his footsteps. The core story was to go from Fechner, through the philosopher Franz Brentano (1838–1917) and the physicist Ernst Mach (1838–1916), to Breuer. As it went forward, the depth and texture of my particular approach meant leaving the breadth of figures behind, and I stuck with the first and last figures. Brentano and Mach remain the bridge connecting Fechner and Breuer, as they were some of the first significant respondents to Fechner's *Elemente der Psychophysik* before meeting with Breuer in the 1870s onward in physiological research, medical practice, and everyday life, and this material still shows up here and there in this project.

But there are good reasons to avoid presenting this project as the history of a movement, school, or even looser current of thought, even if it did have a broader scope. As you read closely in the nineteenth-century sciences of mind and body, you encounter a vast web of citation, most of which is simply outside of the perspective of the professional history of science, leaving very little footprint from a present perspective.[43] Identifying the "core set" of relevant researchers would require a narrowing of the matter at hand much beyond just a specifically Fechnerian "psychophysical" version of the mind-body relation;[44] there were simply too many approaches to questions of mind and body, all of which drew on and responded to each other as necessary.[45] At the same time, any

43 For a view of this web of citation, see Gundlach, *Index Psychophysicus*, which indexes Fechner's many references, explicit and implicit, in *Elemente der Psychophysik*.

44 In Harry Collins's classic statement on the "core set," the scientific problem at hand must be controversial enough, narrow enough, and brief enough to generate a tractable and identifiable "core set." Collins, " 'Core-Set' in Modern Science."

45 For examples that narrow around a particular controversy, set of material objects, or sensory through line, see, on the Helmholtz-Hering controversy about vision, Turner, *In the Eye's Mind*; on Helmholtz's devices, Schmidgen, *Helmholtz Curves*; on aural sensation and the ear, Hui, *The Psychophysical Ear*. In some earlier literature on Freud and psychoanalysis, there is the idea of a Fechnerian psychophysical school that

included figures would have had to have left the appropriate sort of source material for my particular approach, resulting in a further skew to selection.[46]

In this sense, the answer to why Fechner and Breuer is that they offered a window into questions I had more generally: How do ideas come into being and stick around? Why do scholars do what they do? Aren't these other ephemeral aspects of life—the walking and talking—as important as the work itself? Those were the places I did my thinking—why not these paragons of science? Conceptualizing this dissertation as answering these questions is built some on Francesca Trivellato's reflections on the travels of microhistory, where she notes that the original Italian microhistorians offered "a new conceptualization of the connection between social action and cultural beliefs" not via narrative but via mircosocial analysis.[47] My project does something along these lines, refiguring instead the connection between scientific thinking and everyday life.

Framing my answers in terms of Weber's "Wissenschaft als Beruf" and Germanophone university science is only one possible avenue. Other possible avenues, which flash up here and there, would be: gender and masculinity, personae and the self, reflexivity and the mind-body, media and book history, private life and domesticity.[48] Cities and

---

influenced Freud alongside (or against) the "biophysical school" of Hermann Helmholtz, Emil du Bois-Reymond, Ernst Brücke, and others; e.g., Sulloway, *Freud, Biologist of the Mind*, 65–67. But literature on Helmholtz et al. has moved on, away from the anachronistic term *biophysical*, and there is little reason to set up Fechner and those who supposedly followed him against it. For the newest view of Helmholtz et al., see Wise, *Aesthetics, Industry, and Science*; cf. older works, Cranefield, "Organic Physics of 1847"; Cranefield, "Biophysics Movement of 1847."

46 So the physiologist Ewald Hering, who as a student heard Fechner's lectures in the early 1860s in Leipzig and then worked with Breuer on the respiratory reflex later that decade, would be a perfect subject connecting the two. Yet his personal archive is not preserved. Turner, *In the Eye's Mind*, 290n(chap. 4)1.

47 Trivellato, "Italian Microhistory" (pdf p. 15). There Trivellato considers microhistory and its relation to narrative and global history; see also, on the variations and travels of microhistory, Trivellato, "Microstoria/Microhistoire/Microhistory"; on microhistory versus biography in the Anglophone context, Lepore, "Historians Who Love Too Much."

48 For relevant literatures, see, on scientific masculinity, Milam and Nye, "An Introduction to *Scientific Masculinities*"; on the scientific self, Daston and Sibum, "Scientific Personae and Their Histories"; on reflexivity and the human sciences, Smith, "Does Reflexivity Separate"; on media and science, Greene, "Knowledge in medias res"; on science and private life Coen, "The Common World."

politics are notably absent and somewhat difficult to track for each (in part due to sources and in part due to their interests), yet such absence could have been easily thematized too. But regardless of the framing, my basic questions about thinking and the life of the mind would have been the same. Historians often mute such personally animating questions, as self-indulgent, distracting, private, or simply disjunctive with the dominant historiographical framing. Because of my particular focus, it seems important to own these questions.

CONSEQUENCES (BUT WHAT ABOUT GOD?)

In a way, my dissertation builds on one of the main currents in the historiography of science since the 1980s: to treat science, of the high academic varietal and otherwise, as any other human endeavor, conditioned by the social, political, and economic demands and expressive of the norms and values held in the broader culture in which it happened. Steven Shapin summarizes this current as "lowering the tone."[49] Of this current, I owe most to work on the *embodiment* of scientific knowledge production, with Barbara Duden and Shigehisa Kuriyama being particularly instructive and inspiring.[50] And indeed, my dissertation offers a new "low" context for the history of science, the everyday experience, to the many others explored by the field.

Yet at the same time, I hope to push against at least one of the major consequences of this current. Such historiographical "lowering the tone" has, at least from the vantage of Dickinson Hall, won the day. Shapin sees this de-deified commitment as admirable, a vocational commitment to "telling stories—rich, detailed, and, we hope, accurate—about a tone-lowered, heterogeneous, historically situated, embodied, and thoroughly human

49 Shapin, "Lowering the Tone in the History of Science."
50 Duden, *The Woman beneath the Skin*; Kuriyama, *Expressiveness of the Body*. See also the collection Lawrence and Shapin, *Science Incarnate*; in that collection, especially Browne, "I Could Have Retched All Night"; Winter, "A Calculus of Suffering."

set of practices."[51] Very often, however, these human practices feel to me washed out by the historical situation, the various social, political, and economic demands shaping the scientific life from the outside. The lives of the mind we study seem to me unendingly complex, in both vocational and human aspects, and meeting this complexity should demand more than just a lowering of the tone.

Along these lines, I turn back to Hannah Arendt. She famously ends the first volume of her *Life of the Mind* by changing the question: Not *what* is thinking but rather *where are we when we think*? Her answer, given via a reading of one of Franz Kafka's parables, is striking:

> It is the quiet of the Now in the time-pressed, time-tossed existence of man; it is somehow, to change the metaphor, the quiet in the center of a storm which, though totally unlike the storm, still belongs to it. In this gap between past and future, we find our place in time when we think, that is, when we are sufficiently removed from past and future to be relied on to find out their meaning, to assume the position of "umpire," of arbiter and judge over the manifold, never-ending affairs of human existence in the world, never arriving at a final solution to their riddles but ready with ever-new answers to the question of what it may be all about.[52]

The answer is in fact a gloss on an equally striking diagram (fig. 1.1). Setting aside Arendt's broader project, which is highly technical and still tied to the grand edifices of the history of Western philosophy, I find her account of the *where* and *when* of thinking extremely evocative and resonant.[53] Where better to start an account of the complexities and textures of the lives of the mind than with the extreme otherworldliness of thought itself?

51 Shapin, "Lowering the Tone in the History of Science," 14.

52 Arendt, *The Life of the Mind* 1:209–10.

53 This means, of course, that I do not put any stock into the division of thinking from technical-scientific work, as is fundamental to Arendt's teacher Martin Heidegger. Two other works that similarly flesh out thinking in science, though emphasizing thinking about thinking, and have greatly influenced my approach are Cowles, *The Scientific Method*; Dunning, "Writing the Rules of Reason." For another perspective on various modes of the life of the mind throughout the history of philosophy, emphasizing "nonstandard" variants, see Smith, *The Philosopher*.

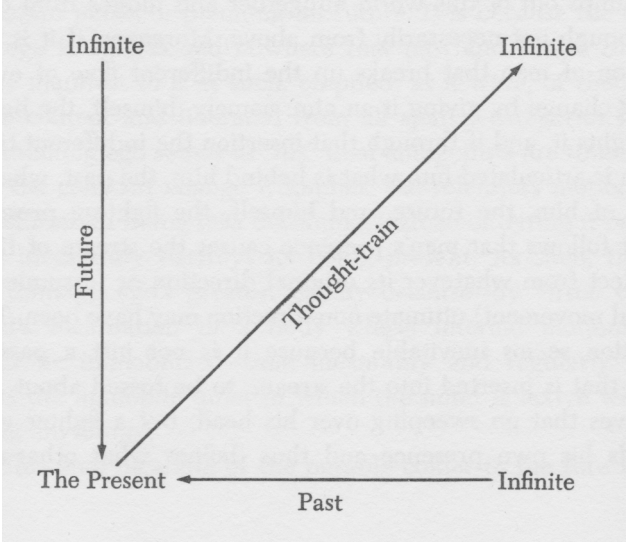

Figure 1.1. "Where are we when we think?" Past and future have indefinite origins, colliding in the present; from this collision emerges thinking, with a definite origin in the present and indefinite and infinite endpoint. Arendt, *The Life of the Mind* 1:208.

One of the consequences of my dissertation is to thus flesh out this where and when, this "definiteness" that Arendt takes as the starting point of the life of the mind. This definiteness takes place in mundane, forgettable, and at times trying daily experiences; it is made concrete via the seemingly lifeless and demanding construction, appraisal, and transit of scientific concepts. Pace Arendt, it is far from solitary and comprises much more than just *thinking* per se, much more than mind alone. But per Arendt, it is very much an encounter with "the manifold, never-ending affairs of human existence in the world, never arriving at a final solution to their riddles but ready with ever-new answers to the question of what it may be all about."

Ultimately, Fechner's and Breuer's lives did indeed head toward the infinite. Here the "lowered" context of everyday experiences and concrete concepts results in the highest of consequences: God. Both saw God and religious experience as just beyond the bounds of the knowledge produced and secured by science, yet they were drawn again and again to this place. Religious beliefs and experiences were thus intimately tied to the demands

of the day, animating the demons that held their strings. Such beliefs and experiences were neither mere consequences nor full causes; they cannot be explained by nor explain Fechner's and Breuer's scientific or everyday lives. Nevertheless, I hope to open a window onto these beliefs, showing what grappling with them might have looked like and meant.

Part I

Gustav Theodor Fechner and an "Exact Science of the Relations between Body and Soul"

Ich denke, es ist im Wissen wie in Leben am beßten, den Thurm von unten, statt von der Spitze an, zu bauen; dann mag man sich wohl von der Spitze aus etwas weiter umsehen, als es von unten gieng.

I think in knowledge, as in life, it is best to build the tower from below rather than from the top; then surely you will see out from the top somewhat farther than from below.

Gustav Theodor Fechner, untitled maxim, 1852, Sammlung Autographa, Bibliotheka Jagiellonska, Krakow.

INTRODUCTION

On Monday, 17 October 1842, the Leipzig physicist Gustav Theodor Fechner, then in the midst of a years-long illness that kept his eyes, stomach, and thought weak, recorded in detail a series of mental and physical exercises he had employed of late. Two of them stand out to readers familiar with Fechner's psychophysics, a science devoted to the relation between mind and body. First was an attempt to prevent any trains of thought from taking hold:

> I carry on furthermore another exercise, of which I have probably already spoken. This consists of scattering my thoughts with force, when they have taken up a certain direction or started spinning in a certain circle of ideas, and taking myself in or driving myself about against my own will, which has already for me become morbid and greatly contributes in mentally exhausting me. Customarily I carry out this exercise while walking [*Spazierengehen*] in the garden, such that, just as any thought, any idea is going to bring about a consequence, I jump off at once and direct my attention in another direction; this often happens only with great self conquest, since for each thought, so to say, its conclusions are dear, which are now here suffocated at birth. . . . I seek one moment to think of nothing at all, the next to let only the exterior things exert influence on me.[1]

1 Fechner, *Tagebücher* 1842:333–34. I cite Fechner's diaries from the published edition with the abbreviation *Tb*, the year, and pagination of that year's sheets (as counted by archivists), following the citation method

Second was an attempt to subject his digestive apparatus to his will:

> Yet another exercise, which I am likewise in the habit of undertaking while walking [*beim Spazierengehen*], is this: I try to divert the nerve energy from the brain onto the digestive tools, whose weakness often causes me trouble. Here I also think practically nothing, but I generate in myself an urge of the sort, as if that which otherwise forms thoughts should take a seat in the abdomen. It is difficult to describe this *nisus*. The digestive tools, in the customary state, are not capable of conducting any sensation to the brain or experiencing any influence of the will from there. If they are however inflamed, they nevertheless conduct pain to the brain. Should one not be able inversely to also introduce through will energy a supply line from the brain to those organs and thereby come to the aid of their inactivity? (*Tb* 1842:334–35)[2]

These exercises were fundamentally mirrors of each other.[3] The former, while superficially dealing only with the mind, was a submission of mind to body. When his mind had begun to run counter his will, he directed his attention outward, a move he

---

of the editors (e.g., *Tb* 1842:333–35); going forward, I do so in text (except for material from footnotes, all of which are editorial additions and are cited normally here). See Meischner-Metge, "Einleitung"; and Altmann, "Zur Edition der Tagebücher Fechners," esp. xxxii. From quotations, I omit the sheet numbers added by the editors, material Fechner crossed out, and interpolations by the editors (the latter two unless otherwise noted); I include Fechner's marginal additions without marking them (unless otherwise noted).

{"Ich setze ferner eine andere Uebung noch fort, von der ich wohl schon früher gesprochen, die darin besteht, meine Gedanken mit Gewalt zu zerstreuen, wenn sie eine gewisse Richtung eingeschlagen oder sich in einem gewissen Zirkel von Vorstellungen zu drehen angefangen haben, und mich wider meinen eigenen Willen darin fortnehmen oder umtreiben, was schon ganz krankhaft bei mir geworden ist und viel beiträgt, mich geistig zu erschöpfen. Gewöhnlich stelle ich diese Uebung beim Spazierengehen im Garten so an, daß, so wie irgend ein Gedanke, eine Vorstellung eine Folge nach sich ziehen will, ich gleich abspringe und die Aufmerksamkeit andershin lenke, was oft nur mit großer Selbstüberwindung geschieht, da jedem Gedanken so zu sagen seine Folgerungen lieb sind, die nun hier in der Geburt erstickt werden. . . . Bald suche ich gar nichts zu denken, bald nur die Außendinge auf mich einwirken zu lassen."}

2 {"Noch eine andre Uebung, welche ich ebenfalls beim Spazierengehen vorzunehmen pflege, ist die, daß ich die Nervenkraft vom Gehirn auf die Verdauungs-Werkzeuge abzulenken suche, deren Schwäche mir oft zu schaffen macht. Auch hiebei denke ich so viel wie Nichts, erzeuge ich aber in mir einen Drang der Art, als ob das, was sonst die Gedanken bildet, im Unterleibe Platz nehmen sollte. Es ist schwer, diesen *nisus* zu beschreiben. Die Verdauungswerkzeuge vermögen im gewöhnlichen Zustande keine Empfindung zum Gehirn zu leiten und keinen Willens-Einfluß von daher zu erfahren. Sind sie aber entzündet, so leitet sie allerdings Schmerz zum Gehirn. Sollte man nun nicht umgekehrt durch Willens-Energie auch eine Zuleitung vom Gehirn zu jenen Organen einleiten und dadurch ihrer Unthätigkeit zu Hülfe kommen können?"}

3 In total, he described five exercises, one before and then two following the mirrored ones. The first dealt with language, while of the latter two, one dealt with his eyes and the other with morality.

described with a bodily term: "I jump off." But such a directionality inevitably went not merely metaphorically but in fact via the body. His protocol concluded: "I seek one moment to think of nothing at all, the next to let only the exterior things exert influence on me, and the next to drive the thinking capacity [*Denkvermögen*] into, so to speak, the front of the head, the top of the head, or the back of the head, without other thoughts than the intention to do so" (*Tb* 1842:334).[4] Here, as he walked, Fechner's submission of mind to body alternated from complete erasure of the former through pure bodily perception of outer things to the driving of thinking capacity intentionally to specific parts of the head. Inversely, the latter was a submission of body to mind. Why, if an inflamed digestive apparatus can send pain to the brain, cannot the brain send "will energy" back? Such a power would be similar to bringing one's attention to the eye or the ear and its objects. He admitted the difference between the voluntary and involuntary bodily activities and that the latter (e.g., the digestive and circulation organs) were separate from the voluntary nervous agent. "The fact, however," he added, "that during lively digestion one cannot at the same time think in a lively manner and vice versa, shows nevertheless that they [the involuntary actions of digestion and circulation organs] are likewise subject to involuntary influences of the [nervous agent's] distribution, and the question is precisely whether one, through exercise and raised effort, cannot elevate these to voluntary influences" (*Tb* 1842:336; my interpolations).[5] Here, even the unruly involuntary body was brought possibly under the control of thought.[6]

4 {"Bald suche ich gar nichts zu denken, bald nur die Außendinge auf mich einwirken zu lassen, bald das Denkvermögen ohne andern Gedanken als die Absicht dazu so zu sagen in den Vorderkopf, die Kopfhöhe, oder den Hinterkopf zu treiben."}

5 {"Indeß der Umstand, daß man bei lebhafter Verdauung nicht zugleich lebhaft denken kann und umgekehrt, zeigt doch, daß sie [die unwillkührlichen Verrichtungen der Verdauungs- und Circulationsorgane] unfreiwilligen Einflüssen der Vertheilung [des Nerven-Agens] ebenfalls unterliegen, und es fragt sich eben, ob man diese nicht durch Uebung und erhöhte Anstrengung zur freiwilligen erheben kann." (My interpolations.)}

6 A number of readers have noted a possible comparison between Fechner's mind-body exercises and meditation or mindfulness. Yet such a comparison is unlikely to enlighten the relation between Fechner

In a manner deadly serious for Fechner, because of the stakes of his illness, and highly evocative for us, these two mirrored exercises enacted a problem at the very core of his scientific and philosophical oeuvre: the mind-body relationship.[7] His major scientific work, *Elemente der Psychophysik* (1860; *Elements of Psychophysics*), introduced the new science of psychophysics as "briefly an exact science of the relations between body and soul [*Leib und Seele*]."[8] He had been, as he wrote in his own retrospective account of the emergence of psychophysics in *Elemente*, "from time immemorial very attached to

---

and the history of meditation. During the nineteenth century, Western scientific researchers and colonial intermediaries played an important role in this history, especially in how meditation and mindfulness have come to be practiced today in the West (the relation of British physical culture and modern yoga is probably the most well-known part of this history). Yet Fechner's relation to scholarly Orientalism was either nearly absent or just remains opaque today due to a lack of sources. What's more, his few mentions of "the Hindus" in *Zend-Avesta* and *Nanna*, which emphasized their ostensible view of the ensoulment of the world rather than any beliefs or practices of the human mind-body, bordered between unlearned and bigoted. See, on the history of modern mindfulness in colonial encounters, Ditrich, "Buddhism between Asia and Europe"; on the view of Buddhism in high German idealism, Dumoulin, "Buddhism and Nineteenth-Century German Philosophy"; on the many claims about the history of yoga, Doniger, "Assume the Position." Traditions of Western Christian meditation, most prominent in the spiritual exercises of Ignatius of Loyola, were unlikely to be have been more familiar to Fechner, steeped in the Lutheran world.

7 In both his empirical and his philosophical work, Fechner used the two German dyads, *Körper-Geist* (body-mind/spirit) and *Leib-Seele* (body-soul), almost completely interchangeably. This was apparent on the first page of *Elemente der Psychophysik* (1860), where he referred generally to "the science of the relations between body and mind or body and soul." Fechner, *Elemente der Psychophysik*, 1:1. {"Die Lehre von den Beziehungen zwischen Körper und Geist oder Leib und Seele."} He elaborated the terms more fully in the companion philosophical text to *Elemente*, *Über die Seelenfrage* (1861; On the question of the soul), proposing *Körper* as the body of physicists and physiologists and *Leib* as the body as corresponding to a *Seele* (which followed and follows general usage). Fechner, *Über die Seelenfrage*, 11. *Geist* and *Seele*, however, could be configured in various ways, either total equivalents or splitting into "the active reason, the active understanding, the active will" and "disposition, feeling, sensation, hope, love, yearning, striving," respectively. Ibid., 12. {"Die tätige Vernunft, der tätige Verstand, der tätige Wille"; "Gemüt, Gefühl, Empfindung, Hoffnung, Liebe, Sehnen, Trachten."} But in the end, he preferred for his work the widest understanding, in which *Geist* and *Seele* were synonymous, and *Köper* and *Leib* were functionally the same as well. Ibid., 15–16. I thus translate *Geist* as *mind*, *Seele* as soul, and *Körper* and *Leib* as body (thereby mostly avoid *spirit*, except for when *Geist* comes in a combination [e.g., *Geisterreich*]). This pragmatic approach to terminology characterized Fechner's work in general; later in the introduction to *Elemente*, he referred to "inner and outer perception in the sense of customary linguistic usage." Fechner, *Elemente der Psychophysik*, 1:8. {"Innere und äussere Wahrnehmung im Sinne des gewöhnlichen Sprachgebrauches."}

8 Fechner, *Elemente der Psychophysik*, 1:v. {"Kurz eine exacte Lehre von den Beziehungen zwischen Leib und Seele."} Going forward, citations to *Elemente der Psychophysik* are done in text with the abbreviation *EP*. Only the first volume has been translated; as I draw from both volumes, I have not used this translation. Fechner, *Elements of Psychophysics*. The second edition, edited by Wilhelm Wundt and published after Fechner's death, provided helpful footnotes indicating where Fechner elaborated on specific ideas in three significant later works. Fechner, *Elemente der Psychophysik*, 2nd. ed.

the view of a far-reaching connection between body and soul and imagining this in the form of a double manifestation of the same fundamental essence" (*EP* 2:553).[9] Indeed, his habilitation of 1823, *Praemissae ad theoriam organismi generalem* (Premises toward a general theory of organisms), already included the parallel aspect to this relation that came to define Fechner's approach and its reception through his lifetime and beyond: "A strict parallelism exists between soul (*anima*) and body in such a way that from one, properly understood, the other can be constructed."[10] The specific exact and empirical form of this parallelism put forth in *Elemente* and its summation, a logarithmic relation between stimulus and sensation based on extensive experimentation, was yet to come. However, the object at the heart of Fechner's project—the connection between body and mind—had been present in his thinking in various guises for years.[11]

Yet the mirrored exercises contained another aspect, less obviously linked but just as crucial to Fechner's engagement with the mind-body connection: he practiced them while taking a walk. *Spazierengehen*—to take a walk or stroll—was here more than a mere backdrop.[12] Indeed, the "exterior things" that he let dominate his bodily attention in the mind exercise were physical features of his garden, such as the contrasting various greenery and yellow sand paths he noted in the following eye exercise (*Tb* 1842:338). But, qua daily

9 {"Von jeher der Ansicht von einem durchgreifenden Zusammenhange zwischen Leib und Seele zugethan und diesen in der Form einer doppelten Erscheinungsweise desselben Grundwesens vorstellend."}

10 Translation (with interpolation) in Marshall, "Fechner: Premises Toward," 442. The original is Fechner, *Praemissae ad theoriam organismi generalem*, 23. {"Parallelismus strictus existet inter animam et corpus, ita ut ex uno, rite cognito, alterum construi possit."} Marshall convincingly reads the parallelism thesis as well as the entire habilitation as building on the larger idealism of contemporary Naturphilosophie (specifically of Lorenz Oken and F. W. J. Schelling) while also emphasizing the necessity of a mathematical approach to the natural sciences, a combination that Fechner stuck with throughout his career.

11 Fechner did not use the term *parallelism* regularly in his work and never as part of the more general *psychophysical parallelism*, which Heidelberger suggests was coined by either the philosopher Alexander Bain or the psychologist Wilhelm Wundt. Heidelberger, *Nature from Within*, 169. Heidelberger is interested in this larger term because of its renewed pertinence in twentieth-century philosophical debates around the mind-body, specifically in the work of the Austro-American philosopher Herbert Feigl, and how these debates refigured the work of Fechner and other nineteenth-century scholars. Ibid., chap. 5.

12 References to Fechner's walking are always to *Spazierengehen* rather than mere *Gehen*.

experiences, Fechner's habitual walks were themselves the *experiential* counterpart to his *scientific* investigations of the mind-body connection as undertaken by psychophysics. They emphatically didn't provide the empirical material upon which the experiments of psychophysics were based. Instead, they were Fechner's immersion in and living out of the conceptual issues that came to the fore in the *Elemente*. There he already recognized that these issues extended beyond the specific human mind-body relation. Elaborating upon the short definition of psychophysics from the foreword cited above, he wrote in the introduction, "Under *psychophysics* shall here be understood an exact science of the functional or dependent relations between body and soul, more generally between the bodily and mental world, the physical and psychical world" (*EP* 1:8).[13]

Walking plunged Fechner's own personal connection of body and mind into the wider, deeper, and richer general connection of bodily and mental, physical and psychical. On foot, he experienced the connection of body and soul that was present throughout the entire world—in plants, stones, and stars. Just like humans, they were all "ensouled" (*beseelt*), as was the world itself. This connection of physical and psychical in the world at large was between an omnipresent God and the expanse of physical nature, as intertwined and dependent as that between Fechner's own mind and body.[14]

13 {"Unter *Psychophysik* soll hier eine exacte Lehre von den functionellen oder Abhängigkeitsbeziehungen zwischen Körper und Seele, allgemeiner zwischen körperlicher und geistiger, physischer und psychischer, Welt verstanden werden."}

14 N.b., I use "psychical" to translate *psychisch*, keeping Fechner's generally parallel uses of *physisch–psychisch* ("physical"–"psychical") and *körperlich–geistig* ("bodily"–"mental"). *Psychical* is thus a generic complement of *physical* rather having to do with the term's overriding present-day connotations of the occult, spiritualism, and theosophy. It's worth noting, though, that these connotations do date from this period, and Fechner was a notable (and skeptical) player in the encounter of empirical natural science and the claims of spiritualists in Germany. He attended, with his colleagues and friends Wilhelm Weber and Wilhelm Wundt, the séances and other demonstrations by the American spiritualist Henry Slade in Leipzig in the late 1870s, which were documented by the physicist Karl Friedrich Zöllner and were a major flash point of this encounter. On these sessions and their place in the subsequent rise of the occult across wider German culture, see Treitel, *A Science for the Soul*, chap. 1. Fechner kept his own detailed account of Slade's visit to Leipzig, published as part of his diaries (*Tb* 1877-2), an account of which is given in Bringmann, Bringmann, and Medway, "Fechner and Psychical Research," emphasizing his ultimate "guarded endorsement" of the presented phenomena. On the relationship between Fechner and Zöllner, and their shared interest in a

Ultimately, psychophysics, if its precepts and results were followed to the fullest extent via analogy beyond the empirical, "leads to the view of a God, omnipresent and conscious in nature, in which all minds live, weave and are, just as he in them, with individual mental intermediate stages between him and us; these stages are inherent to heavenly bodies and carry creaturely minds exactly so unitarily tied in themselves, just as these minds for their part are carried in the divine mind and just as the creaturely minds in turn carry in themselves their sense circuits and these their specific sensations" (*EP* 2:542), as he wrote in a late chapter in *Elemente*.[15]

These chapters offer a new interpretation of Fechner's entanglement with the mind-body relation in both his scientific work and the everyday experience of walking, taking into particular account how each context facilitated such a view of God. To do so, I examine his concurrent and interrelated *scientific* and *experiential* investigation of the mind-body connection, primarily in its most fecund phase leading up to the publication of *Elemente der Psychophysik* in 1860 (though taking account of his entire life and work). In both cases, Fechner was working to make the mind-body relation graspable within the idiom of the context, here scientific, there everyday. In the first chapter, "Fechner at the Threshold," I show how complex *Elemente*, the foundational text of psychophysics, really was, and how it only worked with the concept of the *threshold* as its prime mover. In the second chapter, "Fechner on a Walk," I bring to life Fechner's daily walks before offering critical, thick accounts of the experience to show how his pursuit of the mind-

---

fourth dimension of space, which was a significant aspect of their entanglement with Slade and spiritualism, see Thiele, "Fechner und Zöllner."

15 {"Die Consequenz dieser Auffassung führt zur Ansicht eines in der Natur allgegenwärtigen bewussten Gottes, in dem alle Geister leben, weben und sind, wie er in ihnen, mit, den Weltkörpern inwohnenden, individuellen geistigen Zwischenstufen zwischen ihm und uns, welche die geschöpflichen Geister eben so einheitlich verknüpft in sich tragen, wie sie ihrerseits im göttlichen Geiste getragen werden, und wie die geschöpflichen Geister wieder ihre Sinneskreise und diese ihre Sonderempfindungen in sich tragen."}

body relation operated while on two feet. First, I here consider the current literature on the mind-body sciences in this era and on Fechner, before giving a brief biography.

Historiographical

The literature on Fechner is as wide ranging as his life and work were. The most significant contribution is from Michael Heidelberger, who, in essays as well as his book, *Nature from Within*, has undertaken the most extensive and detailed analysis of Fechner's work as a whole, from his scientific endeavors in physics and psychophysics through his beliefs and worldview at large to his significant contributions to epistemology itself.[16] What's more, his survey of the secondary literature on Fechner remains the best way to begin canvassing what's available.[17] Two biographies scope out his life, one by his nephew Johannes Emil Kuntze from just after Fechner's death and one more recent by Hans-Jürgen Arendt, with a much more even-handed and contextually aware approach.[18] Three edited volumes provide a plethora of specific contributions that similarly mark out the main terrain, covering Fechner and the history of psychology specifically, Fechner and his work outside the natural sciences, and his life and work more broadly.[19] In addition to Heidelberger, the work most pertinent for these chapters is by Horst Gundlach, Marilyn Marshall, and Anneros Meischner-Metge. Gundlach offers detailed readings of *Elemente der Psychophysics* and attendant conceptually precise analysis.[20] A series of essays by Marshall are at once conceptually acute and take the interplay between his life and work seriously.[21]

16 Heidelberger, "Fechner's Impact for Measurement Theory"; Heidelberger, *Nature from Within*; and Heidelberger, "Gustav Theodor Fechner and the Unconscious."
17 Heidelberger, *Nature from Within*, 9–15.
18 Kuntze, *Fechner*; and Arendt, *Fechner*. See also Arendt, "Fechner [. . .] und die Leipziger bürgerliche Gesellschaft," on Fechner's social world in Leipzig.
19 Brožek and Gundlach, *G. T. Fechner and Psychology*; Fix and Altmann, *Fechner und die Folgen*; and Meischner-Metge, *Gustav Theodor Fechner*.
20 Gundlach, *Entstehung und Gegenstand der Psychophysik*; and Gundlach, "Was hat Fechner gemessen?"
21 Marshall, "Fechner, Dr. Mises"; Marshall, "William James, Gustav Fechner"; Marshall, "Fechner: Premises Toward"; Marshall, "Biographical Genre and Biographical Archetype"; Marshall, "Physics, Metaphysics, and

Anneros Meischner-Metge not only spearheaded the indispensable edition of Fechner's diaries, along with Irene Altmann, but provides one of the only sustained interpretations of his unpublished daily writings.[22]

To this literature, I hope to make three primary contributions: One, I show the conceptual complexity of Fechner's psychophysics and how the concept of the *threshold* allows for a new reading of that science as an entire integrated project. Two, I take his daily life, specifically his walking habits, seriously and analyze how they too were an investigation of the mind-body relationship, on par with the psychophysics. And three, I show how these two aspects, threshold and walking, relate in Fechner's conception of an omnipresent God as well as in his attempt to make the mind-body relationship a tractable aspect of that conception.

"The Entire Fechner"? A Brief Biography

Gustav Theodor Fechner's life was expansive in both time and topic, spanning nearly the entire nineteenth century, from 1801 to 1887, and ranging from early experimental work on electricity in correspondence with the physicist Georg Simon Ohm through extensive publications of satire, verse, and riddles, to his lifelong philosophico-theological writings on the ensoulment (*Beseelung*) of the world.[23] The second of five children, Fechner was born to Samuel Traugott and Johanna Dorothea Fechner in Groß Särchen (then in the eastern part of Saxony, today Żarki Wielkie in Poland); he and his brother were raised strictly by their father and then by their maternal uncle, both Lutheran pastors like their fathers, in a milieu of Enlightenment-forged "moral Christianity,"[24] speaking Latin as well

Fechner's Psychophysics"; Marshall, "Psychological Acrobat"; and Marshall, "Early Work of Gustav Theodor Fechner."

22 Meischner-Metge, "Einleitung"; and Meischner-Metge, "Gustav Theodor Fechner."

23 This biographical sketch draws primarily from Fechner, "Lebenslauf"; Kuntze, *Fechner*; and Arendt, *Fechner*, with occasional specific insights from his diaries.

24 Arendt, *Fechner*, 12.

as they spoke German.[25] After a brief sojourn in Dresden, Fechner finished his medical studies in Leipzig, where he remained for the rest of his life. He was mostly uninspired by his lectures and ultimately declined, for a variety of reasons, to become a practicing doctor. He soon hit upon the three vocational avenues (professional and intellectual) he would pursue throughout his life: belles lettres, speculative and Romantic Naturphilosophie, and exact experimental natural science.[26] In lieu of practical medicine, it was the first and third, via connections in the publishing world, that provided him necessary income

25 Once Fechner's father died, he claimed he and his brother lost their Latin and "had to relearn it grammatically, just as laboriously as others." Fechner, "Lebensabriss," 22. {"[Wir] haben es später ebenso mühsam grammatikalisch wieder lernen müssen, als Andere."} In his biography of Fechner, Kuntze published excerpts from a number of unpublished materials (mostly letters and diaries) that were lost when the major Fechner *Nachlass* at the Königlich Sächsischen Gesellschaft der Wissenschaft zu Leipzig was destroyed during World War II, including various diary entries forming this "Lebensabriss" (Life sketch) and the also notable "Krankheitsgeschichte" (Illness chronicle), chronicling Fechner's illness. A catalogue of this material was published in Lipps, "Bericht über das Fechner-Archiv." Döring and Plätsch, "Kommentiertes Verzeichnis" lists Fechner's archival material that has been published and cross references it to the archival holding and includes a detailed correspondence of the material published by Kuntze and the Lipps catalogue of the later destroyed archive. I cite the "Lebensabriss," given its title by Döring and Plätsch, and the "Krankheitsgeschichte," given its title already in Kuntze, as stand-alone items.

26 I leave Naturphilosophie in German. While it referred broadly in the eighteenth century to philosophical investigations aimed at nature, as did its English cognate *natural philosophy*, it took on a new set of connotations around 1800 (along with the rise of Romanticism), primarily in the German-speaking world, that mark it as its own highly specific movement. Dietrich von Engelhardt has done much work to disentangle these connotations, delineating Romantic, speculative, and transcendental Naturphilosophie, with the first more or less identical with practice-focused Romantic *Naturforschung* (nature research). The first two were closely linked under the general heading of metaphysical Naturphilosophie, while the third (initiated by Kant) was opposed to the metaphysical. The philosopher F. W. J. Schelling was the major figurehead of both speculative and Romantic Naturphilosophie (Hegel, for example, represented speculative but not Romantic Naturphilosophie), and it was this branch that was most significant for Fechner. Most simply, it combined empirical research with a commitment to asking and speculatively answering bigger questions (e.g., related to the divine); as Engelhardt puts it, in only one of the many elements given in his detailed description of Romantic Naturphilosophie and *Naturforschung*, "*Naturforschung* shall join speculation and empirical knowledge and shall not disregard or make absolute one of the sides. Every natural finding consists of rational and sensuous elements." Engelhardt, *Historisches Bewußtsein in der Naturwissenschaft*, 106. {"Naturforschung soll Spekulation und Empirie verbinden und nicht eine der Seiten vernachlässigen oder verabsolutieren. Jede Naturerkenntnis besteht aus rationalen und sinnlichen Elementen."} See Engelhardt, *Historisches Bewußtsein in der Naturwissenschaft*, chap. 3; and Engelhardt, "Romantic *Naturforschung* around 1800"; see also, on the cultural and political background more broadly, Engelhardt, "Romanticism in Germany," 111–14. Simon Schaffer provides an incisive consideration of the broader social and epistemological aspects of changes in the natural sciences around 1800 beyond national confines (e.g., the status of evidence, the persona of the natural experimenter, the relation of the scientific and the aesthetic) in Schaffer, "Public Spectacle"; and Schaffer, "Self Evidence."

immediately. "Beweis, daß der Mond aus Jodine bestehe" (Proof that the moon is made of iodine) published under the pseudonym Dr. Mises in 1821, satirized much of practical medicine of the day.[27] Of the second two, represented most prominently by the doctor Lorenz Oken and the Parisian physicist Jean-Baptiste Biot, respectively, he later reminisced about their early interrelated effect on his intellectual trajectory: "In February 1820, Oken's Naturphilosophie came into my hands; I was so enthused by its first chapters, even without fully understanding them and completely without finding clarity in further progress, that my mind received from the work its direction for many years. Gradually I was, namely through the translation of the Biot textbook (1824), steered in a more exact trajectory; as a result, it became clear to me that only via such a route could clear, sure, and fruitful results in natural science be reached."[28] All three expressed, in varying arrangements and counterpoints, his marveling, inquisitive, and ironic stance toward the natural world and how it was experienced.[29]

27 Much of his literary output was published under this pseudonym and was later collected as Dr. Mises [Fechner], *Kleine Schriften* (1875). Notably piquant selections include "Vergleichende Anatomie der Engel" (Comparative anatomy of angels), "Der Schatten ist lebendig" (Shadow is living), and "Warum wird die Wurst schief durchschnitten?" (Why is sausage cut at an angle?).

28 Fechner, "Lebensabriss," 39. {"Im Februar 1820 kam mir Oken's Naturphilosophie zur Hand, durch deren erste Kapitel ich, ohne sie ganz zu verstehen und vollends ohne Klarheit im Fortgange zu finden, doch so begeistert wurde, daß mein Geist Jahre lang dadurch seine Richtung erhielt. Allmählich wurde ich, namentlich durch die Uebersetzung des Biot'schen Lehrbuchs (1824), in eine exaktere Bahn gelenkt, indem mir dadurch zum Bewußtsein kam, daß nur auf solchem Wege zu klaren, sicheren und fruchtbaren Resultaten in der Naturwissenschaft zu gelangen sei."}

29 The mixture of these three vocations, and how they ultimately persisted or not in Fechner's longer career, is a matter of some debate in the historiography. Marshall offers a detail reading of the early satires, suggesting that they gave outlet to Fechner's frustrations with practical medicine and mediated the insoluble conflict between Naturphilosophie and the exact sciences, a position that Heidelberger echoes. Marshall, "Fechner, Dr. Mises," 42–44; and Heidelberger, *Nature from Within*, 31. While their readings are acute, I diverge from Heidelberger's further conclusion that Fechner's primary allegiance to empirical science ultimately extinguished any ties to Naturphilosophie beyond the standard residue of a youthful reading phase. Heidelberger calls it an "overcoming" and "deserting" of Naturphilosophie. Heidelberger, *Nature from Within*, 26, 30. Of the lasting influence of Naturphilosophie, Fechner himself wrote, "The influence of that period, however, has stayed with me in the view of a unitary summit and mental penetration of nature and has found expression in later writings, but without my having then held the Schelling-Oken way of thinking still as authoritative." Fechner, "Lebensabriss," 39. {"Doch ist der Einfluß jener Periode in der Ansicht einer einheitlichen Gipfelung und geistigen Durchdringung der Natur mir verblieben, und hat in späteren Schriften Ausdruck gefunden, ohne daß ich dann die Schelling-Oken'sche Auffassungsweise

After his habilitation of 1823 on Naturphilosophie and his series of translated French physics textbooks, Fechner began his own electrical experiments, related to Ohm's law and ultimately in correspondence with Ohm himself and the mathematician Carl Friedrich Gauß. He was appointed the professor ordinarius of physics at Leipzig in 1834, but only took the position the next year, as he was in the midst of editing an eight-volume encyclopedia for the Breitkopf und Härtel publishing house.[30] In 1836, he published *Das Büchlein vom Leben nach dem Tode* (*The Little Book of Life after Death*), a short work (originally published under his pseudonym) intervening into the then lively debate on immortality in the Germanosphere, which first articulated some important aspects of his belief about souls and was ultimately his most popular work, going through three editions in his lifetime.[31] Through the 1830s, he partook in one of the several regular intellectual circles (*Kränzchen*) that would be significant over his life, meeting regularly with the

noch für maßgebend gehalten hätte."} "A unitary summit and mental penetration of nature" perfectly described Fechner's later view on the ensoulment of the world. Heidelberger attributes this view as much to Fechner's "romantic-aesthetic attitude" and, to a lesser extent, his engagement with philosophical idealism in general. Heidelberger, *Nature from Within*, 35–37, 41–42. Marking these categories apart so starkly, especially speculative Naturphilosophie and a Romantic view of life, seems unproductive to me, considering their mixture in the people and works with which Fechner dealt in the 1820s and his own lifelong mixing of beliefs, methods, and objects of inquiry. Furthermore, the method that propelled his works in this vein of Naturphilosophie was extended analogy, which could easily be read as speculative in the very same mold of Naturphilosophie. Fechner's *Über die Seelenfrage* is a good example of a thoroughly methodological marriage of analogical reasoning and his view on the soul of nature. Marshall highlights the importance of analogy, while emphasizing Fechner's critique of the lack of firm ground upon which speculative Naturphilosophie built its analogies. Marshall, "Fechner, Dr. Mises," 46–48; and Marshall, "Psychological Acrobat," 32–35.

30 Arendt estimates that Fechner himself authored roughly one third of the total 5,689 topics and 7,032 pages. Arendt, *Fechner*, 60.

31 The immortality problematic, more broad than a debate, concerned most simply the nature of the soul itself via its relation to death (itself an old question in Christianity) in the context of fervent new philosophy, science, aesthetics, literature, politics, and more. While major philosophers, specifically Kant and Hegel, marked out its primary contours, the problematic was at the nexus of philosophical idealism, Christian theology, Romantic literature, and wider popular writings. Czakó, *Geist und Unsterblichkeit*, 101–2. Fechner's *Büchlein* was responding directly to *Die philosophische Geheimlehre von der Unsterblichkeit des menschlichen Individuums* (1833; The philosophical esoteric doctrine of the immortality of the human individual) by his friend Christian Hermann Weiße, a philosopher, who was in turn responding to *Gedanken über Tod und Unsterblichkeit* (1830; *Thoughts on Death and Immortality*) by the anonymous Hegelian Ludwig Feuerbach. Arendt, *Fechner*, 72–74. István Czakó gives a very good summary of the major philosophical aspects of the problematic. Czakó, *Geist und Unsterblichkeit*, 103–28.

book dealer Friedrich Grimmer, the publisher Hermann Härtel, the physiologist Alfred Volkmann, and the philosopher Christian Hermann Weiße among others, all of whom remained fixtures in Fechner's life. In 1833, he married Clara Volkmann, sister of Alfred and later author of the well-known collection of children's tales, *Die schwarze Tante* (1848; *The Black Aunt*). The next year, Fechner's ten-year-old nephew Johannes Emil Kuntze moved in with the new husband and wife and was raised as their adopted son. While Fechner and Kuntze never achieved a mutually supportive relationship, the three of them created a bright, stubborn, and funny family unit, especially within the tight, lively, and child-filled familial worlds of the Volkmanns and Härtels.[32]

All the while, his work only increased, continuing his literary activities while lecturing and experimenting as professor, a combination that led to exhaustion and a generalized illness that included specific inabilities to take in light, digest food, and control his thoughts from 1839 to 1843. As he wrote in his own personal account of the illness in 1845, "I broke myself to pieces, maltreated my head from morning to evening and during some nights, in order to gain sure ground, and could all the same never satisfy myself with it."[33] He dated the episode as lasting roughly four years, but many of the primary ocular, digestive, and mental symptoms remained persistent bugbears throughout his remaining life. The period did, however, leave a permanent mark, doubling his conviction of the world's beauty, now experienced with more difficulty, and his commitment to unfurling it.[34] Moreover, after temporarily stepping away from his professorship in 1840, he declined

32 Fechner recorded some of the difficulties in his relationship with Kuntze in his diary (*Tb* 1844:87–88; 1862:27–40).

33 Fechner, "Krankheitsgeschichte," 106. {"Ich zerbrach mir, mißhandelte den Kopf von Morgen bis Abend und in manchen Nächten, um festen Fuß zu gewinnen, und konnte mir doch nie selbst dabei genügen."}

34 The "Krankheitsgeschichte" published by Kuntze included a number of extreme statements, such as: "It is certain, that I then believed myself to have been destined by God himself for extraordinary things and prepared for these by my suffering itself; that I partly imagined myself already in possession of extraordinary physical and psychical powers, partly believed myself on the way to being so; that the entire world appeared to me in a different light as before and as now; the riddles of the world seemed to reveal themselves; my earlier existence seemed to be simply extinguished and the present crisis to be a new birth. Obviously my

in 1843 to return permanently, taking a small pension, and in 1846 began offering a weekly lecture (not on physics) at the university. Another intense period of literary activity produced *Das höchste Gut* (1846; The highest good), *Nanna; oder, Über das Seelenleben der Pflanzen* (1848; Nanna; or, on the soul life of plants), and *Zend-Avesta; oder, Über die Dinge des Himmels und des Jenseits* (1851; Zend-Avesta; or, on the things of heaven and of the beyond) and was capped in 1850 by an insight that Fechner himself claimed led to the founding of psychophysics.

As Fechner finished *Zend-Avesta*, he came back to a numerical schema (*Zahlenschema*) he had designed to represent the relations of body and soul and lower and higher mental functions, combining it with another idea of his, that a differential of living force might serve as a measure of mental intensity.[35] "Hereby in conjunction, it occurred only luckily to me," Fechner recorded sometime in October 1850, "that, if the

---

state was on the brink of a mental disruption [*Seelenstörung*]; nevertheless, everything gradually settled into an equilibrium." Fechner, "Krankheitsgeschichte," 125. {"Gewiß ist, daß ich damals glaubte, von Gott selbst zu außerordentlichen Dingen bestimmt und durch mein Leiden selbst dazu vorbereitet worden zu sein, daß ich mich im Besitze außerordentlicher physischer und psychischer Kräfte teils schon wähnte, teils auf dem Wege dazu zu sein glaubte, daß mir die ganze Welt in einem anderen Lichte erschien, als früher und als jetzt; die Rätsel der Welt sich zu offenbaren schienen; mein früheres Dasein geradezu erloschen und die jetzige Krisis eine neue Geburt zu sein schien. Offenbar war mein Zustand dem einer Seelenstörung nahe; doch hat sich allmählich Alles ins Gleichmaß gesetzt."}

These, along with the dating of the illness to a specific period, certainly contributed to the impression that it was a contained episode. But reading his diaries in toto shows that his eye troubles remained throughout his entire life as did, though attenuated, his issues with runaway thoughts. Moreover, the daily entries the middle of his illness in 1842 show that his daily life was not in fact extremely altered from the other years he kept a regular diary. All of this is to say that, despite the superficially unique aspects of his illness, there is not a compelling reason to understand it, its characteristics, or evidence of it apart from his life as a whole. The narrative of the illness fits the very prevalent trend across the nineteenth-century of scientific overwork followed by nervous breakdown among mostly male researchers, including Charles Darwin, William James, and Sigmund Freud, itself part of a larger history of nervous illness in the bourgeoisie during this period. On this broader history, see Oppenheim, *"Shattered Nerves"*; and Roelcke, *Krankheit und Kulturkritik*. There is also, however, an aspect of Fechner's illness that extends backward to the Romantic researcher's abuse of his own body while pursuing wide-ranging investigations (e.g., staring at the sun, in Fechner's case). Of this phenomena, the autodidact chemist Johann Wilhelm Ritter stands out for the extremity of his abuse and commitment to a certain connection between this abuse and natural research. See Strickland, "Self-Knowledge."

35 This work was ultimately published as an addendum in *Zend-Avesta*, "Kurze Darlegung eines neuen Principes mathematischer Psychologie." On the road from this early exposition to *Elemente der Psychophysik*, see Lennig, *Von der Metaphysik zur Psychophysik*.

living force comes into being from a specific beginning value via summation of its absolute increments, the soul will also probably add the corresponding *relative* increments. And hereby was the principle found, with whose further development I am just now occupied. It was October 22 early in bed, where this took shape for me" (*Tb* 1850:13).[36] Put another way, each absolute increment of living force would be accompanied by an increment in the soul that was equivalent to the *relative* increment of living force. He recognized at the time the importance of the idea and continued, "If this principle should prove itself, which is still pending, then it would be of course a tremendous discovery, well worth that I record its date. For the consequences, which are already now developing for me and even more those that I foresee, are astonishing even to me. All of philosophy will not only be shaken but find within anchor and grounding" (*Tb* 1850:13–14).[37] He then spent much of the following decade (mostly from 1855) developing a variety of new measurement methods and in correspondence with a small group of other researchers aimed at empirically examining this theory, which culminated in the publication of *Elemente der Psychophysik* in 1860.[38] Despite the emphasis on this single insight and its earliest formation (in both unpublished and published materials), Fechner made it clear that the idea was inert

36 {"Es fiel mir nur glücklicherweise hiemit in Verbindung ein, daß, wenn die lebendige Kraft durch Summation ihrer absoluten Zuwüchse von einem bestimmten Anfangswerth entsteht, auch wohl die Seele die zugehörigen *verhältnismäßigen* Zuwüchse summiren werde. Und hiemit war das Princip gefunden, mit dessen Fortentwickelung ich mich jetzt beschäftige. Es war den 22. Oct. früh im Bette, wo sich mir dieß gestaltete."}

37 {"Wenn sich dieß Princip wirklich bewähren sollte, was noch dahin steht, so wäre es freilich eine ungeheure Entdeckung, wohl werth, daß ich ihr Datum aufzeichnen. Denn die Consequenzen, die sich mir schon jetzt entwickeln, und noch mehr die, die ich voraussehe, setzten mich selbst in Erstaunen. Die ganze Philosophie wird davon nicht sowohl erschüttern werden, als darin Anker und Grund finden."}

38 In the publication, he specifically highlighted his conception of 22 October 1850 (even noting the bed as the site of the insight; *EP* 2:554). The psychologist and historian of psychology Edwin Boring marked and celebrated Fechner Day on 22 October at his lab at Harvard (at least occasionally), though this may have had as much to do with his own birthday being 23 October as with honoring Fechner. Rosenzweig, "Final Tribute," 787–90. Fechner cited the 22 October date in *Elemente der Psychophysik* and the identification of the date stood out at the time; he first noted it in an entry dated merely "September, October" and then, on the following specific stand-alone outline of the idea that was titled (unlike nearly all entries) "First Draft," he wrote "22." on top of a different date that had been previously recorded (*Tb* 1850:11–15, 16)—it doesn't seem like he put much specific stock in it later, not mentioning it again in his diaries.

without significant further conceptual and, more important, empirical work.[39] Yet this insight, when reformulated and then combined with the book's methods and empirical results, was what he became best known for and what guided the nearly thirty years of active investigation, publication, and correspondence with other researchers that followed.

The importance of *Elemente* for understanding Fechner as a whole derives less from its role as the major introduction and elaboration of a mathematical principle relating body and mind and more from its expression of an entirely new experimental situation. Not because the situation was institutionalized or spread with the growth of a discipline, but rather because it encapsulated Fechner's overall scientific approach: one of repeated new starts and unceasing investigation. The psychophysical experiment, as he wrote in the foreword, "now lays claim to its own room, its own apparatus, its own methods. . . . And so I search for the primary fruit of our present investigation less in that which it has till now borne than in that which it promises one day to bear. What is here present is a scanty beginning of a beginning" (*EP* 1:ix).[40] And while he reserved the term *psychophysics* for the specific empirical investigation of the mind-body nexus, it can be understood more widely as the intersection that tied together his various callings—as belletrist, Naturphilosoph, experimenter; each one only ever beginning again, if from a different angle, the unceasing project of excavating new knowledge of objects in the world. He summed up more generally this vision of his scientific project in a diary entry of 1846: "My opinion is also that the task of science should in general be less to conceal things, which are in themselves clear, in the dark depths than to pull things, which seem dark, out into the clear light, where they are for everyone more comprehensible than before" (*Tb* 1846:5).[41]

39 For his account of the genesis of the idea and the subsequent necessary work, see *EP* 2: chap. 47.

40 {"Nimmt nun sein eigenes Zimmer, seinen eigenen Apparat, seine eigenen Methoden in Anspruch. . . . Und so suche ich die Hauptfrucht unserer bisherigen Untersuchung weniger in der, die sie bisher getragen hat, als der, die sie einmal zu tragen verspricht. Was hier vorliegt, ist ein dürftiger Anfang eines Anfanges."}

41 {"Auch ist meine Meinung, daß die Aufgabe der Wissenschaft überhaupt weniger die sein sollte, Dinge,

Moreover, without a professional institute or office after 1840, Fechner's investigative situation traveled with him, from his bed and desk, through Leipzig's Café Français and Rosental park, to the walking paths of Thuringia's forests and hills. At these sites with colleagues, family, and friends, all overlapping categories, the psychophysical situation rendered moot personal and professional distinctions, staging instead the scene of his inquisitive and marveling stance toward the natural world and how it was experienced.

The persistence and ubiquity of this approach to scientific work and being in the world was so strong that Fechner himself perceived his life as sedate, prosaic, and more or less unremarkable. Looking back in 1862, after a near decade-long silence in his diaries, he wrote, "Nothing particularly notable happened to me in the course of these 20 years" (*Tb* 1862:18), a period that included the "end" of his major illness and the primary insight and work of psychophysics.[42] After *Elemente der Psychophysik*, his publication carried on apace, producing two books shortly thereafter on belief and religion, two further books on psychophysics proper (each responding at length to the responses the first work generated), a work on experimental aesthetics, and a new attempt at laying out his entire philosophy.[43] His energetic investigations didn't end with the completion of a manuscript, and he routinely made changes or additions to works already at the printer, noting in his diary, "Often what's best or the best version occurred to me only in the end" (*Tb* 1862:325).[44]

The vigor with which he approached his objects also characterized his interpersonal relations, personal and professional. During his toast at the dinner for a new rector of the

---

die an sich klar sind, in die dunkle Tiefe zu verstecken, als Dinge, die dunkel scheinen, an das klare Licht hervorzuziehen, wo sie jedem faßlicher als vorher werden."}

42 {"Besonders Merkwürdiges ist mir im Laufe dieser 20 Jahre nicht begegnet."}

43 The works on beliefs and religion were *Über die Seelenfrage* (1861); and *Die drei Motive und Gründe des Glaubens* (1863; The three motives and reasons of belief). Those on psychophysics were *In Sachen der Psychophysik* (1877; In the matter of psychophysics); and *Revision der Hauptpuncte der Psychophysik* (1882; Revision of the primary points of psychophysics). That on experimental aesthetics was *Vorschule der Aesthetik* (1876; Introduction to aesthetics), and the general philosophy was *Die Tagesansicht gegenüber der Nachtansicht* (1879; The day view as against the night view).

44 {"Oft fiel das Beßte oder die beßte Fassung mir erst zuletzt ein."}

university in 1864, he compared the present scene, "in which traditionalists and rationalists, materialists and idealists, atomists and dynamicists, reactionaries and men of progress dine out of the same dishes totally peaceably, as if they were best friends, while otherwise each is against the other, one always wants kill the other" (*Tb* 1864:247) to a booth at the trade fair, in which a wolf and a lamb, a cat and a rat, a fox and a hen, and a hawk and a dove all ate together in peace;[45] the underlying conflict was the lifeblood of science: "After all, may we, out of the threefold point of view, let dispute live: that it preserves wisdom in a living manner, that it preserves our appetite in a living manner, and that it preserves our amicable communication in a living manner" (*Tb* 1864:253).[46] His dealings with family and friends, and especially his wife, were similarly enlivened with friendly but purposeful conflict, even in matters apart from science proper. After a discussion that ranged from the presence of the minister Eduard von Wietersheim at Weiße's lecture to Bavarian King Ludwig's Walhalla hall one evening in 1842 (*Tb* 1842:547–62), Fechner and friends turned to a pressing matter: "On the occasion of soup, the question: which is the worst soup?" (*Tb* 1842:559).[47] Answers included apple soup, pumpkin soup, and mock turtle soup, to which Fechner added, "Lilac soup without or with inadequate wine, sugar, and spice, just to jibe at my wife a bit" (*Tb* 1842:560).[48]

In portraying "the entire Fechner," his first biographer, Kuntze, presented a man dominated by his *thinking*—scientific, literary, and beyond—and his work recording it: "His entire long life was simply thoroughly fulfilled by working at his desk; throughout

45 {"Worin Orthodoxen und Rationalisten, Materialisten und Idealisten, Atomistiker und Dynamiker, Reactionäre und Fortschrittsmänner, ganz verträglich aus denselben Schüsseln speisen, als wenn sie die beßten Freunde wären, während sonst jeder wider den andern ist, einer immer den andern todt machen will."}

46 {"Lassen wir nach Allem den Streit aus dem dreifachen Gesichtspuncte leben, daß er die Weisheit lebendig erhält, daß er unsern Appetit lebendig erhält und daß er unsern freundschaftlichen Verkehr lebendig erhält."}

47 {"Bei Gelegenheit der Suppe die Frage: welches die schlechteste Suppe sei?"}

48 {"Fliedersuppe ohne oder mit nicht hinreichendem Wein, Zucker und Gewürz, um etwas auf meine Frau zu sticheln."}

his lifespan, the interruptions were always only few and short."[49] While his pursuits within a career of the mind were varied, like "a mighty large woven fabric, in whose surface the shadows of some mystical crease played a significant factor," ultimately "the primary fabric consisted of the most laborious and nearly incessant work of thinking, researching, and experimenting."[50] This image of Fechner the thinker was echoed by his most famous successor in Leipzig, the psychologist Wilhelm Wundt, in his celebration of Fechner's centenary in 1901. There Wundt connected the indefatigable thinking and his regular walking, emphasizing that even the thinking that did take place while walking was subordinate to the more formalized setting of the desk. "It would often happen," Wundt wrote, "that he had just set out with his faithful life companion on the daily walk [*Spaziergang*], which he allowed himself as a one and only rest during the day, when he once again returned from the street into his study in order to quickly bring to paper a thought that had just come to him."[51] Fechner himself also expressed such a sentiment, looking back from 1885, when he reduced everything to the desk itself: "My life presents no memorable events at all and is led primarily at my desk."[52]

In what follows, I aim to show how Kuntze and Wundt were from one viewpoint correct, in tracing the intricacies of Fechner's complex thought, and from another vastly mistaken, in bringing forward the everyday embodiment of the very same issues. Yet, as this biographical sketch has hinted at, Fechner's ironically critical, empirically oriented, and

49 Kuntze, *Fechner*, 311–12. {"Sein ganzes langes Leben war eben durchaus von der Arbeit am Schreibtisch erfüllt; der Unterbrechungen waren zu allen Lebenszeiten immer nur wenige und nur kurze."}

50 Kuntze, *Fechner*, 344. {"Einem gewaltig großen Gewebe, in dessen Fläche die Schatten mancher mystischen Falte hineinspielen"; "das Hauptgewebe bestand aus der mühsamsten und fast unausgesetzten Arbeit des Denkens, Forschens und Experimentirens."}

51 Wundt, *Fechner*, 61. {"Da konnte es wohl vorkommen, dass er, wenn er den täglichen Spaziergang mit der treuen Lebensgefährtin, den er sich als einzige Erholung im Tage gönnte, eben angetreten hatte, noch einmal von der Straße in seine Studierstube zurückkehrte, um rasch einen Gedanken, der ihm gekommen war, zu Papier zu bringen."}

52 Fechner, "Lebenslauf," 1222. {"Mein Leben bietet überhaupt keine denkwürdigen Ereignisse dar und ist hauptsächlich am Schreibtisch geführt."}

generatively marveling stance contained these sides not in tension or contradiction but expressed them depending on the position of the observer.

2 FECHNER AT THE THRESHOLD

"Under *psychophysics*," wrote Fechner in the introduction to *Elemente der Psychophysik*, "shall here be understood an exact science of the functional or dependent relations between body and soul, more generally between the bodily and mental world, the physical and psychical world" (*EP* 1:8).[1] He had been interested in this problem throughout his life: a thesis proposing the "parallelism" of body and soul was put forth in his habilitation, *Praemissae ad theoriam organismi generalem* (1823). The interest was also evident in his daily life, as recorded in one of the earliest diary entries, where he along with two friends mused on the relation between perception and proportionality, based on the observation that "while *two* lights do not even make a room much lighter than one, *one* light nevertheless makes a room totally without any comparison lighter than none at all" (*Tb* 1831:7).[2] In *Elemente*, he recognized that the problem of the relationship between body and soul was in fact ancient. Yet what allowed for the new name and new science was his new "formulation and treatment" (*Fassung und Behandlung*) of the task at hand: studying the relations between body and soul (*EP* 1:v).[3]

The *treatment* was both simpler and more commonplace: it was empirical. "All discussions and investigations of psychophysics relate most simply," Fechner elaborated, "to the appearance side of the bodily and mental world, to that which appears either immediately through inner or outer perception, is ascertainable from what is evident, or is graspable as condition, category, context, sequence, law of the evident; briefly, to the physical in the sense of physics and chemistry, to the psychical in the sense of

1 {"Unter *Psychophysik* soll hier eine exacte Lehre von den functionellen oder Abhängigkeitsbeziehungen zwischen Körper und Seele, allgemeiner zwischen körperlicher und geistiger, physischer und psychischer, Welt verstanden werden."}

2 {"Während *zwei* Lichter eine Stube nicht eben viel heller machen als eins, doch *ein* Licht eine Stube ganze ohne allen Vergleich heller macht, als gar keins."}

3 See above on the relationship between the two major German binaries *Körper-Geist* and *Leib-Seele* (*EP* 1:1).

empirical psychology (*Erfahrungsseelenlehre*), but without being in anyway traced back to the essence of the body or of the soul behind the world of appearances in the sense of metaphysics" (*EP* 1:8).[4] As a branch of natural science and opposed to metaphysics, psychophysics dealt with the realm of "appearance" rather than "essence" (*EP* 1:8–9).[5]

The *formulation*, on the other hand, was more complicated. It was one of *perspective*, in which empirical approaches to the mind-body could, and in fact must, take different perspectives.[6] First of all, any account of their relations could not separate the two sides: from within the mental world, where sensations and thoughts were immediately conscious and available, the bodily was obscured (e.g., "the movements in the brain"; *EP* 1:2); while from within the bodily world, where facets of our own and others' bodies were immediately available to physiological and physical investigation, the mental was obscured. The mind-body was thus like any number of other possible objects of investigation, in which two standpoints produced greatly different manifestations; Fechner's main examples were concave and convex sides seen from either side of a circle and the Copernican and the Ptolemaic universe seen from the sun or the earth. But unlike those objects, here the observer *was* the object. One standpoint was *internal* to the observer, while the other

4 {"Alle Erörterungen und Untersuchungen der Psychophysik beziehen sich überhaupt blos auf die Erscheinungsseite der körperlichen und geistigen Welt, auf das, was entweder unmittelbar durch innere oder äussere Wahrnehmung erscheint, oder aus dem Erscheinlichen erschliessbar, oder als Verhältniss, Kategorie, Zusammenhang, Auseinanderfolge, Gesetz des Erscheinlichen fassbar ist; kurz auf das Physische im Sinne der Physik und Chemie, auf das Psychische im Sinne der Erfahrungsseelenlehre, ohne dass auf das Wesen des Körpers, der Seele hinter der Erscheinungswelt im Sinne der Metaphysik irgendwie zurückgegangen wird."}

5 Except for these brief moments in the foreword and introduction, and a few other locations, Fechner avoided engaging with contemporary metaphysical and philosophical debates on the mind-body connection. He specifically noted that the text wouldn't go into debates between materialists and idealists (*EP* 1:xi, 9), and only mentioned monism and dualism once in order to dismiss the debate (*EP* 1:6).

6 It is important to note that *perspective* and *perspectival* are my terms for Fechner's formulation of his task (to which he gave no specific name, while he did use *empirical* liberally). I use these terms because of the subsequent emphasis in the introduction on the different "standpoints" from which one can observe an object or undertake an investigation (*EP* 1:1–6).

was not, yielding a single possible inner standpoint and a plethora of possible outer standpoints (*EP* 1:1–5).[7]

This inextricability of mind and body and then of standpoint and object led Fechner to ask: "What belongs together in the inner and outer manifestation of things and which laws exist for their changes by way of their connection?" (*EP* 1:9).[8] This was a question of the *functional* nature of the mind-body relations: If the relations were functional, what was the function? He distinguished between two types of functional relations: first, immediate and direct ones, and second, mediate and indirect ones (*EP* 1:8–10). "Sensuous sensations stand in immediate dependence on certain activities in our brain," he wrote of the first type; but these same sensations stand "only in mediate dependence on outer stimuli, which elicit these activities only via in-between action of a nerve conduit to our brain" (*EP* 1:9–10).[9] Underlying both immediate and mediate

7 Fechner used the terms *inner* and *outer* somewhat casually and with slight variations in meaning specific to the instance; parsing them out is crucial partly because of how important the terms were for psychophysics and partly because I myself deploy them later, in yet another situationally determined way, for my analysis of Fechner's walking. So while *inner perception* defined the mental and *outer perception* the bodily (*EP* 1:8), *inner psychophysics* wasn't confined to the mental, nor was *outer psychophysics* confined to the bodily; instead, they dealt with two different aspects of the mind-body relation as a whole, outer psychophysics the mediate and indirect relations, and inner the immediate and direct ones (explained in more detail in the next paragraph). He furthermore referred to *inner and outer stimuli*, both of which were aspects of the bodily world: outer stimuli were bog-standard light and sound in the bodily "outer world," while inner stimuli were comparable excitations within the bodily "inner world" (*EP* 1:17). So a whooshing in the ear could be caused equally by the outer sounds of a nearby waterfall or solely by some inner cause; Fechner mostly left this distinction, and any further specification of inner stimuli, to this introductory theoretical discussion. In my exposition of *Elemente* here, the most important use of the terms is the distinction between outer and inner psychophysics; in my analysis of Fechner's walking, my use of *outer* and *inner* builds more broadly on the basic two-standpoint formulation of psychophysics, one internal to the mind-body and one external to it.

8 {"Was gehört quantitativ und qualitativ, fern und nahe, in Körperwelt und geistiger Welt zusammen, nach welchen Gesetzen folgen ihre Veränderungen aus einander oder gehen mit einander?"}

9 {"Sinnliche Empfindungen stehen in unmittelbarer Abhängigkeit von gewissen Thätigkeiten in unserem Gehirne, sofern mit den einen die anderen gesetzt sind, oder solche in unmittelbarer Folge haben; aber nur in mittelbarer von den äusseren Reizen, welche diese Thätigkeiten erst durch Zwischenwirkung einer Nervenleitung zu unserem Gehirne hervorrufen."} That psychophysics as a whole and its prized relationship between stimulus and sensation in particular was based on a *functional* or *dependent* but not *direct* or *immediate* relationship between body and mind is crucial in understanding what psychophysics was as a science. Both Marilyn Marshall and Michael Heidelberger emphasize this point. Marshall, "Early Work of

relations was "psychophysical activity" (*Tätigkeit*, also called "psychophysical movement" [*Bewegung*]), the physical activities of an as-yet-unknown "substratum and form" that directly bore psychical effects; though this third term between body and soul was crucial for psychophysics as a whole, Fechner happily and necessarily set it aside at the outset (*EP* 1:10).

These immediate and mediate relations—empirically intertwined but not inextricable—were ultimately the two main perspectives that defined psychophysics. "According to the nature of the matter," the science was thus divided into two: outer psychophysics to deal with the indirect and mediate relations between body and soul, and inner psychophysics to deal with the direct and immediate ones (*EP* 1:10). Outer and inner psychophysics each had its own internal perspectival formulation of the mind-body, differing only where the outer-bodily standpoint was located (outside of the body for outer psychophysics, and inside for inner; *EP* 1:10–11); yet it was the resulting two different types of mind-body relations—mediate for outer and immediate for inner—that structured psychophysics as a whole. Moreover, in the conclusion to *Elemente*, psychophysics was ultimately guided by the same perspectival formulation and empirical treatment beyond the confines of the individual mind-body toward the broader psychical-physical relation and the realm of Naturphilosophie. In each of these three parts, outer psychophysics, inner psychophysics, and psychophysics beyond the human, Fechner grasped after the mind-body nexus from slightly different angles.

While all of psychophysics (as well as its links to Naturphilosophie) was guided by this perspectival formulation and empirical treatment, Fechner declared outer psychophysics the starting point of the entire project: the present tools of measurement were such that "only the physical is immediately accessible to measurement, whereas measurement of

---

Gustav Theodor Fechner"; Marshall, "Physics, Metaphysics, and Fechner's Psychophysics"; and Heidelberger, *Nature from Within*, 101–6, 118–21.

the psychical can only be gained in dependence on that. . . . This reason is decisive and determines the direction of the course in the following" (*EP* 1:9).[10] What's more, this meant that "the foundational experiences for all of psychophysics can only be sought in the sphere of outer psychophysics" (*EP* 1:11).[11] And these "foundational experiences" would be provided by the couplet of outer stimulus (*Reiz*) and sensation (*Empfindung*): "Sensation depends on stimulus; a stronger sensation depends on a stronger stimulus" (*EP* 1:12).[12] The relation between stimulus and sensation was the core of the psychophysical project, encompassing both perspectival formulation and exact empirical tools. It coordinated the pas de deux implied by the framework between body and mind, between outer and inner perspectives, and was mediated by the still-unknown psychophysical activity. Mental sensations of a just-above-pitch-black darkness or a gentle whoosh could be caused by outer stimuli (e.g., a very faint lamp, a gentle breeze) but also by "inner stimuli" (e.g., the effect of closed eyelids, muffled ears; *EP* 1:17–19). Even more important,

10 {"Nur das Physische dem Masse unmittelbar zugänglich ist, indess das Mass des Psychischen erst in Abhängigkeit davon gewonnen werden kann. . . . Dieser Grund ist entscheidend und bestimmt die Richtung des Ganges im Folgenden."}

11 {"Die grundlegenden Erfahrungen für die ganze Psychophysik können nur im Gebiete der äusseren Psychophysik gesucht werden."}

12 {"Empfindung hängt vom Reize ab; eine stärkere Empfindung hängt von einem stärkeren Reize ab."} Fechner emphasized that he employed the term *Empfindung* "in the customary sense of the word" (*EP* 1:15). Under its heading, he categorized intensive and extensive sensation; the former included sensations characterized by intensity (e.g., brightness of a light), and the latter, those characterized by extension (e.g., length of same light). Both intensive and extensive sensations had a measurement of size and of form (i.e., strength and quality for intensive sensations); size was the aspect that psychophysics investigates (and while pitch [*Tonhöhe*] was perceived as the quality of sound, it also possessed a "quantitative side," in which "a higher and lower level" could be distinguished; *EP* 1:15). He further distinguished "objective" sensations, correlated to one sensory organ (e.g., light and sound), from those subject to the sensus communis or common sensibility (*Gemeingefühl*), which were outside of the current project. *Elemente* took the size aspect of primarily intensive sensations as its object, with some important excursions into the realm of extensive sensations (primarily visual proportionality [*Augenmass*]). *Reiz*, on the other hand, was a bit simpler: "The expression *stimulus* can be related in a narrow sense only to the bodily means of arousal or means of excitement of intensive sensations" (*EP* 1:17; but note his important consideration of outer and inner stimuli, discussed in the next paragraph). {"Der Ausdruck *Reiz* ist in engerem Sinne nur auf die körperlichen Erweckungsmittel, Anregungsmittel intensiver Empfindungen zu beziehen."} In the realm of extensive sensations, he substituted extent (e.g., a length of string) for stimulus, though used the term *Reiz* to refer generally to both.

outer stimuli were easily subject to precise empirical measurement. This empirical measurement was the basis of the three measurement methods of sensitivity Fechner introduced as the primary tools of outer psychophysics; they were the crown jewel, exact and empirical, of the new science.

Indeed, the place of *Elemente der Psychophysik* in both the history and historiography of the mind sciences rests primarily on Fechner's work on relating stimulus and sensation, especially the measurement methods. With these methods, psychophysics came into its own as an empirical science, laying "claim to its own room, its own apparatus, its own methods" (*EP* 1:ix), as proclaimed in the foreword.[13] They were what occupied most of his intensive and drawn-out experimental work in the years leading up to publication[14] and what drew responses, both in publication and correspondence, from Hermann Helmholtz, Ernst Mach, Wilhelm Wundt, and Franz Brentano.[15] These were the methods that the historian of statistics Stephen M. Stigler termed the work's most significant contribution and "a handbook on experimental design, the most comprehensive treatment on that topic before R. A. Fisher's 1935 *Design of Experiments*."[16] This judgment echoes that of Edwin Boring, who termed them "the great thing that he [Fechner] accomplished" and the reason

13 {"Nimmt nun sein eigenes Zimmer, seinen eigenen Apparat, seine eigenen Methoden in Anspruch."}

14 For the behind-the-scene intricacies of Fechner's experimental work (here specifically on muscle contraction and eye and ocular proportionality), see Fechner to Volkmann, 1856–61, Yi 22 II 11, Nachlass Alfred Volkmann, Universitäts- und Landesbibliothek (ULB) Sachsen-Anhalt, Halle (Saale).

15 The importance of Helmholtz's response on measuring light sensation, published already in 1860 with reference to the few early publications leading up to *Elemente*, led Fechner to add an addendum to *Elemente* on Helmholtz (*EP* 2:564–69); Helmholtz's response, first published elsewhere in 1860, was ultimately published as part 2, "Die Lehre von den Gesichtsempfindungen," in his extensive *Handbuch der physiologischen Optik* (Leipzig: Voss, 1867). Mach inquired about a promised forthcoming volume further explicating the measurement methods (which was never published). Mach to Fechner, 14 January 1861, NL 42/2/124, UB Fechner Nachlass; and Fechner to Mach, 20 January 1861, in Thiele, Fechner, and Boltzmann, "Briefe." On Wundt's work of the early 1860s in reference to Fechner, see Boring, *A History of Experimental Psychology*, 319–22. On Fechner and Brentano, see Fechner and Brentano, *Briefwechsel über Psychophysik, 1874–1878*.

16 Stigler, *The History of Statistics*, 244. In another major text on nineteenth-century statistics, Ian Hacking's *The Taming of Chance*, Fechner merits only a cameo, primarily as a link between Carl Friedrich Gauß and C. S. Peirce. Hacking, *The Taming of Chance*, 204–5.

for *Elemente*'s significance in his overarching history of experimental psychology.[17] The relation of the methods to the work's famous laws, both Weber's law linking stimulus and sensation and Fechner's logarithmic elaboration of the same, is complicated for two reasons: One, Fechner himself only called the former a law and made a distinction between the empirical testing of Weber's law as part of the measurement methods and its mathematical formalization; as a formula, it was called the "fundamental formula" and was accompanied by its logarithmic derivative, Fechner's so-called law that he himself called the "measurement formula." Two, these two formulae have often (probably following Boring) been presented historiographically as laws.[18]

Yet by focusing on its new exact, empirical *treatment* of the mind-body relation while mostly minimizing its perspectival *formulation*, such an emphasis misses the larger project of *Elemente*. It wasn't simply a natural-scientific technique but a *Lehre*, a full science in its broadest sense complete with a worldview; moreover, it wasn't limited merely to the human mind-body relation but aimed at the relation of the psychical and the physical more broadly, which, as we'll see, extended throughout the entire world not limited to any subgroups within it. While we do have fuller accounts of *Elemente*, they mostly have specific ends that exceed the work itself: placing the work in the wider context of Fechner's general theory of knowledge (e.g., Michael Heidelberger) or in relation to his own earlier works (e.g., Marilyn Marshall, Petra Lennig); focusing on inner psychophysics

17 Boring, *A History of Experimental Psychology*, 293.

18 Horst Gundlach takes a critical eye to what exactly Fechner was up to with his methods and formulae, asking, "What did Fechner measure?" though this view is still a somewhat narrow one of *Elemente* as a whole. Gundlach, "Was hat Fechner gemessen?"; and Gundlach, *Entstehung und Gegenstand der Psychophysik*. Michael Heidelberger similarly elevates the measurement formula while perceptively critiquing some of its historiographical interpretations. Heidelberger, "Fechner's Impact for Measurement Theory." In a more recent article, the measurement formula again is presented as the high point of *Elemente* and the link between Fechner and the longer history of *mathesis universalis*. Mausfeld, "Von der Zahlenmetapher zur Maßformel." As usual, Marilyn Marshall makes a valiant effort to cut through this difficulty, showing how, over a long period, Fechner developed the formalization of Weber's law (i.e., the fundamental formula) in a dialogue between his work in quantification and philosophy. Marshall, "Early Work of Gustav Theodor Fechner"; and Marshall, "Physics, Metaphysics, and Fechner's Psychophysics."

as an understudied aspect of the whole as well as important in its own right (e.g., Eckart Scheerer, David K. Robinson) or as a crucial element of the work's broader impact in subsequent psychophysics and psychology (e.g., David J. Murray).[19]

To fully grasp psychophysics as an all encompassing science of the psychical and the physical, the mind-body relation at its most general, I propose another approach. I read *Elemente* as tripling its own method: the move from stimulus to sensation in the outer psychophysics was replicated in the larger trajectory from outer psychophysics to inner and then again in the work's conclusion in the transition from psychophysics as a strict exact science to its broader character as a new Naturphilosophie. This triple move, however, was only possible with the later introduction of a concept not present in the introductory material: the threshold (*Schwelle*). Fully introduced only two thirds of the way through volume 1, the threshold was simply a "fact" of empirical psychophysics that was "factually linked with" Weber's law (though not included in it) and was fundamentally intertwined with "the general establishment of measurement" (*EP* 1:69). What was the fact? That a sensation or sensation difference was not noticed at the first change of stimulus from its starting point (null or otherwise) but rather only once the stimulus had reached a certain point (*EP* 1:238). This point was the threshold.

This definition of the threshold, however, was neither simple nor fixed, and as Fechner moved through *Elemente*, the concept mutated, gaining new valences that propelled the science into different areas. It was the threshold that fundamentally allowed Fechner to make his triple move, from stimulus to sensation in outer psychophysics, from outer to inner psychophysics itself, and then from psychophysics proper to Naturphilosophie. At each step, the threshold made a different level of the mind-body relation graspable, each

19 Heidelberger, *Nature from Within*; Marshall, "Physics, Metaphysics, and Fechner's Psychophysics"; Marshall, "Psychological Acrobat"; Lennig, *Von der Metaphysik zur Psychophysik*; Robinson, "Fechner's 'Inner Psychophysics' "; Scheerer, "The Unknown Fechner"; and Murray, "A Perspective for Viewing the History of Psychophysics."

one at once inextricable but also perspectivally varied: first, the level of the individual mind-body and its isolated sensorium, second, that of a contextually enmeshed mind-body subject to exterior influence, and finally that of the wider psychical-physical connection throughout all of nature. With this last level, the threshold linked back up with Fechner's parallel pursuit of the mind-body relation in his everyday walks. Overall, the threshold made the relation between the psychical and the physical tractable, not only in subjecting it to the exact, empirical tools of psychophysics but in transforming their results, drawing them into conversation with his ensouled worldview.

Though Fechner did not admit it in *Elemente*, he seems to have taken the term from the philosopher Johann Friedrich Herbart, whose mathematical approach to psychology was exceedingly prominent at the time and whose precedence Fechner openly recognized. "But in fact," wrote Fechner in the preface, "the following attempt has underlying it fundamental points of view that so essentially deviate from his [Herbart's] that it requires just as little a particular emphasis on the difference of the two, as it would be otiose and misplaced to attempt here a debate between them both" (*EP* 1:x–xi).[20] Despite the differences, which in the realm of natural research boiled down to Fechner's insistence on empirical research free from metaphysical starting points, much of *Elemente* and Fechner's psychology at large can be understood in relation to Herbart.[21] On the term *Schwelle* itself, Michael Heidelberger points out that it was Herbart's "threshold of consciousness" (*Schwelle des Bewusstseyns*) that brought it to Fechner, while he also jettisoned almost

20 {"In der That aber liegen dem folgenden Versuche so wesentlich von den seinigen [Herbartschen] abweichende Grundgesichtspuncte unter, dass es eben so wenig einer besonderen Hervorhebung der Verschiedenheit beider bedarf, als es müssig und unangebracht sein würde, hier eine Auseinandersetzung zwischen beiden zu versuchen."}

21 On Fechner's relation to Herbart, see Heidelberger, "Gustav Theodor Fechner and the Unconscious"; and Heidelberger, *Nature from Within*, chap. 1.4. Fechner himself wrote at least one extended critique of Herbart, though there he also did not mention the threshold. Fechner, "Herbart's Metaphysik."

everything Herbart used it for.[22] It has important resonances across modern German literature, poetics, and philosophy, think notably of Walter Benjamin's meditations on the in-between zones of Paris and modernity in his "Arcades Project" and Paul Celan's animation of emotional, national, and physical thresholds in postwar Europe in *Von Schwelle zu Schwelle* (*From Threshold to Threshold*), but the role of Fechner's natural-scientific (or even Herbart's more philosophical) threshold in this broader history has not attracted much notice.[23] Beyond Heidelberger, Fechner's use of the threshold concept has not attracted much sustained attention. Horst Gundlach's repeated injunctions that the

22 Heidelberger dates Hebart's use of the term of 1816 and Fechner's familiarity with Herbart to the 1820s. Heidelberger, "Gustav Theodor Fechner and the Unconscious," 223.

23 See, for example, Borvitz and Ponzi, *Schwellen*; Görner, *Grenzen, Schwellen, Übergänge*; and Saul et al., *Schwellen*. One important exception in these is Scharnowski, "Wahrnehmungschwellen," which offers critical insight into the connection between *Schwellen* (thresholds) and *Wellen* (waves), between sensation and consciousness, and between science and literature focusing on the work of Eduard von Keyserling. The word *Schwelle* refers specifically to the horizontal beam at the base of a door (and also to railroad ties), the structural beam being part of its roots in Old High German; the transferred figurative meaning, such as in with *an der Schwelle des Jahres* (at the threshold of the new year), developed out of the strong identification of *Schwelle* with *Türschwelle*. This mirrors the English *threshold*, which also refers specifically to the foundational piece of wood and has a long figurative history. The Anglo-American psychologist Edward Titchener, a student of Wundt's, used the Latin *limen* for Fechner's term, which Boring continued, but this is an unnecessary scientistic relic of the era (similar to the Standard Edition translations of Freud's everyday terminology). *DWDS* / *Etymologisches Wörterbuch des Deutschen* (Pfeifer), s.v. "Schwelle," accessed 22 May 2019, https://dwds.de/wb/Schwelle; and *OED*, s.v.v. "threshold, *n.*," "limen, *n.*," accessed 22 May 2019, https://www.oed.com/view/Entry/201234, https://www.oed.com/view/Entry/108451. Despite Walter Benjamin's poetic injunction to consider the "tides" that are contained within the word *schwellen* (to swell) and thus also in *Schwelle*, the words do not share roots (let alone with *Welle*), though the origin of each remains unclear (there seems to be more agreement around the verb coming from the Proto-Germanic **swellan*, while connections of the noun to **sel-* [Kluge] or to **swallja-*, **swelljō*, and **sulljō* [Pfeifer] are both highly contested). Nevertheless, a long-attested (since the mid-eighteenth-century) use of *Schwelle* is for a girder at the base of a sluice, holding back swelling water; such interplay, sustained by folk etymology, buoyed by homophony, and extended by phonetic and morphological resonance with *Welle*, has clearly played a role in the history of the concept, evident perhaps in Fechner's use of a wave schema to visualize the threshold. Benjamin, *Das Passagen-Werk*, 617–18 (record O2a,1); *Etymologisches Wörterbuch der deutschen Sprache* (Kluge), 25th ed. (2011), s.vv. "Schwelle," "schwellen," "Welle"; *DWDS* / *Etymologisches Wörterbuch des Deutschen* (Pfeifer), s.vv. "Schwelle," "schwellen," "Welle," accessed 22 May 2019, https://dwds.de/wb/Schwelle, https://dwds.de/wb/schwellen, https://dwds.de/wb/Welle; and *DWDS* / *DWB* (Grimms), s.vv. "schwelle (2)," "schwellen (1, 2)," accessed 22 May 2019, https://dwds.de/wb/dwb/schwelle#2, https://dwds.de/wb/dwb/schwellen. On the etymological difficulties surrounding proposed origins for *Schwelle*, see *Brill Indo-European Etymological Dictionaries Online (IEDO)* / *Etymological Dictionary of Greek*, s.v. "σελίς" [selis], accessed 29 May 2019, https://dictionaries.brillonline.com/search#dictionary=greek&id=gr6056.

object of psychophysics wasn't simply the relationship between stimulus and sensation but something more complex give a significant role to the threshold.[24] Yet there is much more to say on the topic, and this chapter offers one possible opening.

The chapter begins with an overview of *Elemente der Psychophysik*, both to situate the stakes of the project both for Fechner and for us and to delineate the complexity of the work, each of which are necessary to understand how the threshold functioned. Then, I delve into what the threshold actually was and how it functioned in the work. Most important, I show how it connected the work's disparate parts, bridging three important structural transitions, each with particular version of the mind-body relation, and allowing psychophysics to fulfill its exact and empirical aim and to glimpse at its full potential. Finally, I follow an archival lead that illuminates the development of the threshold in Fechner's thinking, bringing the threshold forward as an aspect of everyday life.

OUTER PSYCHOPHYSICS, FROM CLOUD NUANCES TO OCULAR PROPORTIONALITY

Like nearly all of Fechner's scholarly books, *Elemente der Psychophysik* was a sprawling text, spanning two volumes and about nine hundred pages. It was a compendium of the decade's work he did in wake of the insight of 1850: hashing out error-correction methods, performing structured experiments, collecting stray observations of stimuli and sensations in daily life, discussing results with friends and colleagues, newly interpreting results from other researchers, and calculating, calculating, calculating.[25] He split the work

24 Gundlach, "Was hat Fechner gemessen?"; and Gundlach, *Entstehung und Gegenstand der Psychophysik*.

25 Very little archival material remains from this decade, with no entries in his diary and only a few letters. Some scattered notes for the book are in Fechner, Notizen, 1852, 1883, 1894, NA 01/01/01, UA Fechner Nachlass. A series of letters from this period sent to Alfred Volkmann show the intricacy and depth of his collaborative experimental approach, with extensive comments on Volkmann's experiments and both of their attempts to replicate and extend experiments first done by others. Fechner to Volkmann, 1856–61, Yi 22 II 11, Nachlass Alfred Volkmann, Universitäts- und Landesbibliothek (ULB) Sachsen-Anhalt, Halle (Saale). An invaluable resource in sorting out the complex network of published material that Fechner cited, both in *Elemente der Psychophysik* and the numerous works he published on related topics between 1851 and 1861, is Gundlach,

into two major parts, "Outer psychophysics" and "Inner psychophysics," bookended by an introduction and some historiographical considerations (plus a few addenda). The double purpose in establishing a new science—laying out basic principles and methods as well as reporting empirical results in the context of critical readings of other researchers' work, again doubled in both outer and inner psychophysics—required complexity, extension, and depth. Despite the mandate to be exact and empirical, the novelty of psychophysics meant much of its work (both outer and inner) remained resistant to these charges and led Fechner to declare occasionally that certain conclusions or theories must remain hypotheses, unsubstantiated by experiment.[26] While highly structured, this complexity and interrelatedness also demanded a fair amount of conceptual jumping, in which Fechner referred to a later or an earlier section to substantiate a point, immediately followed by an amendment or correction, which itself foreshadowed or called back to another section; certain experiments were elucidated in different parts across the text, depending on which part of the experiment was being highlighted.[27] This structured yet recursive form was further enhanced by its style; while sharp and witty in his satirical and speculative writing, Fechner was here languorous, difficult to follow, and prone to excessive and at times contradictory exposition.[28] Overall, these facets of the work's form

---

Index Psychophysicus. The best account of Fechner's philosophical and scientific development leading up to *Elemente*, focused on the fundamental formula that related stimulus and sensation ($dy = \frac{Kd\beta}{\beta}$, where β was the stimulus, y the sensation, d the differential sign indicating a "small increment," and K a constant depending on the unit of measurement [*EP* 2:9]) in the context of his philosophical background, is Marshall, "Physics, Metaphysics, and Fechner's Psychophysics."

26 For example, at the end of a special part on the relation between light and sound sensations, specifically with regard to oscillation, Fechner wrote, "As long as this supplement [to this relation] still allows gaps or doubts, that which we thus infer remains only hypothesis" (*EP* 2:282). {"So lange diese Ergänzung [zu dieser Beziehung] noch Lücken oder Zweifel lässt, bleibt das, was wir so erschliessen, nur Hypothese."}

27 A primary example of this was the weight experiments done with the method of right and wrong cases (*EP* 1:94–120, 182–201, 305–22).

28 The eminent historian of psychology Edwin Boring shared this viewpoint, writing in a letter to a former student on the task of translating the second volume of *Elemente*, "Put literally into English it is about as dull and confusing and sometimes uninterpretable as it always was in the German." Rosenzweig, "Final Tribute," 790.

could be read as embodying a strategy of overwhelming the reader, not only with empirical facts and calculation but by leavening this with ever-more complex theory.[29] While Fechner might not have thought of himself as overwhelming the reader, the structure of the book—from stimulus to sensation, from outer psychophysics to inner, then from psychophysics to Naturphilosophie—made this interplay between the theoretical and the empirical a distinct feature in the unfurling and practice of psychophysics.

What made up the meat of "Outer psychophysics" and "Inner psychophysics"? Both major parts contained considerations of basic principles and methods as well as extensive reporting of empirical results and critical readings of other researchers' work on the topics. "Outer psychophysics," which made up three quarters of the total work, can be understood as three approaches to the same problem: how to relate stimulus and sensation. The three approaches mapped roughly onto the three primary titled sections, with the first, "The psychophysical theory of measurement," solving the problem theoretically, the second, "Fundamental laws and facts," doing so empirically, and the third, "Formulae and implications of psychical measurement," rounding it out mathematically.[30] "Inner psychophysics" had four primary tasks, though Fechner did not break them into titled sections. First, he drew on physiological and anatomical research to establish the psychophysical view of the "seat of the soul" as extended throughout the soul-carrying body. Second, he translated the established laws and facts of outer to inner psychophysics (here theoretical rather than empirical), developing them along with the physiological phenomena of an extended soul into a schema to account for both general

29 The most prominent work of the era that overtly deployed this mode was Marx's *Capital* (1867). Both Fechner and Marx went to great lengths to show their work, so to say, when it came to calculations.

30 While Fechner introduced his three measurement methods in the final chapter, "Measurement methods of sensitivity," of the first, theoretical, section, I treat them with the second, empirical, section, where their experimental implementation was elaborated. This grouping is buttressed by Fechner's own extended outline of what came after the theoretical section, which came just before the chapter on measurement methods (*EP* 1:68–69).

and specific phenomena of consciousness. Third, he catalogued empirical observations on inner psychophysical phenomena such as afterimages, memory images, hallucinations, and dreams. Finally, he linked inner psychophysics as just developed to his larger religious and *naturphilosophische* worldview. But before I show further *how* he unfurled both "Outer psychophysics" and "Inner psychophysics" via the threshold, I need to spend a bit more time in the outer psychophysics for three reasons: One, the first theoretical part of "Outer psychophysics," "The psychophysical theory of measurement," established the possibility of psychical measurement in a way that ultimately subtended the remainder of *Elemente* and is crucial for understanding how the threshold functioned. Two, the measurement methods are of such historical and historiographical importance, as noted above, that understanding them (at least in miniature) is important for understanding *Elemente* as a whole. Three, the threshold was only fully introduced after the measurement methods and thus its work as the prime mover of psychophysics and trace of the mind-body relation only started after the methods.

Fechner began "The psychophysical theory of measurement" by reaching for a touchstone: the law of the conservation of energy. He used this law to solidify his starting claim that the experiences of "outer perception" were immediately accessible to measurement. Mental and bodily activity were linked, both forms of a measurable "living force," thus exposing the former to the same measurement techniques as the latter. With this foundation in place, Fechner took the first of three specific steps in theoretically connecting stimulus to sensation and establishing psychophysical measurement: he related stimulus and sensation in the concept of sensitivity (*Empfindlichkeit*), which referred merely to how sensitive a subject or particular organ was to a specific stimulus.[31] Only by accounting first for variations in sensitivity between subjects and organs and then over

31 Fechner at one point listed "irritability," "excitability," and "sensibility" (*Reizbarkeit, Erregbarkeit,* and *Sensibilität*) as synonyms for "sensitivity" (*Empfindlichkeit*; *EP* 1:51).

time with the same subject or organ was any generally applicable measurement principle for sensation possible. Like "abstract energy," sensitivity should be measured in terms of "something relevant to, something dependent on" (*EP* 1:45) it; measured via "the size of the stimuli, which elicit an equally large sensation," sensitivity was thus "twice as large, if a half-as-large stimulus elicits an equally large sensation" (*EP* 1:46).[32] Attached to this definition of the measurement of sensitivity was a corresponding definition of difference sensitivity, that is, the sensitivity to the difference between two stimuli; as we'll see, Fechner most often worked with stimulus and sensation differences (*Reiz-* and *Empfindungsunterschiede*)—so two stimulus-sensation pairs and the paired differences between the stimuli, on the one side, and the sensations, on the other—and thus with difference sensitivity.[33] Yet such a sensitivity measurement was not itself a measurement of sensation nor did it presuppose it. Instead it, and the formal description of our everyday experience of competing sensations it provided, offered the groundwork for one: "With this, we have the base of measurement, which will stipulate the how-many-times of that which is equal and hereby above all the judgment of that which is equal in the sphere of sensation. *In fact, it will be shown how our psychical measurement amounts in principle to nothing other than physical measurement, to the summation of so-and-so many times of that which is equal*" (*EP* 1:56; my emphasis).[34]

32 {"Die Grösse der Reize, welche eine gleich grosse Empfindung hervorrufen"; "doppelt so gross, wenn ein halb so grosser Reiz eine gleich grosse Empfindung hervorruft."} Fechner happily admitted that this account of sensitivity was merely "a matter of definition" (*EP* 1:46) and asserted that such a guiding definition was necessary to explore the actual relation between stimulus and sensation.

33 N.b., I translate all Fechner's many technical compound words (e.g., *Empfindungsunterschied*, *Empfindungszuwuchs*, *Unterschiedsempfindlichkeit*) as literally as possible, that is as noun plus noun rather than adjective form plus noun (so "sensation difference," "sensation increment," "difference sensitivity"), in order to be as transparent and unambiguous as possible.

34 {"Wir haben damit die Unterlage des Masses, welches das Wievielmal des Gleichen, und hiermit vor Allem die Beurtheilung des Gleichen im Empfindungsgebiete verlangt. *In der That wird sich zeigen, wie unser psychisches Mass principiell auf nichts Anderes herauskommt, als das physische, auf die Summirung eines Soundsovielmal des Gleichen*."} At the beginning of the chapter, Fechner intimated that the measurement of sensation and general mental measurement were, if not the same thing, nearly so: "The question is thus still whether and in what way a measurement of sensation itself and of the mental may be at all possible"

Here Fechner made the second step linking stimulus and sensation, establishing the measurement principle (*Maßprinzip*) that allowed the measurement of stimulus to be used for the measurement of sensation via the intermediary of sensitivity. He asked, "Do we count segments of time directly from time, when we measure time, segments of space directly from space, when we measure space? On the contrary, we apply an external yardstick; and we apply, to be precise, to time a yardstick that is made not of mere time, to space a yardstick not of mere space, and to matter a yardstick not of mere matter" (*EP* 1:56).[35] Just as time was measured with a ticking second hand, and space with a ruler, sensation would be measured with the tool appropriate for the corresponding stimulus. But, as there was yet no law relating stimulus and sensation, the total sensation could not be measured simply via the total stimulus. Rather, based on the same premise as the theory of sensitivity, Fechner asserted that the ability to judge a difference in sensation as a positive or negative change from the starting sensation allowed for the division of the sensation into equal components; these components built from null to the full level. And corresponding to each of these components, judged as equal via the to-be-introduced methods of measurement, was a measurable stimulus increment. This was the fundamental point of his measurement principle, which he emphasized: "*In principle, our measurement of sensation will therefore come out of carving each sensation into equal parts, that is, the equal increments out of which it [the sensation] grows from a null state onward; and then thinking of the number of these equal parts as defined by the number*

(*EP* 1:54). {"Es fragt sich also noch, ob und in wiefern ein Mass der Empfindung selbst und des Geistigen überhaupt möglich sei."}

35 {"Zählen wir denn die Zeitabschnitte direct an der Zeit ab, wenn wir die Zeit messen, die Raumabschnitte direct an dem Raume ab, wenn wir den Raum messen? Vielmehr wir legen einen äusserlichen Massstab an, und zwar an die Zeit einen Massstab, der nicht aus blosser Zeit, an den Raum einen Massstab, der nicht aus blossem Raume, an die Materie einen Massstab, der nicht aus blosser Materie besteht."}

of the corresponding variable stimulus increments—just like by the inches of a yardstick—which are able to bring about the equal sensation increments" (*EP* 1:60).[36]

This was the core of the theoretical solution to the problem of connecting stimulus to sensation, and the basic empirically employable principle of mental measurement that undergirded all of psychophysics. Yet, as Fechner quickly pointed out, completing the analogy between psychical and physical measurement, where equal units of measurement correspond to equal units of the measured object, was not so simple, forcing him to take one further step. Experience under general circumstances told that, while going up the stimulus scale (e.g., softer to louder sound), an ever-increasing stimulus increment (i.e., size of the difference between stimulus *a* and the next louder stimulus, *b*) was required to generate a consistently equivalent sensation increment (i.e., size of the difference between the first sensation *A* and the second sensation *B* associated with stimuli *a* and *b*), breaking the psychical-physical correspondence. However, based on empirical investigations foreshadowed here, the next simplest relation between the units of increment—relative rather than absolute—*did* work in keeping the psychical-physical measurement analogy, with equal units on each side, measurement and measured, remaining consistent. This, ultimately, was what Fechner named Weber's law, after his former teacher and longtime colleague Ernst Heinrich Weber, a physiologist (and one of the famous three Weber brothers).[37] The law did not merely restate the everyday observation that, in the range of

36 {"*Principiell also wird unser Mass der Empfindung darauf hinauskommen, jede Empfindung in gleiche Abtheilungen, d. s. die gleichen Incremente, aus denen sie vom Nullzustande an erwächst, zu zerlegen, und die Zahl dieser gleichen Abtheilungen als wie durch die Zolle eines Massstabes durch die Zahl der zugehörigen variabeln Reizzuwüchse bestimmt zu denken, welche die gleichen Empfindungszuwüchse hervorzubringen im Stande sind.*"} The distinction between an *increment* (*Zuwachs* or *Zuwuchs*, of which Fechner used both) and a *difference* (*Unterschied*), for example between a stimulus increment and a stimulus difference, was that the increment was a specific equal component of any difference and thus closer tied to the basic measuring operation at play in psychophysics while the difference was more general, describing the relation between any two elements. But Fechner wasn't particularly strict about the usage (e.g., *EP* 1:134).

37 The three Weber brothers were the Leipzig physiologist Ernst Heinrich Weber (1795–1878), the Göttingen physicist Wilhelm Weber (1804–1891), and the Leipzig anatomist Eduard Friedrich Weber (1806–1871). An

higher stimuli, larger increments of stimulus were necessary to create the same increase in sensation, but "the *more precise* saying that the size of the stimulus increment must further grow exactly in proportion to the size of the already-grown stimulus in order to achieve again the same for the growth of sensation" (*EP* 1:64).[38] Despite its name, Weber's law did have limits, for it did not hold for all senses at all levels of stimulus. Though it was ultimately the measurement principle that linked stimulus and sensation even beyond these limits, "Weber's law forms only the base for the *most numerous* and *most important* applications of psychical measurement" (*EP* 1:66) and Fechner routinely used it as a heuristic in thinking through the work of psychophysics even beyond the law's bounds.[39]

Because of the importance and fame of Weber's law, it's worth pausing to understand it in action. This example both gave Fechner his first empirical confirmation of the law and leads us into the measurement methods of sensitivity, as it depended on the method of just-noticeable differences. "Under a half-overcast sky," he wrote, "one finds, for the most part easily, a pair of neighboring cloud nuances that offer the eye a touch of a difference or a little cloud that differs only just noticeably from the sky" (*EP* 1:140).[40] He took two gray lenses, each of which let through just over one-third of the light, and viewed the nuance pair through the glasses, reducing each to a third of its former strength. "It suggests

---

overview of the brothers' careers with respect to their relation to Fechner is Schreier, "Die Drei Brüder Weber."

38 {"Der *genauere* Ausspruch nun, dass die Grösse des Reizzuwuchses gerade im Verhältnisse der Grösse des schon gewachsenen Reizes ferner wachsen muss, um noch dasselbe für das Wachsthum der Empfindung zu leisten."} Weber didn't refer to his finding as a law, and Fechner took credit for calling it Weber's law: "The *more precise* saying . . . has been made in some generality first by E. H. Weber and substantiated with experiments; it is therefore named *Weber's law* by me" (*EP* 1:64). {"Der *genauere* Ausspruch . . . ist in einiger Allgemeinheit zuerst von E. H. Weber gethan und durch Versuche belegt worden, daher es von mir das *Weber'sche Gesetz* genannt wird."} Weber's original publication was "Der Tastsinn und das Gemeingefühl" (1846; The sense of touch and the common feeling), republished in a stand-alone edition in 1905.

39 {"Das Weber'sche Gesetz bildet nur die Unterlage für die *zahlreichsten* und *wichtigsten* Anwendungen des psychischen Masses."}

40 {"Bei halbbedecktem Himmel findet man meist leicht ein paar benachbarte Wolkennuancen, die nur einen spurweisen Unterschied für das Auge darbieten, oder ein Wölkchen, das sich nur eben merklich vom Himmelsgrunde unterscheidet."}

presupposing," he continued, following this basic reduction, "that the difference, strongly weakened in such a way, would become from the weakening unnoticeable or at least, in case the limit of noticeability or thereabouts was not reached before application of the glasses, conspicuously less clear, since beforehand the difference was only just noticeable. But it did not prove to be so. The difference remained *at least* still so noticeable as beforehand, and others, whom I had carry out the experiment, declared themselves of the same mind" (*EP* 1:140).[41] The same outcome followed when he placed both lenses in front of one eye, letting in just one-seventh of the original light. This simple demonstration, to which Fechner added a number of additional varied attempts (taking the reduction of light all the way to one-hundredth), counter attempts, and related miscellaneous observations, did not itself prove Weber's law but attested to its holding across the range of "the quite-wide limits of intensity, within which ordinary seeing circulates" (*EP* 1:146).[42] Ultimately, he presented the cloud-nuance experiments not just because they were his first test of the law but "because they are especially comfortable and easily accessible to everyone, and what's more they offer at bottom as much proof for the general fact of the law as all the others" (*EP* 1:147).[43]

Measurement Methods of Sensitivity

This cloud-nuance experiment was built on one of the three measurement methods of sensitivity, which were introduced theoretically in a preliminary chapter and then elaborated empirically in the second section of "Outer psychophysics," "Fundamental

41 {"Es lag nahe, vorauszusetzen, dass der so stark geschwächte Unterschied, da er vorher nur eben merklich war, durch die Schwächung unmerklich, oder, falls etwa die Gränze der Merklichkeit vor Anwendung der Gläser nicht erreicht war, mindestens auffallend undeutlicher werden würde. So zeigte es sich aber nicht. Der Unterschied blieb *mindestens* noch so merklich als vorher, und Andere, welche ich den Versuch anstellen liess, erklärten sich in demselben Sinne."}

42 {"Den, ziemlich weiten, Gränzen der Intensität, in denen sich das gewöhnliche Sehen bewegt."}

43 {"Weil sie ganz besonders bequem, Jedem leicht zugänglich, und dabei für die allgemeine Thatsache des Gesetzes im Grunde so viel beweisend als alle anderen sind."}

laws and facts." It is important to note that these are measurement methods of sensitivity (and really of difference sensitivity) and *not* of sensation. Their primary purpose was to establish which stimulus differences corresponded to equal sensation differences—Fechner's definition of difference sensitivity.[44] The three major methods of difference sensitivity, here with the example of weight experiments, were as follows.[45]

- The method of just-noticeable differences: Identify which two weighted vessels generated a *just-noticeable* difference in sensation; the size of sensitivity was the inverse of the stimulus difference.

44 They *did* provide a way for one to ascertain what size of a relative stimulus increment was necessary to elicit an equally large increment of sensation. As Fechner wrote, "These methods coincide with the measurement methods of difference sensitivity provided that this measurement, according to the concept put forth of same, consists precisely in determining the stimulus differences that correspond to equal sensation differences" (*EP* 1:68). {"Diese Methoden treffen mit den Massmethoden der Unterschiedsempfindlichkeit zusammen, sofern dieses Mass nach dem aufgestellten Begriffe desselben eben nur darin besteht, die Reizünterschiede zu bestimmen, welche gleichen Empfindungsunterschieden entsprechen."} But this wasn't the methods' primary purpose or the starting point for developing them. The relation between sensitivity and sensation as specific objects of psychophysics and its measurement is complicated and confusing. Even in otherwise stellar secondary literature, the difference is sometimes elided, and Fechner's three measurement methods are presented as measuring sensation itself; see Heidelberger, *Nature from Within*, chap. 6.2–3 passim; and Stigler, *The History of Statistics*, 244 (though Stigler is more precise about sensitivity in the remainder of the section). One simple way to explain the difference is that sensitivity already referred to a particular relationship between stimulus and sensation, between outer and inner—a relationship that reflected the fundamental project of psychophysics—while sensation itself was merely one part of those equations. Thus, establishing a true measurement of sensation required more than just a measurement of sensitivity, a way to break apart the implied relationship between stimulus difference and sensation difference into component increments as well as a better understanding of the psychophysical activity that mediated between stimulus and sensation (*EP* 1:59–67). "It will later turn out," he wrote, "that exactly this is most advantageous when it pertains to searching for a base for the measurement of sensation in the measurement of sensitivity" (*EP* 1:73). {"Es wird sich später zeigen, dass gerade diess am vortheilhaftesten ist, wenn es gilt, im Masse der Empfindlichkeit eine Unterlage für das Mass der Empfindung zu suchen."} Horst Gundlach insightfully emphasizes that Fechner drew upon the regular usage of *Empfindlichkeit* in metrology and physics of the day, where it referred to the sensitivity or "subtlety" (*Feinheit*) of a scale. He furthermore identifies how Fechner, via the threshold, transitioned from measuring sensitivity to sensation, noting that this was a transition that many later researchers refused to make. Gundlach, "Was hat Fechner gemessen?," 51–52, 55. That *sensation itself*, or rather the relation between phenomenal qualities of objects, was the ultimate object of psychophysics as a whole (not merely outer psychophysics) is the main point of Gundlach's larger work on *Elemente*. Gundlach, *Entstehung und Gegenstand der Psychophysik*, 222.

45 While Fechner did briefly discuss measurement methods of absolute sensitivity, he was almost entirely concerned with methods of difference sensitivity.

- The method of right and wrong cases: Determine which was heavier of two weighted vessels, vary and repeat, and tally when you are correct; the size of sensitivity was the inverse of the excess weight (stimulus difference) that produced the same proportion of right cases.
- The method of average errors: Estimate two weighted vessels as equally heavy, measure the difference between the two (the error), vary and repeat, and tally the average; the size of sensitivity was the inverse of the average error.

While the first two had been used already in investigations of the mind-body relation (by both collaborators and forerunners of Fechner's), Fechner took credit for importing the third from astronomy to psychophysics. And though certain sensory areas and parts of the stimulus scale were better investigated with one or another of the methods, they all drove toward the same end: measuring slight differences in stimulus and determining equal or unequal levels of sensitivity in relation.

Like their shared end, the methods also shared similar challenges, including chance occurrences as well as predictable variations in spatial and temporal conditions, which must be taken into account, controlled for, both in terms of observation and counting.[46] The number of observations required for "reliable results" (*EP* 1:78) was a significant issue, especially for the methods of right and wrong cases and of average errors. They both required significant repetition that ultimately introduced new issues of variation, including both internal factors, such as the expectation, imagination, fatigue, and practice of the observer, and external ones, such as time of day, room conditions, additional stimuli, and so on, as well as standard issues of chance attached to the law of large

46 Fechner used the words *Controle* and *controliren* (*control* and *to control*) to refer specifically to the checking of results via repetition or another observer (*EP* 1:85–87).

numbers.[47] In response to these factors of both chance and necessity, Fechner designed a number of experimental protocols, including repetition with planned variation of circumstances ("primary cases") and then again in smaller series with fixed circumstances ("fractions"). He established no minimum number of observations necessary to produce valid results, instead pragmatically planning the overall number of observations and the subsidiary primary cases and fractions based on the experiment, the sensory organ under investigation, and the method being used.[48] He then further developed the methods of right and wrong cases and of average errors via error and probability theory, fundamentally establishing a shortcut to actually get a measurement of sensitivity in both methods.[49] The detail and extent of his experimental planning, as well as his use of error and probability theory, won the methods their place in the history of experimental method.[50] The arduousness of these protocols, which had him at times repeating the same experiment every day for a month, led Fechner to compare the object of the psychophysical researcher to a Proteus, "who, instead of answering the posed questions simply and willingly, seems to elude every answer through the maximally shifting forms that he takes; but it suffices to just continuously capture him at the same point, and to do so

47 Fechner referred to the person performing the experiment as the "observer" (*Beobachter*). Internal and external factors were referred to as "circumstances" (*Umstände*) and "conditions" (*Verhältnisse*).

48 Two examples of this pragmatic experiment planning: The weight experiments, using the method of right and wrong cases, had 4 primary cases of 512 observations for each weight difference and starting weight. The ocular proportionality experiments, using the method of average errors, had 2 fractions of 60 observations for each distance and location of the "normal" (fixed) distance (*EP* 1:190, 215).

49 While Fechner's use of error and probability theory was a novel contribution (which he recognized) and has drawn significant attention in the historiography of statistics, he downplayed their importance for the practice of psychophysics and employment of the methods. One could simply take the tables, formulae, and rules he constructed and use those, without a full understanding of the math behind them (*EP* 1:103–4).

50 Notably, while Fechner believed one could control for many aspects of both internal and external circumstances, he did not blind the observers to the experiment or introduce randomization, aspects added soon after by C. S. Peirce and J. Jastrow. Stigler, *The History of Statistics*, 253. In fact, Fechner didn't believe that blinding experiments was possible (or even desirable): "From the other side, however, one may not, for the avoidance of an imagined influence of the powers of imagination, make the procedure blind, so to speak" (*EP* 1:85). {"Von anderer Seite aber darf man auch nicht, zur Vermeidung eines eingebildeten Einflusses der Einbildungskraft, das Verfahren so zu sagen blind machen."}

unwaveringly, so a sure answer is forced out of him" (*EP* 1:78).[51] In the end, across the sensory areas under investigation (light, sound, weight, temperature, and ocular and tactile proportionality [*Augen- und Tastmaß*]), Fechner used the methods not only to establish the possibility of measuring sensitivity but also to two specific ends: confirming Weber's law (or identifying where it doesn't hold) and establishing certain constants for various senses.

Let's take one final closer look at one of the methods in action. While the method of right and wrong cases is probably the most famous, it has also been well covered in the literature.[52] And having already taken a glimpse at the method of just-noticeable differences, let's look here at the method of average errors, which also moves us into the realm of extensive rather than intensive senses. Fechner employed this method specifically for ocular and tactile proportionality. In the ocular field, along with his brother-in-law, the Halle physiologist Alfred Volkmann, he carried out a series of experiments observing the distance between two markers, positioned either horizontally or vertically apart from each other, at various removes. Each observation consisted of comparing two distances, the first a fixed, measured "normal" distance, and the second a "false" distance (*Fehldistanz*; *EP* 1:121), adjusted by the observer to be equal to the first. The first three reported series, which were ultimately summarized together, featured horizontal distances, marked either (in the first series, done by Fechner) by two needle points peeking out of the bottom of two pairs of compasses (covered to reduce the influence of the compass angles) lying on a table and observed from 1 Paris foot away or (in the second two series, done by Volkmann) by three parallel threads pulled taught with weights and observed from 800 millimeters away.[53] The

51 {"Der, statt auf die gestellten Fragen einfach und willig zu antworten, sich durch die wechselndsten Formen, die er anzieht, jeder Antwort zu entziehen scheint; aber es reicht hin, unbeirrt dadurch, ihn nur stetig auf demselben Puncte festzuhalten, so zwingt man ihm eine sichere Antwort ab."}

52 Stephen Stigler offers a thorough and clear account of it in the realm of weight sensitivity, for which Fechner particularly prized the method (*EP* 1:93). Stigler, *The History of Statistics*, 244–53.

53 Fechner took distances for his series in Paris measurements, and Volkmann took his in millimeters, which

normal distances, established with either transversal lines or a ruler, ran between 10 and 50 half Paris decimal lines for Fechner or 10 and 250 millimeters for Volkmann.[54] Each series was run at least twice with the normal distance on the left or right of the false distance, broken into smaller fractions of observations run more than once, 60 observations done twice for Fechner and 16 done three times for Volkmann. Each observation yielded a "raw" error, the difference between the false and normal distances for that single observation. Over a number of observations, the deviation of the average false distance and the normal distance produced a constant error. Fechner then compared absolutely each individual false distance with the average false distance; this resulted in a "pure variable" error that, when summed over a series of observations, was useful in calculating sensitivity (*EP* 1:121). Ultimately, while the pure variable error and the constant error were the component parts of the raw error, they varied independently of each other through the experiments, when spatial and temporal factors as well as the play of chance were accounted for.[55] While not all of the experiments in the realm of ocular and touch proportionality confirmed Weber's law, the results of the first three series did.[56] Reviewing the three, Fechner summarized: "These three series show, in agreement, the proportionality of $\Sigma\Delta$ [the sum of the pure variable error] with the distances; this is most easily assessed when the sums are divided

---

Fechner preserved in publication. Like much of Fechner's work, this exemplified a certain pragmatism, using the measurement system at hand without worrying about converting, even in print.

54 The division of traditional Paris linear measurements was duodecimal (so 12 Paris lines per Paris inch, and 12 Paris inches per Paris foot), and Fechner identified explicitly when he used a decimal division, using the term "duodecimal" only when in direct contrast with "decimal" (*EP* 1:214). Thus a Paris decimal line was $\frac{1}{10}$ of a Paris inch, while a Paris (duodecimal) line was $\frac{1}{12}$ of a Paris inch. For reference, a Paris line was roughly equivalent to 2.255 millimeters. Verdenhalven, *Alte Maße*, 33.

55 Unlike with the method of right and wrong cases, Fechner here didn't fully outline how he accounted for these but noted that the process accorded with that of the other method and promised to fully explain in a forthcoming work titled "Massmethoden und Massbestimmungen im Gebiete der Psychophysik" (*EP* 1:122–23; Measurement methods and measurement determination in the sphere of psychophysics). Fechner referred regularly in *Elemente* to "Massmethoden," which was intended to further the exposition of the measurement methods and their results but was never published.

56 Like with nearly all the sensory areas, the experiments here deviated from the law at the edges of perception, with normal distances between 0.2 and 3.6 millimeters requiring analysis of the sum of the pure variable error into further constant and variable errors, the latter of which better held to the law (*EP* 1:212).

$\frac{\Sigma\Delta}{D}$ in

I	II	III
3,864	1,2600	0,738
3,843	0,936	0,932
4,030	1,286	1,004
3,862	1,035	0,958
3,708	1,114	0,939
	1,226	0,900
	0,919	
	1,099	

Figure 2.1. The first three series of ocular proportionality experiments, summarized via the relation of the sum of pure variable error to the corresponding normal distance (each series tested a different number of normal distances; *EP* 1:216).

with the distances, in which each series shows a noticeable constancy of quotients" (*EP* 1:216; see fig. 2.1).[57]

Where did the methods and their results leave Fechner? The observations provided rough confirmation of Weber's law across multiple sensory areas but within limits; significant sensory areas, including temperature and tactile proportionality, remained troublesome for if not outright contradictory of the law (issues that he himself noted). The deployment of the methods validated many of the preparatory theoretical considerations and showed psychophysics engaging its own apparatus. Yet this was all still within the realm of outer psychophysics, nowhere near transitioning to inner psychophysics and thereby a total psychophysics; and even here, the measurement methods had not yet reached sensation itself, only sensitivity, still short of the famous logarithmic formula relating stimulus and sensation. In short, psychophysics remained far from "an exact science of the functional or dependent relations between body and soul"

57 {"Diese drei Reihe zeigen übereinstimmend die Proportionalität von $\Sigma\Delta$ [der Summe des reinen variabeln Fehlers] mit den Distanzen, welches sich am leichtesten übersieht, wenn man die Summen mit den Distanzen dividirt, wo jede Reihe eine merkliche Constanz der Quotienten zeigt."}

let alone "more generally between the bodily and mental world, the physical and psychical world" (*EP* 1:8).

THE THRESHOLD THREE WAYS

Fechner stood here, as it were, at a threshold—and what took him across it was the concept of the threshold itself. After laying out his measurement methods in action across the senses, he arrived at chapter 10, "The fact of the threshold," still square in the middle of the empirical reports of outer psychophysics. He began with a simple fact: every sensation, every sensation difference took hold—became noticeable—*not* at the null point of the stimulus or stimulus difference. "It appears, rather," he wrote, "that the stimulus as well as the stimulus difference must have already reached a certain finite size before the noticeability of same even begins, that is, before it generates a sensation that noticeably affects our consciousness or constitutes a noticeable sensation difference" (*EP* 1:238).[58] This point, where the *sensation itself* had its null point, where it waxed above or slipped below noticeability, was the threshold; it designated that point of noticeability for the sensation and its stimulus. Along with this point, which Fechner most commonly termed the stimulus threshold, there was of course also a difference threshold, indicating when a sensation difference became noticeable or vanished and its companion stimulus difference.[59] Already here, the introduction of the concept of the threshold, Fechner foreshadowed its overall importance, writing of its possible connection to wider phenomena of consciousness: "In so far as, in addition to sensations, other more general and higher phenomena of consciousness—for example, total human consciousness as

58 {"Es zeigt sich vielmehr, dass der Reiz wie Reizunterschied schon eine gewisse endliche Grösse erreicht haben muss, bevor die Merklichkeit desselben nur eben beginnt, d. h. bevor er eine unser Bewusstsein merklich afficirende Empfindung erzeugt oder einen merklichen Empfindungsunterschied begründet."}

59 He further differentiated between the absolute and relative stimulus difference of the difference threshold but ultimately considered them more or less interchangeable and didn't prefer to use one or the other.

depending on sleep and waking, consciousness of individual thoughts, attention in a given direction—have, in the end, a point of dying out and coming into being, we will also be able to generalize the concept and expression of the threshold for these" (*EP* 1:239).[60] But before he was able to move in this general direction, he offered further specification of the empirical basis of the threshold.

Fechner's prize example of the threshold, like his use of cloud nuances as basic evidence of Weber's law, was both simple to replicate and extremely "striking" to behold (*EP* 1:243): An object was placed in front of two side-by-side lamps, casting two distinct shadows, one from each lamp. When the light from one lamp was reduced, by lowering its wick or moving it away from the blocking object, the shadow cast by that lamp slowly weakened until it disappeared completely, "being absorbed by the general illumination of the ground, notwithstanding that both light sources are still there" (*EP* 1:243).[61] The experiment made a deep impression on Fechner: "I was completely astounded, as I conspicuously perceived, for the first time, seeing two lights throw only *one* shadow. Both lamps burn clearly, yet there is merely *one* shadow" (*EP* 1:243).[62] This was the threshold itself.

With the concept of the threshold made tractable, Fechner dealt with what seemed to be a paradox at its heart but which in fact turned out to be its most important aspect: "How can that which exerts in consciousness no effect, when it is weak, begin to there exert some effect by strengthening? It seems as if summation of null effects could give

60 {"Insofern endlich ausser Empfindungen auch andere, allgemeinere und höhere Bewusstseinsphänomene, z. B. das Gesammtbewusstsein des Menschen je nach Schlaf und Wachen, das Bewusstsein einzelner Gedanken, die Aufmerksamkeit in gegebener Richtung einen Punct des Erlöschens und Entstehens haben, werden wir den Begriff und Ausdruck der Schwelle auch hiefür verallgemeinern können."}

61 {"Gleichsam von der allgemeinen Erleuchtung des Grundes absorbirt werden, ungeachtet doch noch beide Lichtquellen da sind."}

62 {"Ich bin ganz erstaunt gewesen, als ich zum erstenmale darauf aufmerksam wurde, zwei Lichter blos *einen* Schatten werfen zu sehen. Beide Lampen brennen deutlich, doch ist blos *ein* Schatten da."}

something of an effect" (*EP* 1:246).[63] While this might have posed a "metaphysical difficulty" (*EP* 1:246), psychophysics was no metaphysics; it presumed a functional rather than metaphysical relation between stimulus and sensation, and thus considered the imperceptible sensations, roving beneath the threshold, to be merely the negative or imaginary values of a mathematical function of stimuli. These were *unconscious* sensations: "As long as the stimulus or stimulus difference remains under the threshold, the sensation of same remains, as the saying goes, *unconscious*, and the unconsciousness becomes in accordance increasingly deeper as the size of the stimulus or stimulus difference goes down deeper under the threshold. In this way, the remote sound and the odor stimuli in the atmosphere remain under the threshold, and thereby the sensation aroused by these remains in unconsciousness, until the intensity of those stimuli exceeds a certain size and the threshold" (*EP* 1:246).[64]

At first glance, it might seem as if unconscious sensations would trouble the very measurement principles Fechner had just laid out. But he proceeded to outline how, in accordance with the principles of error probability, such "unnoticeable" sensation differences were part of the subtle influences that led to one or the other weight being judged as heavier. Ultimately, the threshold and the unconscious sensations it entailed were fundamental aspects of everyday life. Not only did they vary with "conditions of fatigue, habituation, practice, inner causes of excitement or numbing, medicaments, the periodicity of life, individual constitution, and so forth" (*EP* 1:248), but they allowed for

63 {"Wie kann das, was im Bewusstsein nichts wirkt, wenn es schwach ist, durch Verstärkung etwas darin zu wirken anfangen? Es scheint, als ob Summation von Nullwirkungen ein Etwas der Wirkung geben könnte."}

64 {"So lange der Reiz oder Reizunterschied unter der Schwelle bleibt, bleibt die Empfindung desselben, wie man sagt, *unbewusst*, und das Unbewusstsein vertieft sich mehr und mehr, nach Massgabe, als die Grösse des Reizes oder Reizunterschiedes tiefer unter die Schwelle herabgeht. So bleiben der entfernte Schall, die Geruchsreize in der Atmosphäre unter der Schwelle, und hiemit die dadurch erweckte Empfindung im Unbewusstsein, bis die Intensität jener Reize eine gewisse Grösse, die Schwelle übersteigt."}

one to proceed through the world without complete sensory overload:[65] "If absolutely every smallest quantity of stimulus should be recognized, then, since minima of all sorts of stimuli swirl around us at all times, we would have to feel an infinite mélange and an unceasing change of all sorts of soft sensations, which is not the case" (*EP* 1:249).[66]

While Fechner immediately followed his introduction of the "fact of the threshold" with the reporting of experimental results related to its varying values in different sensory areas, its ultimate consequence was much deeper: The threshold was the fundamental linchpin of psychophysics, linking the major structural binaries—outer stimulus and sensation, outer and inner psychophysics, psychophysics and Naturphilosophie—of the work and allowing Fechner to move from one to the other. Though he didn't overtly recognize it as such, only with the threshold was he able to make the triple move that was at the core of *Elemente*. He used the threshold concept to shift within outer psychophysics, first from measurement to mathematization and then from sensitivity to sensation, truly linking stimulus and sensation (whereas the measurement methods remained tied to mediating sensitivity) and drawing forth the mind-body as an isolated sensorium. He then completed the overall promise of psychophysics, moving from outer to inner psychophysics, first from stimulus to psychophysical activity and then from specific sensations to general consciousness, altering the picture of the mind-body to consider its place in the world more generally. Finally, in the last two chapters of "Inner psychophysics," he made one last move, from psychophysics to religion and Naturphilosophie, elevating the mind-body one last time to a final psychophysical tiers of the world. I proceed one by one, showing how the threshold effected these three moves,

65 {"Verhältnisse der Ermüdung, Gewöhnung, Uebung, innere Ursachen der Aufregung oder Lähmung, Arzneien, die Periodicität des Lebens, individuelle Constitution u. s. w."}

66 {"Sollte überhaupt jede kleinste Reizgrösse erkannt werden, so würden wir, da Minima von Reizen aller Art uns stets umspielen, ein unendliches Gemisch und einen unaufhörlichen Wechsel von leisen Empfindungen aller Art verspüren müssen, was nicht der Fall ist."}

not only structuring *Elemente* itself but identifying the mind-body object at the core of psychophysics as it went along.

Outer Stimulus to Sensation

The first transition, from measurement to mathematization, took place still within the outer psychophysics, in the third major section, "Formulae and implications of psychical measurement" (at the beginning of the second volume of *Elemente*). After a brief review of the basics of logarithms, Fechner introduced his two most important formulae: the fundamental formula and the measurement formula. The former was basically Weber's law as a formula: $dy = \frac{Kd\beta}{\beta}$, where d was the differential sign indicating a "small increment" (*EP* 2:9), y the sensation, K a constant (depending on the unit of measurement), and β the stimulus. The formula was fundamental "as the derivation of all further following formulae are based on it" (*EP* 2:10).[67] Yet, as merely an expression of Weber's law in mathematical notation, the fundamental formula didn't go beyond the basics of outer psychophysics already explored and tested; it "still presupposes no measurement of sensation, yet also grants no such thing" (*EP* 2:10).[68] To move beyond it, he brought in the threshold: "Yet from this formula, via infinitesimal summation, there results another, which sets out a general size relation between stimulus size, summed from stimulus increments, and sensation size, summed from sensation increments; it does so in such a way that the correctness of the latter formula is given together and in accordance with the correctness of the former under the co-prerequisite of the fact of the threshold" (*EP* 2:10).[69] This was the measurement formula: $y = k \log \frac{\beta}{b}$, where k was a constant

67 {"Indem die Ableitung aller weiter folgenden Formeln auf ihr beruhen wird."}
68 {"Setzt noch kein Mass der Empfindung voraus, gewährt aber auch kein solches."}
69 {"Es hängt aber mit dieser Formel durch infinitesimale Summation eine andere zusammen, welche eine allgemeine Grössenbeziehung zwischen der, aus Reizzuwüchsen summirten, Reizgrösse und der, aus Empfindungszuwüchsen summirten, Empfindungsgrösse aufstellt, in der Art, dass mit der Richtigkeit der

(depending on the unit of measurement and the logarithmic base) and b the *threshold value* of the stimulus-sensation β-y.[70]

As so often in *Elemente*, Fechner showed how he arrived at a formula or theory twice, first schematically and second mathematically. He began by highlighting "that the relation between the increments dy and $d\beta$ in the fundamental formula corresponds to the relation between the increments of a logarithm and the increments of the corresponding [input] number" (*EP* 2:11).[71] But beyond this parallel relative movement of each relation, both the fundamental formula and a logarithmic function had a threshold: "Sensation begins with values that exceed the null value, not with the null value but rather with a finite value of stimulus, the threshold value; and in the same way, a logarithm begins with values that exceed the null value, not with the null value of the [input] numbers but rather with a finite value of the [input] numbers, the value 1, provided that the logarithm of 1 is equal to null" (*EP* 2:11–12).[72] Just as the threshold concept demanded the existence of unconscious sensations, here the formula measuring these sensations resulted in negative values, while conscious sensations remained positive.

Fechner subsequently reproduced the measurement formula mathematically by integrating the fundamental formula (and then vice versa, differentiating the measurement formula into the fundamental formula), resulting in the following natural logarithm:

---

ersten Formel unter Mitvoraussetzung der Thatsache der Schwelle solidarisch zugleich die Richtigkeit der letzten gegeben ist."}

70 With the same unit of measurement and the natural log (i.e., base e), K and k were equal, whereas with the common log, they were related by the modulus M that related common and natural logarithms generally, such that $M = \frac{\log_{10}}{\log_e} = \log_{10} e = 0.434294481...$ and $k = \frac{K}{M}$ (*EP* 2:3, 13). While Fechner used the abbreviations "log comm." and "log nat." to refer to the functions in general, he always used just the term *log* in mathematical expressions, specifying the type of logarithm in text.

71 {"Dass die Beziehung zwischen den Zuwüchsen dy und $d\beta$ in der Fundamentalformel der Beziehung zwischen den Zuwüchsen eines Logarithmus und den Zuwüchsen der zugehörigen Zahl entspricht."}

72 {"Die Empfindung beginnt mit Werthen, die den Nullwerth übersteigen, nicht bei dem Nullwerthe, sondern bei einem endlichen Werthe des Reizes, dem Schwellenwerthe, und so beginnt ein Logarithmus mit Werthen, die den Nullwerth übersteigen, nicht bei dem Nullwerthe der Zahlen, sondern bei einem endlichen Werthe der Zahlen, dem Werthe 1, sofern der Logarithmus von 1 gleich Null ist."}

$y = K \log \beta + C$, where C was the integration constant. Here again, the threshold was crucial; without it, the integration would result in an infinitely small integration constant. Only with the aid of the threshold point b, at which by definition the sensation value y was null, was he able to effectively deal with the integration constant, offering the subsequent further derivation and eliminating the constant: $0 = K \log b + C$, $C = -K \log b$, and finally $y = K(\log \beta - \log b)$ (*EP* 2:34). He then converted the result from a natural to common logarithm (where $\frac{K}{M} = k$), producing the already mentioned measurement formula: $y = k \log \frac{\beta}{b}$, and explained the importance of the threshold: "This deduction would become illusory, if the fact of the threshold were not to exist. . . . In fact, if sensation should die out at a null value of stimulus instead of at a finite value, then we would obtain a negatively infinite value for the constant [of integration] C, and no finite expression for an absolute sensation value could be found" (*EP* 2:34).[73] In both routes to the measurement threshold, the stimulus threshold allowed for a mathematical transformation of the measurement theories laid out in the first volume.

This crucial role played by the threshold was again repeated in the other formulae Fechner derived, primarily the difference formula (*Unterschiedsformel*), the difference measurement formula (*Unterschiedsmassformel*), and the situation formulae (*Lagenformeln*). While all were derivable from the measurement and thus fundamental formulae, each must again account for and ultimately turned on the fact of the threshold as the major factor in extending the new formulae to slightly different phenomenal situations. Of one variation of the difference formula, he wrote: "In another sense, we obtain a generalization of the difference formula when we, instead of equating the absolute sensitivity and thereby the [threshold] value b with the effect of both sensations

73 {"Diese Herleitung würde illusorisch werden, wenn die Thatsache der Schwelle nicht bestände. . . . In der That, sollte die Empfindung statt bei einem endlichen Werthe vielmehr bei einem Nullwerthe des Reizes erlöschen, so würden wir für die [Integrations]Constante C einen negativ unendlichen Werth erhalten, und es wäre kein endlicher Ausdruck für einen absoluten Empfindungswerth zu finden."}

β, β' as before, have different threshold values, b, b' respectively, take their places. Then the threshold values do not disappear from the formula" (*EP* 2:94).[74] He subsequently developed the simple difference formula into the difference measurement formula; while the former alone did not account for the fact of the difference threshold, the latter's primary purpose was to capture this other facet of the threshold. Finally the situation formulae extended this once again, allowing for varying threshold values according to the differing temporal or spatial situation of two stimuli.

As Fechner took pains to note, the point of the measurement formula specifically (and by extension all these formulae in general) was *not* to produce numerical values for sensations but rather to fulfill the promise of psychophysics as an *exact* science, one with mathematical underpinnings and legible functions that outlined the relation of its primary components.[75] At the core of this fulfillment, in moving from measurement to mathematization, Fechner made the second crucial transition dependent on the concept of the threshold: from sensitivity to sensation. Again, as he noted at the outset of this section, "The fundamental formula," being merely the formalization of Weber's law and, to some extent, an expression of the measurement methods of sensitivity that test it, "still presupposes no measurement of sensation, yet also grants no such thing; rather it merely expresses the lawful relation that takes place between small relative stimulus increments and sensation increments" (*EP* 2:10).[76] This relation between a stimulus increment and a sensation increment was Fechner's very definition of sensitivity itself. To reach sensation

74 {"Eine Verallgemeinerung der Unterschiedsformel in anderem Sinne erhalten wir, wenn wir, statt wie bisher, die absolute Empfindlichkeit und mithin den [Schwellen]Werth b bei Einwirkung der beiden Reize β, β' gleich zu setzen, verschiedene Schwellenwerthe, respectiv b, b' dafür stattfinden lassen. Dann verschwinden die Schwellenwerthe nicht aus der Formel."}

75 He in fact went further, declaring the measurement formula the very "key" to the upcoming transition from outer to inner psychophysics (*EP* 2:28).

76 {"Die Fundamentalformel setzt noch kein Mass der Empfindung voraus, gewährt aber auch kein solches, sondern drückt blos die gesetzliche Beziehung aus, welche zwischen kleinen relativen Reizzuwüchsen und Empfindungszuwüchsen statt hat."}

itself, outside of sensitivity's relative relation to stimulus, required the measurement formula, the other attendant derivations from the fundamental formula, and, most important, the fact of the threshold: "*With the measurement formula, there has now been gained a general dependent ratio, no longer valid merely for equal cases of sensation, between the size of the fundamental stimulus value and the size of the corresponding sensation; this permits calculating the how-many-times of the latter from the size ratios of the former, whereby the measurement of sensation is given*" (*EP* 2:17).[77] Yet the threshold between sensitivity and sensation didn't come down merely to the introduction of the measurement formula, which itself already hung on the threshold, but also to additional conceptual work within the "Formulae and implications of psychical measurement" section.

Toward the end of the mathematical section and outer psychophysics overall, Fechner reminded the reader that the measurement, difference, and difference measurement formulae only held where Weber's law held, an area he had already showed to have limits. To secure them as true *measurements of sensation*, he doubled back to the measurement principle of sensation, introduced near the beginning of *Elemente*. While Weber's law might fall away at certain points, this was not the case for the measurement principle, "as the essential thing, upon which our principle in its full generality rests, is only the possibility of *establishing the equality of small changes or increments of sensation for given stimulus increments in different parts of the stimulus scale*, for which not one but three good methods are at our disposal" (*EP* 2:191).[78] He offered a basic function expressing this

77 {"*Mit der Massformel hat man nun ein allgemeines, nicht mehr blos für Gleichheitsfälle der Empfindung gültiges, Abhängigkeitsverhältniss zwischen der Grösse des fundamentalen Reizwerthes und der Grösse der zugehörigen Empfindung gewonnen, welches gestattet, aus Grössenverhältnissen des ersten das Wievielmal des letzten zu berechnen, womit das Mass der Empfindung gegeben ist*."}

78 {"Indem das Wesentliche, worauf sich unser Princip in seiner vollen Allgemeinheit stützt, nur die Möglichkeit ist, die *Gleichheit kleiner Aenderungen, Zuwüchse der Empfindung für gegebene Reizzuwüchse in verschiedenen Theilen der Reizskala zu constatiren*, wofür uns nicht nur eine, sondern drei gute Methoden zu Gebote stehen."}

principle, $\mathfrak{F}(\beta)d\beta = c$, where $\mathfrak{F}$ was an unknown function and c a constant. While Weber's law here offered a shortcut, that is, $\mathfrak{F}(\beta) = \frac{K}{\beta}$ yielding $\frac{Kd\beta}{\beta} = c$, the function could as easily be $\mathfrak{F}(\beta) = K\beta$ or even $\mathfrak{F}(\beta) = K$ yielding $K\beta d\beta = c$ or simply $Kd\beta = c$, and still satisfy the measurement principle. Fechner then took another route to sensation, via these other functions.

On his way, Fechner appealed to a crucial distinction he had already developed, between sensation differences in general (*Empfindungsunterschiede*), which include *unconscious* differences, and contrast or felt differences (*Contrast-* or *empfundene Unterschiede*), the specific section of *conscious* sensation differences. This distinction, though introduced late, was crucial to the development of the difference measurement formula, which derived its importance partially because, in measuring *felt differences*, it mapped onto the earlier developed measurement methods. He referred back to this distinction and asserted that, under perfect sensitivity, as long as the *felt difference* between the stimulus, β, and its differential increment, $d\beta$, was judged to be constant, the sensation difference could be also held to be constant, allowing for the replacement of the constant in the function with the differential increment of stimulus, dy.[79] The resulting formula, $dy = \mathfrak{F}(\beta)d\beta$, could itself be integrated, giving the following two integrals, first for sensation difference and second for absolute sensation, crucially with reference for the stimulus threshold: $y - y' = \int_{\beta'}^{\beta} \mathfrak{F}(\beta)d\beta$ and $y = \int_{b}^{\beta} \mathfrak{F}(\beta)d\beta$. He then plugged in the three already-mentioned possibilities for this generic function, $\frac{K}{\beta}$ (aka Weber's law), $K\beta$, and K, and completed the integration, resulting in three new formulae for sensation (fig. 2.2). The first being Weber's law resulted, of course, in the measurement formula itself;

79 He argued for this equivalence, which wasn't immediately obvious: "This solidarity [between sensation differences and felt differences] is perhaps not a priori entirely evident; yet its presupposition is that which, on the one hand, makes measurement possible and, on the other, renders the empirical results" (*EP* 2:193). {"Diese Solidarität [zwischen Empfindungsunterschieden und empfundenen Unterschieden] ist vielleicht nicht *a priori* ganz evident, ihre Voraussetzung aber das, was das Mass einerseits möglich macht, anderseits die erfahrungsmässigen Resultate wiedergiebt."}

$$\gamma = k \log \frac{\beta}{b}, \text{ wobei } k = \frac{K}{Modulus}$$
$$\gamma = k (\beta^2 - b^2), \text{ wobei } k = \frac{K}{2}$$
$$\gamma = k (\beta - b), \text{ wobei } k = K.$$

Figure 2.2. Three solutions to the integral of the function based on the generalized measurement principle for absolute sensation, all dependent on the threshold and only the first of which implied Weber's law (*EP* 2:194).

but the other two possibilities *still* produced formulae for measuring sensation and each of them depended on the threshold. He wrote, "With the preceding taken into consideration, the fundament of our measurement may be ensured in full generality by a turn in two directions" (*EP* 2:194).[80]

But this generalization of the measurement principle points to a deeper intertwining of the threshold and sensation measurement in *Elemente*. Fechner's use of the felt difference as a specific subset of sensation difference in general was more than merely a convenient formal shortcut; it revealed that the threshold was *always* present in the measurement principle of sensation, from the first transition between sensitivity to sensation in volume 1 that was the launching point for the entire enterprise of outer psychophysics. He defined the felt difference and the difference threshold as follows: "Now, following p. 85, sensation difference can be identified with the particular case of a felt difference where a difference is felt at the smallest possible difference of stimuli β, β', and a felt difference can be regarded as the more general case where the sensation of the difference begins and fades out at any specific value of $\frac{\beta}{\beta'}$" (*EP* 2:99).[81] The felt difference was thus the just-noticeable difference *and* the difference threshold in one. It was the

80 {"Das Vorige in Rücksicht genommen, dürfte das Fundament unseres Masses durch eine Wendung nach zwei Seiten in voller Allgemeinheit sicher gestellt sein."}

81 {"Nun lässt sich nach S. 85 der Empfindungsunterschied mit dem besonderen Falle eines empfundenen Unterschiedes identificiren, wo bei kleinstmöglicher Differenz der Reize β, β' ein Unterschied empfunden wird, und ein empfundener Unterschied als der allgemeinere Fall ansehen, wo bei irgend einem bestimmten Werthe von $\frac{\beta}{\beta'}$ die Empfindung des Unterschiedes beginnt und schwindet."}

point at which an observer *just noticed* a stimulus increment, and the point at which the stimulus increment over an already-felt sensation began. And it revealed that the just-noticeable difference and the difference threshold were fundamentally connected.

Fechner recognized this link at the very beginning of the mathematical section, noting that the just-noticeable sensation difference, upon which the method of just-noticeable differences was built, "is related to the difference threshold and nearly coincides with it" (*EP* 2:16).[82] Later, in defining the felt difference, he further emphasized the fundamental nature of the link, writing, "The fact of the difference threshold has proved to us that not every smallest stimulus increment or stimulus difference above the threshold is felt, rather that a certain size of same is required, otherwise it is unnoticeable. A too-small light or weight difference is not felt. The entire method of the just-noticeable difference is based on this" (*EP* 2:84).[83]

While Fechner spent significantly more time developing the other two measurement methods, the method of just-noticeable differences remained the most easily demonstrable, portable, and wide ranging. Moreover, it was the method most clearly linked to the measurement principle of sensation. As noted above, in preparing for his new science, Fechner proposed first a measurement principle of sensitivity (basically defining a sensitivity as inversely proportional to the size of the stimulus) before proceeding to one of sensation itself: "*In principle, our measurement of sensation will therefore come out of carving each sensation into equal parts, that is, the equal increments out of which it [the sensation] grows from a null state onward; and then thinking of the number of these*

82 {"Mit der Unterschiedsschwelle zusammenhängt und nahe zusammenfällt."} He went on to hedge about the consequences of the link, in order to show that the method of just-noticeable differences and the measurement formula itself did not include or depend on the difference threshold. But this hedging only concerned these consequences rather than the link itself.

83 {"Hat uns die Thatsache der Unterschiedsschwelle bewiesen, dass nicht jeder kleinste Reizzuwachs, Reizunterschied oberhalb der Schwelle gespürt wird, sondern dass es einer gewissen Grösse desselben bedarf, sonst ist er unmerklich. Ein zu kleiner Licht-, Gewichtsunterschied wird nicht gespürt. Die ganze Methode der eben merklichen Unterschiede beruht hierauf."}

equal parts as defined by the number of the corresponding variable stimulus increments—just like by the inches of a yardstick—which are able to bring about the equal sensation increments" (*EP* 1:60).[84] The very action demanded by this measurement principle, the identification of equal parts of sensation, *was* the method of just-noticeable differences. Each just noticeable difference stood, in Fechner's empirical practice, for an equal and summable increment, the most basic unit of measurable sensation; it was the purpose of the measurement methods in general to identify these increments and relate them to varying stimulus increments. This did not lead directly to a measurement of sensation (that, of course, required the mathematization just laid out) but *did* reveal that the difference threshold, fundamentally linked to the just-noticeable difference, was a part of the transition from sensitivity to sensation even at the outset.[85]

Outer to Inner Psychophysics

The next transition Fechner effected with the threshold was structurally the largest in the entire *Elemente*: from outer to inner psychophysics. While outer psychophysics was where the new science gained its footing and developed its basic concept and approach, inner psychophysics was always the ultimate goal. At its most basic, inner psychophysics approached the same mind-body nexus as outer psychophysics but according to the

84 {"*Principiell also wird unser Mass der Empfindung darauf hinauskommen, jede Empfindung in gleiche Abtheilungen, d. s. die gleichen Incremente, aus denen sie vom Nullzustande an erwächst, zu zerlegen, und die Zahl dieser gleichen Abtheilungen als wie durch die Zolle eines Massstabes durch die Zahl der zugehörigen variabeln Reizzuwüchse bestimmt zu denken, welche die gleichen Empfindungszuwüchse hervorzubringen im Stande sind.*"}

85 The assertion that just-noticeable differences could be treated as equal and summable increments was fundamental to Fechner's psychophysics and a major point of contention with the earliest respondents to the new science. Both the psychologist G. E. Müller and the philosopher Franz Brentano disputed that just-noticeable differences were equivalent or could be judged as such. Fechner found their objections somewhat puzzling, indicating that perhaps it was an issue mostly of terminology, but was also tenacious in his position, as it was crucial to both the experimental practice and, via the threshold as I show here, to his larger worldview. In response to Müller, see Fechner, *Revision der Hauptpuncte der Psychophysik*, 199–201. Fechner and Brentano corresponded about the matter, before coming to an impasse. Fechner and Brentano, 27 May 1874, n.d., 2 July 1874, n.d., in *Briefwechsel über Psychophysik, 1874–1878*, 81–105.

"immediate" (*EP* 1:11) relation of the mental to the "physical inner world" (*EP* 1:10) rather than its indirect relation to the physical outer world, which was the concern of outer psychophysics. There were two primary reasons that inner psychophysics occupied pride of place in psychophysics at large, one genetic and one conceptual. Genetically, Fechner saw the starting point of the enterprise, the circumstances and observations regarding attention and consciousness that led to the insight of 1850 on a functional mind-body relationship, as part of inner psychophysics (*EP* 2:559). Conceptually, we find the primacy of the inner in psychophysical activity. With psychophysical activity as the fundamental middle term (*Mittelglied*), Fechner wrote:

> In outer psychophysics, we have, so to speak, leapfrogged this middle term, as we were able to directly establish, following direct experience, merely the lawful relation between the end terms of this chain, between stimulus, which is exposed to outer experience, and sensation, which is exposed to inner experience. In the entrance to inner psychophysics, we have let ourselves pass from the outer end term over to the middle term, in order to henceforth take its relation to the inner end term into account instead of that of the outer end term. We then drop the stimulus, after it has fulfilled its purpose, leading us to the middle term. (*EP* 2:377)[86]

Understanding the actual mechanics of psychophysics required identifying and understanding this middle term, even if it, like inner psychophysics as a whole, comprised almost entirely "obscure and disputed questions" (*EP* 1:13). And, in the end, *the* key question about psychophysical activity turned out to be a question of the threshold: Where exactly did it exist in the chain stimulus–psychophysical activity–sensation?

But what was psychophysical activity? The question, Fechner asserted, was a red

86 {"In der äusseren Psychophysik haben wir dieses Mittelglied so zu sagen übersprungen, indem wir, der directen Erfahrung folgend, die gesetzliche Beziehung doch blos zwischen den Endgliedern dieser Kette, dem Reize, welcher der äusseren, und der Empfindung, welche der inneren Erfahrung blos liegt, direct zu constatiren vermochten. Im Eingange zu der inneren Psychophysik haben wir uns vom äusseren Endgliede zu dem Mittelgliede überleiten zu lassen, um fortan dessen Beziehung statt der des äusseren Endgliedes zu dem inneren Endgliede in Betracht zu ziehen. Den Reiz lassen wir dann fallen, nachdem er seinen Zweck erfüllt hat, uns zum Mittelgliede zu geleiten."}

herring. He compared the stuff to electricity and psychophysics to the physical theory of electricity: "For what is electricity? Let's just say, we don't know; and yet how developed is the science of electricity!" (*EP* 2:378).[87] The crucial question was rather how it related and functioned as the middle term in the stimulus-sensation chain. Because all the experiences, experiments, and conclusions of outer psychophysics still pertained to the two ends of the chain and thus, indirectly, to the middle term, they could be brought into inner psychophysics. It was now up to inner psychophysics itself to fill in the remaining blanks.

The most direct expression of this transfer was how the fundamentals of outer psychophysics—Weber's law and the fact of the threshold—translated into inner psychophysics. Ultimately, the translation of both came down to a single question: "Does sensation depend on psychophysical activity or does psychophysical activity depend on stimulus in the terms of the fundamental formula and the measurement formula? Accordingly, in the first case, absolute increments of psychophysical activity would have to move proportionally to those of stimulus; in the second, absolute increments of sensation would have to move proportionally to those of psychophysical activity" (*EP* 2:429).[88] Simply put, in terms of the formulae, was it stimulus or sensation that stood in for psychophysical activity? General impressions and experiences related to Weber's law led Fechner toward the first conclusion. And though the answer for the law must be the same for the fact of the threshold, by dint of their intimate relation, it was the latter case that required specific attention and was ultimately decisive. "Nevertheless, we investigate the question with particular regard to the latter [the fact of the threshold]," he wrote (*EP*

87 {"Denn was ist Elektricität? Sagen wir einfach, wir wissen es nicht; und wie entwickelt ist doch schon die Lehre von der Elektricität!"}

88 {"Hängt die Empfindung von der psychophysischen Thätigkeit oder hängt die psychophysische Thätigkeit vom Reize im Sinne der Fundamentalformel und Massformel ab, wonach erstenfalls die absoluten Zuwüchse der psychophysischen Thätigkeit denen des Reizes, zweitenfalls die der Empfindung denen der psychophysischen Thätigkeit proportional gehen müssten."}

2:431):[89] Where did the threshold in fact lie, with psychophysical activity, as in the first of his cases, or with the stimulus, as in the second? That is, which must reach a threshold for a corresponding sensation to arise or disappear?

After considering the contrary, Fechner made the case that the threshold did in fact lie with psychophysical activity rather than the stimulus, starting with an example from his own life:

> Early in bed, I usually think over all sorts of things. Across from the bed is a black stovepipe in front of a light wall. When I am lying with open eyes after the morning light sets in, the impression of the black stovepipe imprints itself strongly in the eye, since my head lies still, even though I am thinking of entirely different things, and the impression is for me completely unconscious. Yet very often, when I then closed my eyes, I have been astonished by a very intensely white afterimage of the stovepipe. The physical impression was thus made in such a form that the visual sensation could be formed; but it had remained unconscious, as long as attention was diverted, and yet could still enter consciousness afterward. (*EP* 2:432)[90]

To this example of an unconscious sensation that, with a shift in conditions and attention and no change in stimulus, became conscious, he added a number of others, both from his own experience and from various published scientific accounts. What's more, by linking the threshold to psychophysical activity, he was able to rejigger the basics of the fundamental and measurement formulae, relating psychophysical activity to sensation rather than stimulus: "With this translation . . . our science is, speaking in principle, liberated from all precarious stipulations and restrictions, to which it was still subject in

89 {"Doch untersuchen wir noch besonders bezüglich der letzteren [der Tatsache der Schwelle] die Frage."}

90 {"Früh im Bette pflege ich über Allerlei nachzudenken. Dem Bette gegenüber ist ein schwarzes Ofenrohr an einer hellen Wand. Da der Kopf still liegt, so imprimirt sich, wenn ich nach eingebrochenem Morgenlichte mit offenen Augen liege, der Eindruck des schwarzen Rohres stark im Auge, aber ich denke an ganz Anderes, und dieser Eindruck ist mir völlig unbewusst. Sehr oft aber bin ich, wenn ich dann einmal die Augen schloss, durch ein sehr intensiv weisses Nachbild des Ofenrohres frappirt worden. Der physische Eindruck war also in solcher Form gemacht, dass die Gesichtsempfindung entstehen konnte, aber er war, solange die Aufmerksamkeit abgelenkt war, unbewusst geblieben, und konnte doch nachmals noch in das Bewusstsein treten."}

the field of outer psychophysics" (*EP* 2:435).[91] With such a transposition, the formulae were no longer constrained by limits, deviations, and approximations but actually expressed "an *essential* functional relation between body and mind" (*EP* 2:435). Aided by the threshold, Fechner arrived fully in the realm of inner psychophysics and was reconstructing the science as he went.

Once within inner psychophysics, one final major transition remained for Fechner, at least within psychophysics as a science proper: from specific sensations to general consciousness. Here he was concerned not just with the general admixture of sensations that make up the everyday sensorium, and the attendant issues of attention, but also with the question of consciousness in general. He introduced the term "sensuous and specific phenomena" (*sinnliche und Sonderphänomene*; *EP* 2:438) to refer to sensations, hallucinations, afterimages, and other such specific conscious phenomena, within both outer and inner psychophysical realms (so tethered or untethered immediately to an outer stimuli). Without the ability to draw conclusions from the nature of psychophysical activity that underlay these phenomena, he turned again to the threshold: "The opposition of an elevation over the threshold and a sinking under the threshold, with the threshold point between, is not peculiar to the sphere of sensations. The entire mental life of humans alternates between sleep and waking, that is, an unconscious and a conscious state; then in turn during waking, individual spheres and, in each sphere, individual phenomena can exceed the threshold or sink beneath it" (*EP* 2:437).[92] First, he endeavored

91 {"Mit dieser Uebersetzung . . . wird unsere Lehre principiell genommen von allen precären Bedingungen und Beschränkungen befreit, denen sie noch im Felde der äusseren Psychophysik unterliegt."}

92 {"Der Gegensatz einer Erhebung über die Schwelle und eines Versinkens unter die Schwelle mit dem Schwellenpuncte dazwischen ist dem Gebiete der Empfindungen nicht eigenthümlich. Das ganze geistige Leben des Menschen wechselt zwischen Schlaf und Wachen, d. i. einem unbewussten und bewussten Zustande, im Wachen können dann wieder einzelne Gebiete und in jedem Gebiete einzelne Phänomene die Schwelle übersteigen oder darunter sinken."}

to substantiate the fact of the threshold for general consciousness before relating it to the threshold of specific phenomena.

Fechner found the phenomena of sleep and waking the best starting point for his investigation into the general realm of conscious phenomena, and he began by comparing the journey through the two to that of the sun, sinking deeper and deeper during the sleeping night and then rising higher and higher during the waking day. The key was that during sleep psychophysical activity didn't go to zero but was rather merely reduced. This was attested to most simply by the fact that "one hears and feels in just the same way as during waking" (*EP* 2:445).[93] He further cited the removal of certain familiar or ongoing stimuli as a cause of waking: "A strong noise wakes us. But likewise, the miller awakens when the running of the mill falters; the sleeper in church when the preacher stops speaking; the child, sung to sleep by the wet nurse, when the wet nurse stops singing; those habituated to sleeping with a nightlight when the nightlight goes out; those traveling in a wagon when the wagon stops" (*EP* 2:446).[94] All in all, Fechner pinned the threshold between sleep and waking to "finite values of the underlying bodily activity" (*EP* 2:447–48).

But there remained the task of relating this general threshold of consciousness to that of specific phenomena. This relation was one fundamentally tied to the question of attention yet contained within it one of the paradoxes endemic to psychophysics:

> We see an object more brightly, if the light stimulus, which comes from it, is stronger, but we do not see it similarly more brightly if we behold it more attentively. We hear a tone as a stronger one if the sound stimulus is stronger; but the intensified attention does not let us attach to the same a larger sensuous strength. May we look in and listen in more attentively, yet

93 {"Hörte und fühlte man aber im Schlafe schon eben so, wie im Wachen."}

94 {"Ein starkes Geräusch erweckt uns; aber der Müller erwacht eben so, wenn der Gang der Mühle stockt, der Schläfer in der Kirche, wenn der Prediger zu sprechen, das von der Amme eingesungene Kind, wenn die Amme zu singen aufhört, der bei Nachtlicht zu schlafen Gewöhnte, wenn das Nachtlicht erlischt, der im Wagen Fahrende, wenn der Wagen still steht."}

> the brightness and the sound intensity do not seem to us thereby sensuously strengthened. . . .
>
> From the other side, however, it is certain that, with lacking attention, weak stimuli are not at all felt and that a certain attention is necessary to let them become at all noticeable. How is the intensification of attention now supposed to have no effect in letting them become more noticeable? (*EP* 2:452–53)[95]

If attention belonged to the realm of general consciousness and played such a crucial role in the stimulus threshold of specific phenomena, why could it *not*, when these phenomena were already above the threshold, further increase them? To answer this question and relate the specific and general thresholds, Fechner developed the "wave schema." Most simply, this schema visually represented the basic facts of both specific and general consciousness and their thresholds. "Let us think," he wrote, "of the human's total psychophysical activity as a wave and the size of this activity as represented by the level of this wave above a horizontal base or surface, to which every psychophysically active point contributes an ordinate. . . . Thus the level of this wave will have to somewhere and somehow exceed a certain limit, which we call the threshold, so that consciousness, waking, take place at all" (*EP* 2:454–55).[96] This was the primary wave and primary threshold; composing the primary wave were an underwave of a longer oscillation period, representing vivacity (*Munterkeit*; *EP* 2:455), attention, and general consciousness (most

95 {"Wir sehen einen Gegenstand heller, wenn der Lichtreiz, der von ihm herkommt, stärker ist, aber wir sehen ihn nicht ebenso heller, wenn wir ihn aufmerksamer betrachten. Wir vernehmen einen Ton als einen stärkeren, wenn der Schallreiz stärker ist; aber die verstärkte Aufmerksamkeit lässt uns demselben keine grössere sinnliche Stärke beilegen. Mögen wir aufmerksamer hinsehen, hinhören, die Helligkeit, die Schallstärke scheint uns nicht sinnlich dadurch verstärkt."}

{"Von der anderen Seite ist doch gewiss, dass bei mangelnder Aufmerksamkeit schwache Reize gar nicht gespürt werden, dass eine gewisse Aufmerksamkeit nöthig ist, sie überhaupt merklich werden zu lassen. Wie soll nun Verschärfung der Aufmerksamkeit nichts wirken, sie merklicher werden zu lassen?"}

96 {"Denken wir uns die gesammte psychophysische Thätigkeit des Menschen wie eine Welle, und die Grösse dieser Thätigkeit durch die Höhe dieser Welle über einer horizontalen Grundlinie oder Fläche dargestellt, wozu jeder psychophysisch thätige Punct eine Ordinate beiträgt. . . . So wird [. . .] die Höhe dieser Welle irgendwo und irgendwie eine gewisse Gränze, die wir die Schwelle nennen, übersteigen müssen, damit überhaupt Bewusstsein, Wachen stattfinde."}

generally, sleep and waking) and forming the basis of the primary wave, and an overwave of a shorter period, representing specific phenomena and occasionally bursting through the underwave and altering the primary wave (creating either peaks above or troughs below the underwave).[97] The overwave had, of course, a specific overthreshold, at which its eruptions entered or receded from consciousness.

This pair of waves and thresholds combined to describe the interaction between their attendant phenomena and did so in a way that highlights two related types of unconscious phenomena: unconscious sensations and dreams. With the first, during waking consciousness but with attention directed such that elements of the primary wave were below its threshold, specific phenomena crossed their own overthresholds but did not break the primary threshold into the primary wave. Nevertheless, unlike unfelt phenomena that did not cross the overthreshold, these unconscious sensations still expressed "an unconscious codetermination [*Mitbestimmung*]": "Thus, for the walker deep in thought, the sunshine, the greenery, the birdsong expresses an unconscious codetermination; he sees and hears nothing of all this and yet feels otherwise, and his flow of thoughts will be otherwise, than if he were thinking in a dark room" (*EP* 2:461).[98] With the second case, during sleeping unconsciousness and with the primary wave entirely below the threshold, specific phenomena again crossed their own overthresholds and, as overwaves, "play on the low underwaves" (*EP* 2:461).[99]

97 Fechner sketched briefly a more detailed composition of the wave schema, which also dealt with waves attendant to spatial and temporal variations and accounted for the more nuanced oscillations of the underwave according to specific issues of attention. But he worked mostly with the more simplified composite version offered here.

98 {"So äussert beim in Gedanken gehenden Spaziergänger der Sonnenschein, das Grün, der Vogelgesang eine unbewusste Mitbestimmung; er sieht und hört nichts von alle dem und fühlt sich doch anders, und sein Gedankenlauf wird anders sein, als wenn er im dunkeln Zimmer dächte."}

99 {"Auf der niedrigen Unterwelle spielen."} Fechner proposed that dreams may be just like unconscious codeterminations, in that they can become conscious in memory, or that they were in fact "conscious in a similar sense" (*EP* 2:462) to how they seem in memory and diverged from unconscious codeterminations in that there was nothing conscious to codetermine during sleep. He thought the latter was more likely but remained uncertain.

With the wave schema in place and its formalization of the interaction between specific and general phenomena and their thresholds, Fechner made the final major transition within the new science of psychophysics itself. And at its heart was unconsciousness, where psychology falters: "Above all the concept of the psychophysical threshold has the most important significance already by giving the concept of unconsciousness a firm fundament in general. Psychology cannot leave unconscious sensations and ideas, indeed effects of unconscious sensation and ideas, out of account. But how can that which does not exist have an effect? Or in what way does an unconscious sensation or idea differ from the sort of sensation or idea that we do not even have? The distinction must be made; but how is it to be made clearly? And where since then is clarity about it to be found?" (*EP* 2:438–39).[100] Only with the threshold was such a distinction able to be clearly defined; only with the threshold did unconsciousness become subject to exact and empirical science. Fechner considered this accomplishment "as one of the finest results of our theory" (*EP* 2:439).

Psychophysics to Religion and Naturphilosophie

Despite its abstracted and even somewhat speculative nature, especially with the wave schema, inner psychophysics was nonetheless firmly planted within the larger exact and empirical mandate of psychophysics as a whole. The final two chapters of "Inner psychophysics," however, ultimately moved beyond this mandate. Only here did the perspectival approach of psychophysics, which clearly set out the human mind-body relation within the relation "more generally between the bodily and mental world, the

100 {"Ueber das Alles hat der Begriff der psychophysischen Schwelle die wichtigste Bedeutung schon dadurch, dass er für den Begriff des Unbewusstseins überhaupt ein festes Fundament giebt. Die Psychologie kann von unbewussten Empfindungen, Vorstellungen, ja von Wirkungen unbewusster Empfindungen, Vorstellungen nicht abstrahiren. Aber wie kann wirken, was nicht ist; oder wodurch unterscheidet sich eine unbewusste Empfindung, Vorstellung von einer solchen, die wir gar nicht haben? Der Unterschied muss gemacht werden, aber wie ist er klar zu machen? Und wo ist seither eine Klarheit darüber zu finden?"}

physical and psychical world" (*EP* 1:8), get taken to its conclusion, making the more general relation beyond the individual human as the object of the science. In the preface to the second volume of *Elemente*, he called chapter 45 (the penultimate chapter in "Inner psychophysics") both part of a necessarily incomplete effort (at once a "framework" and a "surrogate") toward "the schematic representation of some of the most general and most important psychophysical conditions" based on inner psychophysics and the short introduction to views "that open themselves from a most general version of psychophysics out into the sphere of religion and Naturphilosophie" (*EP* 2:ix).[101] These views were in contradiction with "the now-prevailing common as well as theological and philosophical worldview," and Fechner advised the reader who found no approval for such a contradiction to skip over chapters 45 and 46, as they were mere anticipation of a further developed psychophysics (*EP* 2:x). Yet this further development, despite its challenges, was essential to him. He closed the preface with a final plea:

> It [psychophysics] won't be able to become a universal psychophysics without extending, deepening, and raising the mental tiers [*Stufenbau*] of the world over and above the now-accepted limits. I say this, admittedly, with the conviction that the resistance of the age against views of this kind will also react against the taking up of this psychophysics, which carries such same views as conclusions in its embryo; but likewise with the conviction that in the end this resistance will fail because of the firm ground and future development of this science. (*EP* 2:x)[102]

101 {"Die schematische Darstellung einiger der allgemeinsten und wichtigsten psychophysischen Verhältnisse"; "die sich von einer allgemeinsten Fassung der Psychophysik aus ins Gebiet der Religion und Naturphilosophie eröffnen."} The first of these descriptions of chapter 45—an incomplete attempt, at once "framework" and "surrogate"—also applied to chapter 42, which introduced the wave schema; the second—an introduction to wider views in the realm of religion and Naturphilosophie—also applied to a "short, popularly aimed text" *Über die Seelenfrage* (1861) that would soon appear and extended the conclusions of the chapter.

102 {"Sie [Psychophysik] wird keine allgemeine werden können, ohne den geistigen Stufenbau der Welt über die jetzt angenommenen Gränzen hinaus zu erweitern, zu vertiefen und zu erhöhen. Diess sage ich zwar mit der Ueberzeugung, dass der Widerstand der Zeit gegen derartige Ansichten auch auf die Aufnahme dieser Psychophysik zurückwirken wird, welche dieselben als Folgerungen im Keime in sich trägt, aber eben so mit der Ueberzeugung, dass dieser Widerstand an dem festen Grunde und der künftigen Entwickelung dieser Lehre endlich scheitern wird."}

Despite their anticipatory character, these final two chapters were clearly crucial to psychophysics as a general science of the mind-body relation. So what were "the mental tiers of the world" and how did the threshold get Fechner there?

These tiers were, in brief, Fechner's answer to the question that opened these concluding chapters: If in a single living body, a psychical unity joined a physical manifold, was there a psychical unity, or at least "a unitary psychical resultant" (*EP* 2:527), joined to other physical manifolds? That is, did the psychophysical structure Fechner laid out over the preceding 861 pages for the individual apply beyond that individual? The full answer began with an analogy between the psychical-physical relation of an individual organism and that between organisms, framed as a question of psychophysical continuity and discontinuity: where a physical manifold produced a unified or simple psychical resultant, there was continuity, while where that manifold produced "a distinguishable majority of such," there was discontinuity (*EP* 2:528). Continuity of a general consciousness did not, however, mean there could be no discontinuity regarding specific conscious phenomena. This tension—that in individual organisms both continuity and discontinuity could coexist, brought together in the complexity of nerves tying senses to brain across the extended seat of the soul—was the key to the analogy. Maybe the psychophysical discontinuity between organisms could be understood with reference to the discontinuity of specific phenomena of consciousness within an individual psychophysical continuity. The seeming break of consciousness between organisms must be due to the fact that "that psychophysical activity between them does not extend continuously through nature in the same way as within them, be it that psychophysical activity is altogether lacking in outer nature or even just beyond each nervous system, or that it sinks under the threshold, which enters under the same principle, provided that a cessation of psychophysical activity

means only the greatest possible depth under the threshold" (*EP* 2:529).[103] Once again, the threshold pushed psychophysics forward, here by transitioning psychophysical continuity and discontinuity from the individual organism to a series of organisms.

To visualize this expanded continuity-discontinuity, Fechner again called on the wave schema, here both transposed from the one to the many and drawn as an actual wave: "Here, a, b, c represent three organisms or rather the psychophysical primary waves of three organisms, and AB the threshold. That which from each wave peak sticks out over the threshold coheres in itself and carries one united consciousness; that which is under the threshold, in carrying unconsciousness, divides the conscious, while it yet still sustains the physical linking between them" (*EP* 2:529; see fig. 2.3).[104] Fechner then bolstered the analogy between individual and general psychophysical continuity and discontinuity, drawing on further physiological evidence about psychophysical phenomena in segmented animals (e.g., *Lumbriculus variegatus*, a fresh-water worm), which, when cut into certain segments, produced new separate organisms; he reconceived of this evidence in terms of psychophysical activity and a threshold between continuity and discontinuity. He further buttressed it with observations of humans with the destruction of one brain hemisphere that did not then destroy the overall continuity of the soul: "Apart from that, both cases [destroying a cerebral hemisphere and splitting an animal] are in agreement that both parts of the creature feel as one before the splitting and support each other in psychical performance; but one part can also do without the other and still give the same psychical

103 {"Dass die psychophysische Thätigkeit sich zwischen ihnen nicht in derselben Weise durch die Natur forterstreckt, als in ihnen, sei es, dass sie in der äusseren Natur, oder selbst schon über jedes Nervensystem hinaus, überhaupt fehlt oder dass sie unter die Schwelle sinkt, was unter dasselbe Princip tritt, sofern ein Aufhören der psychophysischen Thätigkeit nur die grösstmögliche Tiefe unter der Schwelle bedeutet."}

104 {"Hier stellen a, b, c drei Organismen oder vielmehr die psychophysischen Hauptwellen dreier Organismen vor, AB die Schwelle. Was von jedem Wellenberge die Schwelle überragt, hängt in sich zusammen und trägt ein einiges Bewusstsein; was unter der Schwelle ist, trennt als Unbewusstsein tragend das Bewusste, indess es doch noch die physische Verbindung dazwischen unterhält."}

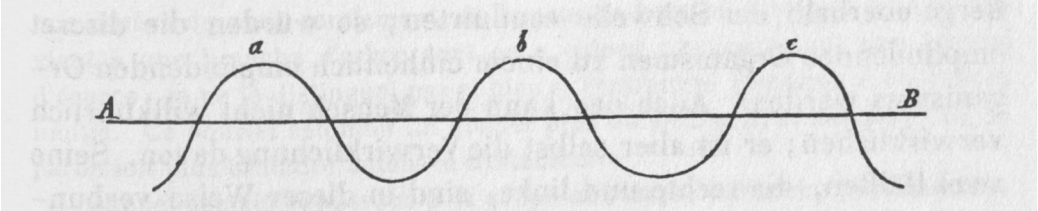

Figure 2.3. The first wave schema of psychophysical continuity and discontinuity in nature. The three peaks a, b, and c were three organisms, each with a united consciousness above AB, the threshold of consciousness (*EP* 2:529).

performance as before, only weaker" (*EP* 2:536).[105] Finally, he moved from the spatial relations of psychophysical continuity and discontinuity (i.e., across organisms) to the temporal ones, noting the continuity of identity across waking and sleeping as well as the ever-changing material of body via continual metabolism. In both cases, the spatial (or physical) conditions allowed for the perpetuation of psychophysical activity across time, whether via a separation of certain "psychophysically active particles above the threshold" (*EP* 2:539) from those beneath the threshold, in terms of waking and sleeping, or via the admixture of new material and old psychophysical activity, in terms of metabolism.

Fechner took these empirical observations on psychophysical continuity and discontinuity and brought them to bear on the full wave schema, with its primary wave, overwave, underwave, and attendant thresholds. Just as before he had transposed a simplified wave schema from the individual organism to many organisms, here he applied psychophysical continuity and discontinuity to the overwave (representing specific as opposed to general conscious phenomena), accounting for the differentiation or nondifferentiation of simultaneous sensations: "That all the overwaves $a, b, c \ldots$ are

105 {"Im Uebrigens stimmen beide Fälle [die Zerstörung einer Hirnhälfte und die Spaltung eines Tiers] darin überein, dass vor der Spaltung die beiden Theile des Geschöpfes in Eins empfinden, und sich in der psychischen Leistung unterstützen, aber auch der eine Theil den einen andern missen kann, und doch noch dieselbe, nur schwächere, psychische Leistung als vorher giebt."} How to fully reconcile the experimental evidence related to "lower animals" and the impossibility of actually splitting a human or other higher animal was a challenge for Fechner (*EP* 2:537). He sought to deal with it theoretically by addressing the resulting possibility of multiple souls not only via their count but also their intensity.

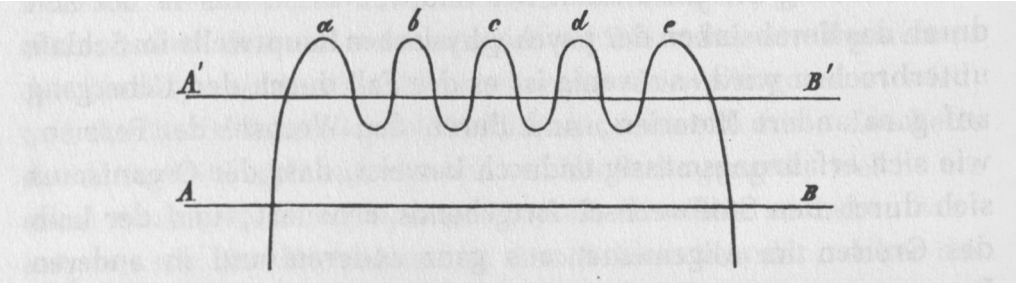

Figure 2.4. The second wave schema of psychophysical continuity and discontinuity. AB was the primary threshold and $A'B'$ the overthreshold. The five peaks, a, b, c, d, and e, were specific conscious phenomena, each discontinuous with the next via a dip below the overthreshold. Fechner subsequently reconceived of them as a series of humans, organisms, heavenly bodies—any system of psychophysical activity—cresting as overwaves above the primary wave of nature but distinct from each other, united in the consciousness of a God in continuity far above a much deeper primary threshold (*EP* 2:540).

joined together above the same primary threshold in *one* primary wave arranges them into and subordinates them to the same primary consciousness; that they are, however, at the same time discontinuously over their own threshold lets them differentiate *inside* this primary consciousness" (*EP* 2:540; ellipsis in original; see fig. 2.4).[106] Such a schema not only provided for the differentiation of specific sensations within a larger consciousness but also accorded with the allocation of psychophysical activity throughout the body (e.g., across two halves of the brain in higher animals, a series of similar segments in lower ones) in its ability to better effect its psychical work (e.g., in the face of injury, with the distribution of sensations). Fechner worked out this refined wave schema in only six paragraphs, relying on his extensive previous work to substantiate that the overwave and the overthreshold did in fact unite these two facets of his psychophysical research. But the brisk pace also brought him all the more quickly to the true quarry of this new schema: the psychophysical tiers of the world at large.

"Let us conclude the observations that we have tied on to our schema in this and an earlier chapter," Fechner began the final move modestly, "with still some observations of

106 {"Dass alle Oberwellen $a, b, c \ldots$ oberhalb derselben Hauptschwelle in *einer* Hauptwelle zusammenhängen, ordnet sie demselben Hauptbewusstsein ein und unter, dass sie aber zugleich discontinuirlich über ihrer eigenen Schwelle sind, lässt sie *innerhalb* dieses Hauptbewusstseins unterscheiden."}

the most general nature" (*EP* 2:541).[107] These considerations would allow a glimpse at "the far-reaching consequences of psychophysics" (*EP* 2:541):

> Our primary waves, upon which our primary consciousness hangs, carry waves, upon which our particular phenomena of consciousness hang. But cannot our primary waves, for their part, be regarded as overwaves of a larger primary wave? Physically, they actually are; why not also psychophysically? For the total activity of the earthly system is representable under the schema of a large wave, to which the activity systems of individual organic creatures belong only as small overwaves. And the activity systems of individual heavenly bodies are again only overwaves of nature's universal system of total movements. The tiers that extend in and throughout us also extend over and above us. (*EP* 2:541–42)[108]

Just as psychophysical continuity and discontinuity within an organism could be extended horizontally to explain psychophysical continuity and discontinuity *between* organisms, its own internal layering of specific and general phenomena—the tiers—could also be extended vertically to suggest tiers of the world at large. Again, the key to this vertical extension was the threshold. Fechner continued:

> If the overwaves in us, upon which the distinguishable phenomena of consciousness hang in us, are now only discontinuously over their threshold but continuously over our primary threshold, won't also the primary waves, upon which our primary consciousness hangs, be only discontinuously above their threshold but continuously above a deeper primary threshold? That would also carry along with it, that there is along with our primary consciousness yet another more general one, which encloses ours as its particularities, just as ours, for its part, encloses its particularities in turn. (*EP* 2:542)[109]

107 {"Schliessen wir die Betrachtungen, die wir in diesem und einem früheren Kapitel an unser Schema geknüpft haben, noch mit einigen Betrachtungen allgemeinster Natur ab."}

108 {"Unsere Hauptwellen, an denen unser Hauptbewusstsein hängt, tragen Wellen, an denen unsere besonderen Bewusstseinsphänomene hängen. Aber können nicht unsere Hauptwellen ihrerseits als Oberwellen einer grösseren Hauptwelle betrachtet werden? Physisch sind sie es wirklich, warum nicht auch psychophysisch? Denn die gesammte Thätigkeit des irdischen Systemes ist unter dem Schema einer grossen Welle darstellbar, wozu die Thätigkeitssysteme der einzelnen organischen Geschöpfe nur als kleine Oberwellen gehören; und die Thätigkeitssysteme der einzelnen Weltkörper sind wieder nur Oberwellen des allgemeinen Systems der gesammten Bewegungen der Natur. Der Stufenbau, der sich in uns hinein fortsetzt, setzt sich auch über uns hinaus fort."}

109 {"Wenn nun die Oberwellen in uns, an denen die unterscheidbaren Bewusstseinsphänomene in uns hängen,

This was the psychophysical tiers of the world, in which individual systems of psychophysical activity were all entangled, stacked as particular overwaves to a more general, indeed universal, primary wave of consciousness. Of the schema's two primary elements—the wave and the threshold—the wave remained further abstracted from the empirical foundations of outer psychophysics than the threshold.[110] The very constitution of psychophysical activity, the bearer of the wave itself, was still hazy as physical aspect in an organism and was of course more so once considered beyond the individual organism (this was the subject of the following chapter). The threshold, on the other hand, had both concrete footing with specific conscious phenomena and in extension to the more general.[111] It provided the tiers of the world, relating the psychical and the physical at their most widespread.

"The consequence of this conception," Fechner concluded, "leads to the view of a God, omnipresent and conscious in nature, in which all minds live, weave and are, just as he in them, with individual mental intermediate stages between him and us; these stages are inherent to heavenly bodies and carry creaturely minds exactly so unitarily tied in themselves, just as these minds for their part are carried in the divine mind and just as the creaturely minds in turn carry in themselves their sense circuits and these their

---

nur discontinuirlich über ihrer Schwelle, aber continuirlich über unserer Hauptschwelle sind, werden nicht auch die Hauptwellen, an denen unser Hauptbewusstsein hängt, nur discontinuirlich über ihrer Schwelle, aber continuirlich über einer tieferen Hauptschwelle sein? Das würde mitführen, dass es zu unserm Hauptbewusstsein noch ein allgemeineres giebt, welches das unsere eben so als seine Besonderheiten umfasst, wie das unserige seinerseits wieder seine Besonderheiten umfasst."}

110 It was, of course, no coincidence that Fechner, whose early work in physics happened during intensive elaboration of different physical wave theories, developed such a wave schema. Marshall highlights specifically the work of A. L. Cauchy, in addition to that of Ernst Heinrich and Wilhelm Weber, as important for Fechner's understanding of physical wave theory, though Fechner himself (as per usual) did not offer citations in *Elemente*. Marshall, "Early Work of Gustav Theodor Fechner," 51. The importance of waves also showed up earlier in *Elemente*, where Fechner gave briefly his only attempt at systematically deploying the ultimate measurement of sensation, taking oscillatory stimuli, that is light and sound, and their measurable waves as object (*EP* 2: chap. 32).

111 Fechner did gesture to the connection between oscillation of specific stimuli (light and sound), which carried a double aspect of quantity and quality, and the wave form of psychophysical activity, but only briefly (*EP* 2:545–47).

specific sensations" (*EP* 2:542).[112] This was of course the true stuff of Naturphilosophie and religion, and Fechner directed readers elsewhere for further steps in this direction. Psychophysics as an exact and empirical science, "which according to its present-day position was capable of granting only just starting points to these," was here exhausted (*EP* 2:543).[113]

"HOW TO REPRESENT?"

The threshold did not diminish in importance for Fechner after the publication of *Elemente*. The concept appeared in his text on empirical aesthetics, *Vorschule der Aesthetik* (1876), in a mode foreshadowed by an aside in *Elemente* on the threshold of pleasure and unpleasure (*Lust und Unlust*; *EP* 2:464), as well as in both of his book-length elaborations and defenses of psychophysics, *In Sachen der Psychophysik* (1877) and *Revision der Hauptpuncte der Psychophysik* (1882). In these latter texts, he stuck to his conception of the threshold as an element of psychophysical activity (or an "inner threshold") as against the "physiological" view of the psychologist G. E. Müller, which allowed for an outer threshold but denied an inner one, and the philosophical view of the philosopher Franz Brentano, which denied the existence of a sensory threshold overall.[114]

Fechner and Brentano's letter exchange regarding the latter's *Psychologie vom empirischen Standpunkte* (1874) returned repeatedly to the threshold and Brentano's denial thereof; ultimately, Fechner connected this denial to the divergence of their views on physical and psychical phenomena and further of their different approaches toward

112 {"Die Consequenz dieser Auffassung führt zur Ansicht eines in der Natur allgegenwärtigen bewussten Gottes, in dem alle Geister leben, weben und sind, wie er in ihnen, mit, den Weltkörpern inwohnenden, individuellen geistigen Zwischenstufen zwischen ihm und uns, welche die geschöpflichen Geister eben so einheitlich verknüpft in sich tragen, wie sie ihrerseits im göttlichen Geiste getragen werden, und wie die geschöpflichen Geister wieder ihre Sinneskreise und diese ihre Sonderempfindungen in sich tragen."}

113 {"Welche nach ihrem heutigen Stande erst nur Anknüpfungspuncte dazu zu gewähren vermag."}

114 Fechner, *In Sachen der Psychophysik*, 24–27, 42–51, 215; and Fechner, *Revision der Hauptpuncte der Psychophysik*, 235–42.

empirical research.[115] Wundt recognized how important the threshold was for Fechner's psychophysics, writing in his celebration of Fechner's centenary, "His entire psychology, as far as it embarks on an interpretation of empirical facts, consists in the application of this threshold concept to the most disparate psychical processes. . . . Everything that happens in human consciousness comes, for Fechner, under the point of view of a threshold phenomenon."[116] Notably Wundt thought this omnipresence of the threshold, specifically its translation into inner psychophysics, failed and thus prevented inner psychophysics and the related wider philosophical viewpoints from gaining scientific footing.[117]

While the archival record pertaining to the threshold (and psychophysics at large) remains relatively thin, there is one moment in the one collection of Fechner's notes that hints at the historical genesis of the concept as well as how it, and thus the mind-body relation it tracked, figured in his broader life. Of his extensive scientific work, only a small number of miscellaneous research notes has survived at the Universitätsarchiv Leipzig.[118] Among the collection are only a few experimental protocols, some detailed and clear and some mere jottings, with a number of stray pages strewn with unidentified numbers and variables as well as some preliminary working out of his own writings. Most common are the citations from his contemporaries' work (e.g., Ernst Mach), either as items in lists or in longer quotations, sometimes along with his resulting comments. One of these citations, from a journal of 1856, carried a peculiar short title, or statement of topic as in an essay,

115 Fechner and Brentano, 27 May 1874, n.d., 2 July 1874, n.d., in *Briefwechsel über Psychophysik, 1874–1878*, 81–105.

116 Wundt, *Fechner*, 83–84. {"Seine ganze Psychologie, so weit sie sich auf eine Interpretation empirischer Thatsachen einlässt, besteht in der Anwendung dieses Schwellenbegriffs auf die verschiedensten psychischen Vorgänge. . . . Alles, was im menschlichen Bewusstsein geschieht, fällt für Fechner unter den Gesichtspunkt eines Schwellenphänomens."}

117 Wundt, *Fechner*, 85.

118 Fechner, Notizen, 1852, 1883, 1894, NA 01/01/01, UA Fechner Nachlass. The notes in fact stem from many other dates beyond these (plus it is unclear which papers are dated to after Fechner's death, that is, 1894, and whether they were at some point attributed to someone else); page numbers, added by archivists, refer to sheets front and back.

that did not in fact show up in the citation itself: "Zur Schwelle"—"On the threshold."[119] "On p. 189, Renz and Wolf draw attention to the following,"[120] began Fechner, before quoting, haltingly with a number of crossed-out errors and corrections, from the text: "This 'remote noise of the day' is not observed by us or hardly so; it might be able to really be guided to full consciousness by almost nothing but its opposite. In fact, upon ascension to considerable heights in a hot-air balloon, the 'soundless calm' is one of the single most conspicuous phenomena, frequently described as truly uncanny."[121] After the quote was a simple question of Fechner's own: "How to represent?"[122] The citation was in fact from a footnote in the source, which neither used the word *threshold* itself nor focused on the phenomena quoted by Fechner. What then can be made of the stated topic and the gnomic challenge to represent it?

The citation was Theodor Renz and Augustus Wolf, "Versuche über die Unterscheidung differenter Schallstärken" (Experiments on the differentiation of different sound intensities), which delivered exactly what its title promised. Fechner cited the text in *Elemente* as a primary example of the method of right and wrong cases (*EP* 1:74). The experiment, which was explicitly aimed at the intensity (or quantity) of sound rather than its tone (or quality), featured an apparatus made of two wood boards, one fitted with a movable pocket watch with an audible ticktock and the other with a listening hole for an ear. With various upholstery to dampen unwanted internal echoes and a small mirror with marks to keep the ear of the listening participant in the right place, the watch was placed

119 Fechner, Notizen, NA 01/01/01, UA Fechner Nachlass, p. 32.

120 Fechner, Notizen, NA 01/01/01, UA Fechner Nachlass, p. 32. {"Renz und Wolf machen S. 189 auf folgende aufmerksam."}

121 This citation without errors and corrections is from the original. Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 189n. {"Dieser 'entfernte Tageslärm' wird von uns nicht oder kaum beobachtet, er möchte fast nur durch seinen Gegensatz eigentlich zum vollen Bewusstsein geführt werden können; in der That ist bei Ascensionen im Luftballon in bedeutender Höhe die 'lautlose Ruhe' eines der allerauffallendsten und häufig als wirklich unheimlich beschriebene Phänomene."} The errors and corrections in Fechner's transcription were minor, a word or phrase here and there misread or misanticipated.

122 Fechner, Notizen, NA 01/01/01, UA Fechner Nachlass, p. 32. {"Wie zu repräsentiren?"}

at one distance from the ear for five seconds, before being moved (fully dampened by a cardboard disc) to a second distance, where it was again heard for five seconds (with an assumption that the strength of the ticktock did not vary greatly over this brief period). The listener then decided which was louder, and the answers were subsequently marked as right, wrong, or undecided, with the strength of the two sounds recorded relative to each other (with one sound intensity fixed and given the relative value 1000).

The authors each performed between twenty and sixty identifications (really between fifty and sixty for the first four pairs and between twenty and thirty for the last six) for each of ten pairs of sound intensities (each pair done twice, with each value of each pair as the starting value for a series, resulting in twenty total series). They summarized these results into four pairs of sound intensities by averaging the pairs with the nearest weaker sound intensities and then further averaging the results for each pair (eliminating the difference in order of stronger and weaker ticktocks), giving a summary table that showed the stark increase in certainty as the difference in relative intensity increased (see fig. 2.5). Only around the ratio of 1000 to 919.5 did the number of undecided and wrong judgments come close to that of right judgments, while 1000 to 846 produced a large percentage of right judgments (over 80 percent).[123] As for further conclusions, Renz and Wolf admitted that more research would be needed to give "sharper portrayal of the phenomenon's conformity to law."[124] The two showed opposite tendencies when it came to the influence of the order of sounds on the accuracy of judgment, whether the first or second sound was louder. Finally, they noted that the ability to differentiate (*Unterscheidungsvermögen*) in the realm of quantity (sound intensity) was "quite considerably lesser" than in the realm of quality (pitch), which corresponded to a similar divide for the sense of sight.[125]

123 Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 186–92.
124 Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 192.
125 Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 192. They did not explicitly cite the source for the comparison of pitch (sound quality) and color (ocular quality).

Tabelle III.

Relative Schallstärke.	Wolf. Urtheil			Renz. Urtheil		
	richtig.	unentschieden.	falsch.	richtig.	unentschieden.	falsch.
a 1000 : 919,5	56,5	29,3	14,0	53,3	28,8	15,8
b 1000 : 846	84,6	17,6	3,7	85,6	6,8	7,5
c 1000 : 778	81,1	8,2	10,5	97,2	1,8	1,9
d 1000 : 716	100	—	—	100	—	—

Figure 2.5. Summary table of right, undecided, and wrong judgments for both researchers of pairs of sound intensities from a watch ticktock, measured by relative distance pinned to a fixed 1000. Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 191.

Fechner's interest in the report, however, stemmed not from the methods or conclusions but rather, as the first quotation indicated, on a particular confounding factor: "remote noise of the day." The authors mentioned this factor in one paragraph, with a long footnote, between their description of the experiment itself and the reporting of results. "At the outset, we hoped to obtain a 'physiological acoustic unit-measurement,' in such a fashion," began the paragraph, "that we would take on as a unit the sound size that could be perceived at the clock's farthest removal from the ear even with rapt attention."[126] This was not possible for two reasons: one, there was persistent background noise, and two, the ticktock disappeared at greatly different distances each day. This impossibility was the end of the matter for the authors, and they moved on; but it was the first cause, "disturbances from foreign noises,"[127] that caught Fechner's eye, primarily due to Renz and Wolf's particular definition of these disturbances, which they elaborated in a footnote: "By these we understand not only positively perceivable noises, so namely those that appear

126 Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 188. {"Anfangs hofften wir ein 'physiologisches acustisches Einheitsmaass' in der Art zu erhalten, dass wir diejenige Schallgrösse als Einheit annehmen, welche bei der stärksten Entfernung der Uhr vom Ohr eben noch bei gespannter Aufmerksamkeit wahrgenommen werden konnte."}

127 Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 189.

in rotation, but that peculiar noise complex, coming usually not properly consciousness, albeit being absolutely not trivial for our auditory nerves and for that which we even hear; this could best be termed 'remote noise of the day,' and it bestows every locality a particular character."[128] This phenomena of "remote noise of the day" was, of course, a primary element of the threshold and one of the main facts that moved psychophysics as a whole from its outer foundations to its inner spires: the existence of unconscious sensations carried by stimuli below the threshold. In his notes, Fechner quoted the authors' further elaboration of such remote noise, which remained unnoticed by most and only was fully brought into consciousness via its complete elimination, such as in a hot-air balloon far above the city.[129]

Fechner's interest in Renz and Wolf's account of this phenomena did not surface in *Elemente*,[130] but he did echo it in the description of unconscious sensations used to buttress the transfer of the site of the threshold from stimulus to psychophysical activity: "Someone speaks, for example, to us; we are, however, distracted and do not hear (not consciously) what he has said. But the moment later we collect ourselves, and that which he has said enters into our consciousness. Indisputably, thus, the movements with which hearing is tied must have already been formed beforehand, and the composure of attention was only successful in lifting them over the threshold" (*EP* 2:433).[131] Renz and Wolf's

128 Renz and Wolf, "Versuche über die Unterscheidung differenter Schallstärken," 189n. {"Darunter verstehen wir nicht sowohl positiv wahrnehmbare, also namentlich abwechselnd auftretende Geräusche, sondern jenen eigenthümlichen, für gewöhnlich nicht recht zum Bewusstsein kommenden, wenn auch für unseren Hörnerven und für das, was wir eben hören, durchaus nicht gleichgültigen Geräuschcomplex, den man als 'entfernten Tageslärm' am besten bezeichnen könnte und der jeder Localität einen besonderen Character verleiht."}

129 Fechner, Notizen, NA 01/01/01, UA Fechner Nachlass, p. 33.

130 Fechner did mention Renz and Wolf in passing regarding the difference threshold for sound intensity (*EP* 1:258).

131 {"Es spricht beispielsweise Jemand mit uns; wir sind aber zerstreut und hören nicht (nicht bewusst), was er gesagt hat. Den Augenblick darauf aber sammeln wir uns, und das, was er gesagt hat, tritt in unser Bewusstsein. Unstreitig mussten also die Bewegungen, an die sich das Hören knüpft, schon vorher entstanden sein, und die Sammlung der Aufmerksamkeit hatte nur den Erfolg, sie über die Schwelle zu heben."}

"remote noise of the day" was the complement to this not-consciously heard remark, the background washing out the listener's attention such that the foreground utterance was not at first registered. This was the very interplay of underwave and overwave Fechner represented in his schema, answering the question he posed to Renz and Wolf and to himself in his notes.

How to "represent" the complexity of unconscious and conscious life—including sleep and waking, washed-out attention and specific consciousness phenomena, and above all sensations that were unconscious then become conscious—in the terms of psychophysics (rather than simply psychology or physiology) was a primary question for inner psychophysics (*EP* 2:429, 435, 437, 442, 446–47, 453–54).[132] The wave schema was the ultimate answer, enabling the coordination of both general and specific phenomena, at once the remote noise of the day and the at-first unheard utterance of a friend. The underwave represented the gradual movements of sleep, waking, and general liveliness and attention with longer periods, while the overwave represented the sharp movements of particular sensory stimuli and other such specific phenomena with shorter periods, together forming the primary wave of consciousness (*EP* 2:455–57). "With the representation of these most general conditions," wrote Fechner, "there is now related the representation of many particular conditions" (*EP* 2:459).[133] These particular conditions were the various combinations of overwave-affecting stimuli, such as the ringing of a bell or the utterance of a friend, and underwave-affecting movements of background elements, such as a directed attention toward listening or the remote noise of the day, and their

132 Fechner also used the terms *Repräsentation* and *repräsentieren* in the part "Formulae and implications of psychical measurement," where he worked to mathematize outer psychophysics and which also included the specific question of representing the threshold mathematically (*EP* 2:15). But this issue of functional representation did not touch the issue of attention and "remote noise" that the Renz and Wolf quotation foregrounded.

133 {"Mit der Repräsentation dieser allgemeinsten Verhältnisse hängt nun aber die Repräsentation vieler besonderen zusammen."}

interplay. Such representation could explain the difference between a word unheard due to inattention or to diminished capability and why a sleeper, awoken by a stray bell, could not immediately fall back asleep, despite the disappearance of the offending stimulus (*EP* 2:459–63).

As the end point for the threshold in psychophysics proper (before its jump to Naturphilosophie), the wave schema was the fullest representation of the mind-body relation for Fechner. His interest in Renz and Wolf's "remote noise of the day" and its abstracted link to the threshold was thus part of this primary thrust of psychophysics, an attempt to represent the relationship between the psychical and physical. But it also brings us back to Fechner's life outside of psychophysics proper. Whereas the "remote noise of the day" just at the edge of consciousness presented a challenge to Renz and Wolf and their attempt for a "unit-measurement" exactly at the sound stimulus threshold, it presented to Fechner as the beautiful incarnation of the intricacies of the mind-body relation itself and their strangest phenomenon, the unconscious sensation. In unfurling this fact, Fechner drew on an experience important to him, one that occupies the next chapter and formed the everyday counterpart to the science of psychophysics: taking a walk. "What's more, it is not the same, however," he wrote,

> whether something grasped by a sense is not grasped [by the person] only due to lack of attention or whether it affects the sense too weakly or not at all. The fact that it is above its threshold (the overthreshold) always gives it a positive value in consciousness; but, while the primary consciousness is not awake for it yet is awake for others, it appears on the scene as an unconscious codetermination of that for which the primary consciousness is awake, a codetermination that can be, according to circumstances, disturbing or harmonious. Thus, for the walker deep in thought, the sunshine, the greenery, the birdsong expresses an unconscious codetermination; he sees and hears nothing of all this and yet feels otherwise, and his flow of thoughts will be otherwise, than if he were thinking in a dark room—thus, at the opera, the radiance of the scene upon *those who are listening closely* and the music upon the *spectators*. Every perception [*Anschauung*] of things we know through

life, of a house, of a person, draws along with it a quantity of other ideas through association; these remain in the unconscious yet still, in this way, unconsciously constitute for us the meaning of the house, of the person, which would otherwise count merely as a fleck of color in the eye. They hang on overwaves, which elevate themselves in connection with those [overwaves] elevated by outer causes to the peak of the primary wave but remain under the primary threshold, whereas those [other overwaves] enter over the primary threshold. (*EP* 2:461)[134]

134 This passage included one of Fechner's few uses of the substantivized adjective *the unconscious* (*das Unbewusste*) rather than merely *unconsciousness* (*das Unbewusstsein*), which he used frequently. For more on these terms, see, Nicholls and Liebscher, *Thinking the Unconscious*.

{"Dabei ist es doch nicht dasselbe, ob etwas vom Sinne Gefasstes nur wegen mangelnder Aufmerksamkeit nicht gefasst wird, oder ob es den Sinn zu schwach, oder gar nicht berührt. Dass es über seiner Schwelle (der Oberschwelle) ist, giebt ihm immer einen positiven Werth im Bewusstsein; aber es tritt, während das Hauptbewusstsein dafür nicht wach, jedoch für Anderes wach ist, als unbewusste Mitbestimmung dessen, wofür das Hauptbewusstsein wach ist, auf, eine Mitbestimmung, die nach Umständen störend oder harmonisch sein kann. So äussert beim in Gedanken gehenden Spaziergänger der Sonnenschein, das Grün, der Vogelgesang eine unbewusste Mitbestimmung; er sieht und hört nichts von alle dem und fühlt sich doch anders, und sein Gedankenlauf wird anders sein, als wenn er im dunkeln Zimmer dächte;—so auf den *Horchenden* in der Oper der Glanz der Scene, auf den *Zuschauer* in der Oper die Musik. Jede Anschauung von Dingen, die wir durch das Leben kennen, eines Hauses, einer Person, zieht durch Association eine Menge anderer Vorstellungen mit, die im Unbewussten bleiben, und doch so unbewusst die Bedeutung des Hauses, der Person für uns constituiren, welche ohnedem blos als Farbenfleck für das Auge zählen würden. Sie hängen an Oberwellen, die sich mit der auf dem Gipfel der Hauptwelle durch äussere Ursache erhobenen im Zusammenhange erheben, aber unter der Hauptschwelle bleiben, indess jene über die Hauptschwelle treten."}

3 FECHNER ON A WALK

On 22 August 1866, Johannes Emil Kuntze wrote to his uncle Gustav Theodor Fechner and implored the Fechners to come to Eisenach, a town in the Thuringian Forest where Kuntze was staying, for their routine late summer holiday trip. Chiefly, and especially in competition with Schwarzburg (the Fechners' already-planned destination), Eisenach boasted unparalleled opportunities for the dedicated walker: "Within a radius of some 3–4 hours, there is such a selection of beautiful promenades down toward the valleys as well as up at mid- and full-altitude of the mountains, a selection unlike one I've ever come across, apart from the nearest vicinity of spas. Both outings that branch off from the Marienthal—into the Landgrafenschlucht and into the Annathal, each $\frac{1}{2}$-hour long—are superb refuges in the heat of the day and as if created for walks with obligatory meditation or conversation."[1] He continued to list the appeals of the region: the spa towns nearby, the gardens open early to late, and outing after outing for walkers.

Kuntze admitted that the high point of Schwarzburg might be higher, but insisted the variety of Eisenach's offerings made it more desirable and ultimately convinced Fechner. On 21 September, the day after their return from Eisenach, Fechner wrote in his diary, "There was lot of walking; a few acquaintances were even made; the stay however did not offer any exceptional peculiarities" (*Tb* 1866:12).[2] He then continued to describe the trip, mostly the walks, their views, and the company they had on them—all of course absent any "particular oddities"—over the next thirty pages, cataloguing his usual array of joking

1 Kuntze to Fechner, 22 August 1866, NL 42/2/101, UB Fechner Nachlass. {"Im Umkreise von etwa 3-4 Stunden hat man hier eine solche Auswahl von schönen Promenadenwegen nach den Thälern herab sowie auf halber und ganzer Höhe der Berge, wie mir außer in nächster Nähe von Badeorten, noch gar nicht vorgekommen ist. Die beiden vom Marienthal abzweigenden Seitenpartien in die Landgrafenschlucht und in das Annathal—jede 1/2 Stunde lang, sind in der Tageshitze unübertreffliche Zufluchtsorte und wie geschaffen für Spatziergänge mit der obligaten Meditation oder Conversation."}

2 {"Es ist viel spaziert worden; auch einige Bekanntschaften wurden gemacht; besondere Merkwürdigkeiten aber bot der Aufenthalt nicht dar."}

anecdotes, descriptions of nature, and prompted thoughts in connection with published debates.

Kuntze's request to Fechner and the subsequent mundane nature of Fechner's reminiscences here point to how important walking was for him. In biographical writings about Fechner from around 1900, Kuntze and Wilhelm Wundt both highlighted his walking in order to ultimately emphasize Fechner's fundamental character as a thinker through and through, tied at all times (at least mentally) to his desk. Even Fechner himself promoted this view, writing in 1885, "My life presents no memorable events at all and is led primarily at my desk."[3] Yet here he was, scribbling away at his desk, recording in extreme detail over thirty pages of his diary the scattered impressions, thoughts, and experiences had during a walking vacation. These may not have qualified as "memorable events" but they were certainly important to Fechner, even if he wasn't explicit about it, as he considered his state of being while walking as if being lost in the clouds. As he wrote in *Elemente der Psychophysik*, noting his usual inability to produce memory images due to distraction: "After walks, I have sometimes not surely known which of two totally different branching ways I took" (*EP* 2:487).[4]

In fact, it was precisely his vacillating *awareness* while walking—here pensive and withdrawn, there animated and connected, here for "meditation," there for "conversation," as Kuntze highlighted of the walks in Eisenach—that was one of the hallmarks of his walking as the everyday pursuit of the mind-body connection. Just as he developed an entirely new science, psychophysics, devoted to this pursuit, Fechner investigated the ins and outs of the mind-body in his daily life while on foot. Of course, unlike with exact and empirical natural science, everyday experiences such as walking

3 Fechner, "Lebenslauf," 1222. {"Mein Leben bietet überhaupt keine denkwürdigen Ereignisse dar und ist hauptsächlich am Schreibtisch geführt."}

4 {"[Dass ich] nach Spaziergängen manchmal nicht sicher gewusst habe, welchen von zwei ganz verschiedenen Zweigwegen ich gegangen bin."}

produce no multi-volume texts, no resulting facts, formulae, or graphs, and no concepts such as the threshold that render their work legible. So to draw out the peripatetic investigation, I briefly isolate the walks from their daily context and examine them with recourse to psychophysics in order to see how they themselves worked to make the mind-body graspable for Fechner.

While Fechner didn't reflect explicitly on the practice, and it only showed up occasionally in his published works, records of his walking persist from throughout his lifetime, primarily in his diaries. There, in 1842, he made a distinction between a *Spaziergang* (walk, stroll) and a *Geschäftsgang* (business walk) in a discussion of exercises that could train the sense of hearing. With the proper training, he suggested, one could tell the difference between the stepping sound of the walker or stroller ("Spatziergänger") and that of the person striding for business ("in Geschäften Schreitenden") along with what sorts of tool and material were being struck together and what types of trees the wind blew through. Training the ear to make such distinctions was practically useful in addition to "ennobling of the totality of the human" (*Tb* 1842:121). In a similar manner, we can track the Spaziergang through Fechner's diaries, finding a specific way of being in the world that was fundamentally though not obviously connected to his scientific work on the mind-body connection. There, in scenarios ranging from minimal enumerations of that day's activities including his walks to details of significant debates with colleagues on the relation between stimulus and sensation while on foot, Fechner illustrated a variegated practice.

I focus specifically on the Spaziergang rather than all pedestrian activity for several reasons.[5] First, it offers a specific track—variations of the lemma *spazier-*—to follow

5 The word *spazieren* dates to the thirteenth century, from either the Italian *spaziare* or directly from the Latin *spatiārī*, and always had a leisurely and undirected aspect to it. It took its combined noun form *Spaziergang* in the fifteenth century. *DWDS / Etymologisches Wörterbuch des Deutschen* (Pfeifer), s.v. "spazieren," accessed 10 May 2019, https://dwds.de/wb/spazieren. The word gained new connotations in the late eighteenth century that were particularly pertinent to Fechner (see the following secondary literature). While the term *stroll* encompasses some of its leisureliness, I mostly use the generic *walk*, as Fechner's usage

through Fechner's life and writings, showing up over a hundred times throughout the diaries.[6] Two, this track excludes, with foresight, *Fußreisen* (foot journeys) and *Geschäftsgänge*, which are more goal directed and ultimately don't provide as important fodder for Fechner, but includes leisure-directed walks both at home in Leipzig and while traveling.[7] Three, it pins Fechner squarely to his time, which coincides with the full flowering of the Spaziergang in the German speaking world, at once tied to Bildung and the new public social spaces of the post-Napoleonic era while also in conversation with Romantic ideals of the individual and nature.

On this final count, it is important to note that Fechner's walking was precisely not special or set apart from the wider walking culture of the era. Not only did the themes present in his own writings, specifically in terms of the individual and nature, match those of the larger culture, he overtly tied his walking to that of others in an entry of August 1842, via a contrast of their hardiness: "Incidentally, timidity of cold and other effects of the weather reigns almost universally in Leipzig. Under an overcast sky, the walkways are empty, even if it's still quite pleasant outside; no one dares to go out. . . . I myself have from an early age walked with bare neck and without stockings in the boots, under any weather, summer and winter" (*Tb* 1842:41).[8] While Fechner thought he stood apart from the crowd in terms of his weather endurance, the relation to the general walking public implied in the boast—if dismissive—was nevertheless a relation of belonging. However

---

included significant mountain hikes that escape the *stroll.* Though *walk* is much older, the sense of *taking a walk* dates similarly from the late fourteenth century (though it may have arisen much earlier in colloquial speech). *OED*, s.v. "walk, *v.*," accessed 21 May 2019, https://www.oed.com/view/Entry/225241.

6 I use *spazier-* as a lemma, referring to any instances of the verbs *spazieren* (also spelled *spaziren* and *spatzieren* in the diaries) and *spazierengehen* and the nouns *Spaziergang*, *Spazieren*, and *Spazierengehen*. Another popular term of the time, *promenieren*, only showed up a handful of times. I do, however, consider foot-based activities without the term *spazier-* when they mirror his most common uses.

7 He used *spazier-* for walks in the woods but rarely used variations on *wander-*.

8 {"Uebrigens herrscht die Aengstlichkeit vor Erkältung und sonstigen Witterungseinflüssen in Leipzig fast allgemein. Bei bedecktem Himmel sind die Spaziergänge leer, wenn es auch noch so angenehm draußen ist; niemand traut sich heraus. . . . Ich selbst bin von klein auf mit bloßem Halse und ohne Strümpfe in den Stiefeln, bei jeder Witterung, Sommer und Winter gegangen."}

special he considered his own commitment to walking, he didn't actually undertake it differently than his peers. Walking was something everyday, generic, and pedestrian; it was decidedly *not* a major philosophical or scientific object.

Fechner fits in a long history of thinkers on foot, from Aristotle and the Peripatetics, through Montaigne and Rousseau, to Kant and Thoreau, and the literature on walking is just as wide.[9] Frédéric Gros attempts to work out this link between thinking and walking by cutting into the minutiae of the act, as he has practiced it and in some of the most famous such examples (e.g., Nietzsche).[10] Joseph Amato and Rebecca Solnit offer much wider overviews of walking in general over centuries across the West. Amato moves chronologically through the main stages of that history from a deeply necessary all-encompassing aspect of life to a fragmented and displaced leisure activity, with an emphasis on technology.[11] Solnit works rhythmically through themes, led as it were by wanderlust, from the twentieth-century permutations of the pilgrimage, through the literatures of the pure, the simple, and the long walk, to women's struggle for the freedom to walk; catholic in sources yet incisive in particular analysis, she explores walking as "a constellation whose three stars are the body, the imagination, and the wide-open world."[12] Fechner of course would have a place in these accounts, though a disjointed one perhaps, as he didn't reflect on the practice and there was no significant published relation between his scientific work and the walks. One contribution this chapter makes is to closely consider how walking (both in and out of connection with thinking) worked when the walker didn't pay much direct mind.

9 There are numerous works that focus specifically on the aesthetic, mostly literary, aspects of the history, and specifically that of walking and thinking. Two that cross linguistic boundaries, though with a Germanic emphasis, and cover a significant amount of ground are Gellhaus, Moser, and Schneider, *Kopflandschaften, Landschaftsgänge*; and Wellmann, *Der Spaziergang*.

10 Gros, *A Philosophy of Walking*.

11 Amato, *On Foot*.

12 Solnit, *Wanderlust*, 290–91.

Crossing most of the nineteenth century, Fechner's life covered almost perfectly the emergence of a new mode of urban walking, inflected by ever-increasing industry, commerce, and global interchange and whose ideal type was the critic Walter Benjamin's flâneur.[13] This new walking, with various permutations across classes, is the object of a recent article by Joanna Guldi, which maps out the arrival of new postures and types of walking via the proliferation of new terms (e.g., *lounge*, *stride*) in printed matter (found via searching digitized sources) from and about London over the first half of the century.[14] Another recent collection, *Walking Histories, 1800–1914*, sketches the varieties of modern walks, connecting the contemplative Romantic walk with its apparent urban contradictions, both strolling and hurrying, and bringing an emphasis on Britain into conversation with Central European and non-European examples.[15] The situation in the German-speaking lands was quite different, however, than in the major metropolises of London and Paris as well as from the English countryside, which receives significant attention for the Romantic era, for three primary reasons: the specificities of Romantic and post-Romantic Germanic culture, a vastly different political, social, and physical landscape of town and countryside and historical evolution thereof, and the burgeoning ideal of Bildung Gudrun König provides an extensive, detailed, and insightful history of the specificities of walking in the Germanic world from 1780 to 1850, drawing on a wide variety of sources, including diaries, autobiographies, archives of local groups, and numerous *vedute* (detailed land- and cityscape prints) to unite histories of the environment, the city, the body, mentalities, the individual, and class and gender. The

13 As Solnit points out, there never was a person who would have claimed (or been given) the mantle flâneur; rather, "everyone engaged in some version of flâneury." Solnit, *Wanderlust*, 200. For an incisive look at the actual historical import of the flâneur and subsequent analysis of the counterpart crowd, the *badaud*, see Shaya, "The *Flâneur*, the *Badaud*."

14 Guldi, "History of Walking."

15 Bryant, Burns, and Readman, *Walking Histories, 1800–1914*. The introduction offers the best critical panorama of literature on walking, if still largely anglophone in emphasis.

work shows the emergence of a new relation between humans and nature that took shape in both the individual Spaziergänger in nature and the new multiclass spaces (the promenade, the city wall, before the gate, the boulevard) where one strolled to see and be seen. During this period, the Spaziergang came into its own in contrast with the *Fußreise* and the *Wandern* (rambling, wandering, traveling), bringing together enjoyment and recovery (*Erholung*) in a tensed relationship of inwardness and outwardness of the walker in new natural and social contexts.[16] Heikki Lempa focuses on walking as an expression of the bodily aspect of Bildung before the 1830s, emphasizing the social world necessary for Bildung to take hold as an ideal and how walking in new spaces of the city (often related to the tearing down of city walls) was a major instantiation of this imbrication of the body and the social. The work offers a tripartite division of such walking, the dietetic, the representational, and the pleasurable, all united by their emphasis on moderation.[17]

In both König and Lempa, with the urban and political changes of the mid-century (faster industrialization in König, gymnasium reform and cholera outbreak in Lempa), the Spaziergang ultimately morphed, losing some of its tensed relationship with nature and ultimately gaining some of the urban characteristics already present in London and Paris. Yet Fechner, along with many others born before this change, preserved much of the highly charged and specific characteristics of the Spaziergang. Leipzig only became a *Großstadt*, with over one hundred thousand inhabitants, around the founding of the empire in 1871, and only then did industrialization truly take off.[18] The world of Fechner's strolling, Café Français on Augustusplatz, Rosental park and Göhlis beyond, and the streets of Rome and paths of the Harz mountains that he trod just as he did in Leipzig, was the world of the Spaziergang as portrayed by König and Lempa. His Leipzig was where the city walls came

16 König, *Eine Kulturgeschichte des Spazierganges*.
17 Lempa, *Beyond the Gymnasium*, esp. chap. 6.
18 Oehme and Staude, "Leipzigs Aufstieg zur Großstadt."

down, the gate fees were abolished, and excursions to sites such as Rosental became part of the city's new landscape of promenading.[19] This chapter aims to bring texture to this historiography of the modern walk and the Spaziergang, bringing forward not only the intricacies of the practice as it was lived in Leipzig and elsewhere across the century but also showing how to give critical and holistic accounts of such walks as experiences.

There is also some literature on walking in the historiography of science. Michael Reidy analyzes the gendered aspects and outcomes for human physiology via mountaineering and its focused masculinity in Victorian Britain, pointing toward some important connections between the body in motion and knowledge production (though daily walking is not at issue).[20] In his rereading of Einstein's arrival at special relativity, Peter Galison animates the stroll Einstein regularly took among the very clocks whose synchronization spurred his thinking on the matter.[21] Recently, Andreas Mayer writes the history of walking, mostly of the natural stride, as an *object* of scientific inquiry over the nineteenth century, framing the work as contribution primarily to the history of scientific observation and the experimentalization of life (including that of everyday experiences).[22] The collection *Science Incarnate* takes seriously the proposition that knowledge and knowledge making are, and always have been, embodied, deploying (broadly) analyses of the symbolic meaning of the body in relation to knowledge making across many centuries (though it does not address walking overtly).[23] Both Alison Winter's and Janet Browne's contributions to this collection, on Ada Lovelace and Charles Darwin, respectively, are specifically relevant in addressing ill nineteenth-century savants; Winter especially delves into the vexing relationship between the body and the production of scientific knowledge

19 Schötz and John, *Geschichte der Stadt Leipzig*, 3:58, 107–8.
20 Reidy, "Mountaineering, Masculinity."
21 Galison, "Einstein's Clocks," 375.
22 Mayer, *Wissenschaft vom Gehen*.
23 Lawrence and Shapin, *Science Incarnate*.

by that body's possessor, showing how Lovelace's own troubled mind-body connection inflected her research.[24] I hope to show not only how walking was an important embodied aspect of knowledge production in one historical case but how this knowledge production also took place, if not formally, in the everyday spaces seemingly beyond its purview and out of direct contact with its object.

Finally, there is a large theoretical literature on walking, where I aim to make a specific intervention. The three major touchstones of this literature are Marcel Mauss, Michel de Certeau, and phenomenology. Mauss's epochal "Techniques of the Body" was central in establishing bodily habits, such as walking, as possible objects of critical interpretation; for Mauss, bodily techniques are activities that are at once effective and traditional and are composed of biological, psychological, and social elements. He proposes reading back from ethnographic material to the modes and conditions of a certain techniques' transmission, giving the example of a new mode of walking among Parisian girls, transmitted via cinema from America.[25] Certeau identifies walking as one of the primary spatial tactics, at once a pedestrian speech act and an "oneiric figuration," that refuses the "proper" places of the city imposed strategically primarily from above.[26] Lastly, Erwin Straus's "The Upright Posture" initiates a phenomenology of walking with particular attention to uprightness as the key to understanding the human (both bodily and mentally) and the attendant movement, walking, as the rhythmic alternating performance of the contradictions contained within the human as self and as part of the world.[27] There are a number of insightful critiques of Straus's normative male and able-bodied human;[28] most important for my purposes is Gayle Salamon's recent

24 Winter, "A Calculus of Suffering"; and Browne, "I Could Have Retched All Night."
25 Mauss, "Techniques of the Body."
26 Certeau, *The Practice of Everyday Life*, esp. chap. 7.
27 Straus, "The Upright Posture."
28 The classic feminist critique is Young, "Throwing Like a Girl"; a more recent disabilities critique is Abrams, "Is Everyone Upright?"

critical reading of Straus's notion that understanding another person's walk is intuitive and straightforward, showing exactly how much ambiguity and competing meanings (in Salamon's case related to gender and sexuality) are present in a walk.[29] All of these approaches read walking in conjunction with another specific contextual element (i.e., cultural transmission in Mauss, place and the city in Certeau, and identity and gender in Salamon); I aim to add another such element, the production of scientific knowledge, as a partner for walking.

This chapter has three parts: First, I establish what exactly Fechner's walks were and how he recorded them. This section both grounds *walking* as a practice and emphasizes its persistent, if background, link to his scientific work. Second, the core of the chapter, I offer thick accounts of his walks as experiences, examining them at a slight remove from their own daily context yet immersed within that of his psychophysics. There I show how Fechner attempted to grasp the mind-body relation in his walks via three primary modes: the physiopsychical, the interpersonal, and the universal. Finally, I transition from his universal walks to his religious views, offering a new reading of his vibrant conception of God and psychophysics via his peripatetic practice.

THE EVERYDAY SPAZIERGANG

Only in one very brief communication did Fechner take walking as a specific object of research, "Verhältnis der weiblichen zur männlichen Schrittgrösse" (1853; Ratio of female to male step size). Sitting by the window in his new house just east of the city center on Dresdner Straße, Fechner counted, across thirty-two dates at various times and with various weather, the number of steps passersby took to cross the length between two

29 Salamon, *Latisha King*, 40–61.

trees (identified by him as "twenty and some steps" long).[30] In toto, the 1,258 women took 31,442.54 steps, while the 1,796 men took 38,409.05 steps, giving an overall ratio of 100.00 to 115.76 in women's step size to men's.[31] The main connection to wider research was the concluding observation that step size exhibited a stronger distinction between women and men than height. Overall, the communication can be read as yet another example of Fechner's recurrence to *counting things* as a key tool in understanding the world.[32]

Yet one line points to how Fechner considered walking more generally. In asserting the general validity of his finding, he noted the variety of not only conditions (time of day and weather) but also type of walk being taken: "Since the home is on a street in Leipzig's Dresdener Vorstadt [suburb], through which both workers and country people frequently pass in and out, both rural and urban populations, and with them business and strolling gaits (*Geschäfts- und Spaziergang*), were considered quite evenly."[33] For the purposes of this inquiry, he was interested in nearly all types of adult strides; whether by city or country person, for business or pleasure, the stride counted toward a general validity.[34] What mattered was that it was a stride of a walk that actually took place.

As an object under investigation, this stride contrasted significantly with that taken up

30 Fechner referred alternately to Dresdener and Dresdner Straße; city maps of the time and today use the latter. Kuntze identified the two trees as the length markers. Kuntze, *Fechner*, 202–3.

31 He does not explain how, from the window, he measured partial steps.

32 Fechner, "Verhältniss der weiblichen zur männlichen Schrittgrösse." In addition to the unending counting of various stimulus-sensation pairs in the experiments of *Elemente der Psychophysik*, Fechner's counting included items such as the various flags hanging from windows in Leipzig during the Franco-Prussian War of 1870–71 and who among friends, family, and colleagues associated which colors with which vowel sounds. Fechner, "Fahnenschmuck Leipzigs"; and Fechner, *Vorschule der Aesthetik*, 2:315–19. See also *Tb* 1870:157–71 on the flags of Leipzig.

33 Fechner, "Verhältniss der weiblichen zur männlichen Schrittgrösse," 168. {"Da die Wohnung in einer Strasse der Dresdener Vorstadt Leipzigs liegt, durch welche Arbeiter und Landleute vielfach ein- und auspassiren, kam ländliche und städtische Bevölkerung, Geschäfts- und Spaziergang dabei wohl ziemlich gleichmässig in Betracht."}

34 In addition to children, also excluded were "the frail, the burdened, and those who walk together with children or a person of the opposite sex." Fechner, "Verhältniss der weiblichen zur männlichen Schrittgrösse," 168. {"Gebrechliche, Belastete, und mit Kindern oder einer Person von gegentheiligen Geschlecht Zusammengehende."}

by Fechner's close colleagues Wilhelm and Eduard Friedrich Weber in their *Mechanik der menschlichen Gehwerkzeuge* (1836; *Mechanics of the Human Walking Apparatus*). Of the series of works considered by Andreas Mayer in his book *Wissenschaft vom Gehen*, this was probably the scientific work on the matter nearest to Fechner, considering his personal relationship to the Weber brothers. As detailed by Mayer, the Webers were concerned with an ideal natural stride and investigated the object specifically in the context of rising machine transport.[35] Fechner, on the other hand, wanted to identify a generally valid female and male average as it existed in the world.[36] Even here, narrowed and abstracted into a scientific object—the step length—Fechner's walk was as it was practiced on an everyday basis. This everyday Spaziergang, contrasted with the *Geschäftsgang* here as in the hearing exercises mentioned above, was also the walk that appeared in his other published works. And there it was nearly always his *own* personal walk.

Throughout Fechner's published work, walking only showed up in a handful of places, and there mostly as a colorful example. In addition to the already noted passages in *Elemente der Psychophysik*, Fechner opened *Die Tagesansicht gegenüber der Nachtansicht* sitting on a bench in Leipzig's Rosental park, a usual destination of his regular walks. There, he dramatized the buzzing fervor of the world around him—the warm sunshine and the fluttering butterfly—that the night view considered as mere illusion. Pages later, he highlighted a specific walk he took while on a trip to Sassnitz as another source for his conviction regarding the day view and its affirming stance toward the world.[37] In these instances as well as others in his published works, walking was an illustrative example or analogy. It fleshed out a philosophical and scientific project that, at its core, was meant to interrogate and bring forth the vibrancy and interconnectedness

35 Mayer, *Wissenschaft vom Gehen*, chap. 3.
36 Fechner did cite the Webers' book in passing in *Zend-Avesta*, 1:114–17, but not in relation to walking as an experience.
37 Fechner, *Die Tagesansicht gegenüber der Nachtansicht*, 3–4, 8–9.

such a daily experience embodies. While he mobilized these walking stories to specific ends in his published works, they were fundamentally the same Spaziergänge that he recorded regularly in his diaries.

Killing Time, from Writing to Walking

Fechner started writing his journal in earnest on 9 July 1842. He recalled in his account of his illness, "With help of a device, which permitted keeping the direction of lines without use of the eyes, I started keeping a diary, both of which [the diary and the concurrent visit of family] contributed to shortening time for me. In the latter [the diary], I noted the smallest happenings, just to have stuff to write."[38] The first entries comprised just such "smallest happenings":

> 9 July 42
> I took a walk in the garden; when Prof. Seyffarth visited me, I continued strolling with him. We spoke about gardening; out of this I note the following: according to the instruction by Irnisch, an experienced local gardening enthusiast, in order to grow woodland strawberries that surely and amply bear fruit the entire year, one must cultivate them newly from seed every three years, since they degenerate with time. . . .
>
> 22 July 1842, copied over in September 66
> Drunk coffee with the Härtels and Volkmanns. The conversation came to Haupt. Luise said: she must keep to her opinion and finds it confirmed every time when she sees Haupt, that since his marriage, he presents himself no longer at all so charming as before. In general this was met with approval; he is no longer so sharp, outwardly no longer so interesting to his acquaintances. (*Tb* 1842:1b–2)[39]

38 Fechner, "Krankheitsgeschichte," 112. {"Auch fing ich an, mit Hülfe einer Vorrichtung, welche ohne Gebrauch der Augen die Richtung der Zeilen einzuhalten gestattete, ein Tagebuch zu führen, was beides [das Tagebuch und der gleichzeitige Besuch der Familie] beitrug, mir die Zeit zu kürzen. In letzterem [dem Tagebuch] notierte ich die kleinsten Ereignisse, um nur Stoff zum Schreiben zu haben."}

39 {"9. Juli 42. // Ich gieng im Garten spazieren, als der Prof. Seyffarth mich besuchte, mit dem ich fortfuhr zu lustwandeln. Wir sprach von Gärtnerei; woraus ich Folgendes bemerke, nach der Angabe von Irnisch, einem hiesigen erfahrenen Liebhaber der Gärtnerei, muß man, um Monats-Erdbeeren zu ziehen, die das ganze Jahr sicher und reichlich tragen, dieselben alle drei Jahr von Neuem aus Saamen anziehen, da sie nach der Zeit ausarten."}

Ultimately, however, the diary extended much beyond just these "smallest happenings" and spanned nearly his entire adult life, with material from 1828 to 1879 over 3,865 mostly quarto-sized sheets (17 by 21.5 cm). Those that remain reside primarily in the archive of the Universitätsbibliothek Leipzig and were edited and published in 2004.[40] While some years were extensively documented (e.g., 1842, 1862, 1864, 1866) and include hundreds of manuscript pages, others had very little if anything at all (e.g., 1828 had just ten pages, 1851–1859 had nothing). What was recorded also spanned the gamut of topics: from miscellany of his personal life, including discussions of which is the worst soup (*Tb* 1842:569–61), anecdotes about the inkwell that wouldn't stop staining (*Tb* 1850:4–5), and detailed histories of the family house and his income (*Tb* 1873:31–35), through riddles, poems, and children's stories, to materials directly related to his published works, including his struggles with math (*Tb* 1848:2), the famous first records of his "mathematical principle of psychology and of the connection of body and soul" (*Tb* 1850:11–16), and religious matters such as the question of passion plays (*Tb* 1864:213–15). All of which were accompanied by an incessant patter of jokes and humorous observations:

{"22. Juli 1842. abgeschrieben im Sept. 66. // Kaffee bei Härtels und Volkmanns getrunken. Das Gespräch kam auf Haupt. Luise sagte: sie müsse dabei bleiben und fände es jedesmal bestätigt, wenn sie Haupt sähe, daß er sich seit seiner Verheirathung gar nicht mehr so liebenswürdig darstelle, als früher. Man fiel diesem im Allgemeinen bei; er sei nicht mehr so aufgeweckt, äußere nicht mehr so viel Interesse an seinen Bekannten."}

40 Altmann, "Zur Edition der Tagebücher," xxx, xxxii. This published version presents the entire remaining manuscript with a few minor typographical emendations; the editors include early literary sketches from 1828 to 1831, though Fechner himself dated the journal to 1842. Meischner-Metge, "Einleitung," xxvii. The bulk of the material in Leipzig is Fechner, "Tagebücher 1828–1879," NL 36–41, "Literarische Skizze über Grimmer," NL 42/7/6, "Schleiermacher Studien," NL 42/7/7, UB Fechner Nachlass; the two sections of the published diaries that reside elsewhere are Fechner, manuscript, n.d. [1864], Sammlung Härtel, Handschriftenabteilung, Staatsbibliothek zu Berlin–Preußischer Kulturbesitz; and Fechner, "Über Slade's Sitzungen in Leipzig im Jahr 1877 aus meinem Tagebuche," n.d. [1877], NA 01/02/01, UA Fechner Nachlass. Some material has been lost in the interim, such as 1863, as indicated by Fechner's own reference to that year's journal in the following year (*Tb* 1864:1). Other lost material was published or cited in Kuntze's biography, including the "Lebensabriss" and "Krankheitsgeschichte," as catalogued in Lipps, "Bericht über das Fechner-Archiv" and then cross-referenced in Döring and Plätsch, "Kommentiertes Verzeichnis." Kuntze, *Fechner*, 105–26, 302, 305. For more details on the history of the diaries and the Fechner Nachlass, see Altmann, "Zur Edition der Tagebücher"; and Meischner-Metge, "Einleitung" (n.b., some of the archival material has since been recatalogued at the holding archives).

> *Alfred.* I must admit that, from the outset, I would have no trust in a doctor who wears curls.
>
> *I.* Yes, it suggests itself, the more around the head, so much less in the head. (*Tb* 1842:215)[41]

Everyday events—who visited, what was eaten, read, and discussed, how his eyes and head were feeling—framed nearly every entry. Only in recording a series of items (e.g., the current daily routine) did he employ staccato notes, writing instead in lengthy and considered sentences and paragraphs (occasionally with notable edits). The language, as noted in an analysis of the diaries' use of language by Siegfried Grosse, was of standard educated speech of the time.[42] He often directly recorded conversations, admitting that this afforded him "the last word" and claiming that he wrote down "always only the essential of the points of view and topics brought to conversation" (*Tb* 1845:140).[43] Though the immediate qualification to this assertion—"but in many conversations a point is first spoken around at length before it becomes really clear which matter is being quarreled about with the words" (*Tb* 1845:140)—indicates just how expansive his understanding of "the essential" was.[44] These dialogues often continued around the point ad nauseam, with a final line tagging the extended impasse: "About this, much still was still spoken hither and thither" (*Tb* 1864:86).[45]

41 {"*Alfred.* Ich muß gestehen, daß ich zu einem Arzte, der Locken trägt, von vorn herein kein Zutrauen haben würde. // *Ich.* Ja es liegt nahe, je mehr um den Kopf, so weniger in dem Kopf."}

42 Grosse, "Die Tagebücher Gustav Theodor Fechners," 191.

43 {"Überhaupt immer nur das Wesentliche der zur Sprache gebrachten Gesichtspuncte und Gegenstände."}

44 {"Aber in vielen Gesprächen wird erst lange um einen Punct herumgesprochen, ehe man sich nur recht klar wird, um welche Sache man mit den Worten streitet."}

45 {"Hierüber wurde noch viel hin- und hergeredet."} What might other historians learn from the diaries? The primary form and content—offhanded though at times in-depth recordings of each day's happenings, often including recorded speech, retold stories, accounts of that day's reading, unstructured debates with colleagues, and jokes, and only occasionally including longer accounts of material relevant to his scientific work—along with the sporadic nature of the entries (especially before the publication of *Elemente*) means that drawing out an evolution or systematic formation of Fechner's scientific thinking (let alone of specific works) or a systematic account of his scientific practices would be difficult; for example, the "famous" entry of October 22, 1850, (as mentioned in *Elemente* and later celebrated by the psychologist Edwin Boring

Fechner stated only one aim of the diaries: passing the time or, more explicitly, vanquishing boredom.[46] "A sad day, a sad week!" began the journal entry of Saturday, 19 November 1842, near the highpoint of his illness:

> My head is constantly so strained that I haven't been able to reflect [*nachdenken*] about anything and have been barely capable of writing down the trivial notes of my diary. Where objects of a somewhat more serious observation occurred, I have been able to write down only sentence, sentence, and sentence, always with interruption, in order to meanwhile scatter the thoughts elsewhere, and this not without great arduousness. Conversation proceeds still easier than reflection [*Nachdenken*]; even listening while someone reads aloud doesn't strain so much. The most straining is wanting to recall something, searching for something in thought, and it have it only be the expression for a thought that I already have. Only *prima vista* can I think [*denken*], speak, write; but since there is little suitable stuff to this end, there remains much boredom. (*Tb* 1842:683–84)[47]

---

at his Harvard lab as Fechner Day), in which Fechner recorded his first insight about the possible relative mathematical relation of body and soul, was one of only seventeen sheets from that year and was preceded by five thin years and followed by nine years of silence. Similarly little could be made of contemporary political goings-on and the vast urban changes to Leipzig, which Fechner mentioned rarely. Much more could be made of the entries that deal with aesthetics, as his work in this arena corresponded with the fat years of the diary, the 1860s (though again it was mostly piecemeal). Most of all, there is much here for social and cultural historians keen on everyday life (like myself), household dynamics, speech patterns, self-presentation, the experience of illness and health, learned masculinity, and diary practices themselves.

46 I translate *Langeweile* as *boredom* with no caveats. *Langeweile* (literally, *long while*) dates (as a joined single word) occasionally from the fourteenth century and then more commonly from the seventeenth century, with earlier roots as separate words in Middle High German. *Boredom* dates only to the mid-nineteenth century, notably in Dickens. *DWDS / Etymologisches Wörterbuch des Deutschen* (Pfeifer), s.v. "Langeweile," accessed 10 May 2019, https://dwds.de/wb/Langeweile; *OED*, s.v. "boredom, *n.*," accessed 10 May 2019, https://www.oed.com/view/Entry/21650. Yet Elizabeth Goodstein makes a strong argument that *boredom* emerged just when the concept's three major European guises, *boredom*, *ennui*, and *Langeweile* coalesced, joining the traditional temporal and existential connotations of the earlier German and French counterparts. Goodstein, *Experience without Qualities*, 107–8. Fechner's relatively consistent usage of *Langeweile* and its adjectival and verbal counterparts, *langweilig* and *langweilen*, across more than thirty years of the diary, implicating both the physical and the psychical, relating to both the need to kill time and the impossibility of doing so, reflected this dual temporal and existential meaning, which Goodstein called "subjective malaise." Goodstein, *Experience without Qualities*, 108. His version of boredom was, of course, steeped in the world of late Romanticism, where this convergence of temporal and existential was particularly acute, as well as, more directly, in the ever growing physiological and medical literature on nerves. Ludwig Völker tracks the many valences up to around 1800, specifically nine distinguished forms, in *Langeweile*; on boredom during Romanticism, see Schwarz, *Langeweile und Identität*.

47 {"Ein trister Tag, eine triste Woche! Mein Kopf beständig so angegriffen, daß ich über nichts habe nachdenken können, und kaum im Stand gewesen bin, die gleichgültigen Notizen meines Tagebuches niederzuschreiben. Wo Gegenstände etwas ernsterer Betrachtung vorkamen, habe ich nur Satz und Satz,

He recognized the connection between his bodily woes (both during and beyond the high period of illness in the early 1840s), boredom, and his diary. Just as thinking itself had become difficult, so was its material recording deeply disturbed. Yet these woes were also the cause of the very boredom that he sought to conquer with his diaries. The "fatal boredom" he encountered as his symptoms worsened and his "mental engagement" came to a standstill were combated, when possible, with writing in his journal;[48] the most extensive year of his journaling was 1842 during the illness. Despite overcoming the worst of his illness and its mental pains, his eye issues persisted throughout his life and contributed just as significantly to the same boredom.[49] Yet, at its most extreme, his bodily struggles also prevented him also from writing his journal (*Tb* 1843:10).[50]

---

immer mit Unterbrechung, um die Gedanken inzwischen anderwärts zu zerstreuen, niederschreiben können, und dieß nicht ohne große Mühseligkeit. Gespräch geht noch leichter von Statten als einsames Nachdenken; auch Vorlesenhören strengt nicht so sehr an. Am anstrengendsten ist, mich auf etwas besinnen zu wollen, etwas in Gedanken zu suchen, und wäre es auch nur der Ausdruck für einen Gedanken, den ich schon habe. Nur *prima vista* kann ich denken, reden, schreiben; aber da hiezu wenig geeigneter Stoff ist, so bleibt viel Langeweile."}

48 Fechner, "Krankheitsgeschichte," 109.

49 Almost a year after his self-declared recovery, he repeated the need to write his journal as a salve for boredom: "For more than 8 days, my eyes have again been so weak that I can neither read nor well endure the full sunlight; hence I must pause myself during the finest weather and during the finest parts of the day, and sometimes I almost die of boredom. So it is then merely from boredom that I begin writing in this diary again." (*Tb* 1844:19). {"Meine Augen sind schon seit mehr als 8 Tagen wieder so schwach, daß ich weder lesen, noch das volle Sonnenlicht gut vertragen kann; daher bei dem schönsten Wetter und während der schönsten Tageszeit mich inne halten muß, und vor Langeweile manchmal fast sterbe. So ist denn auch blos aus Langeweile, daß ich wieder an diesem Tagebuche zu schreiben anfange."} In 1862, he wrote about the difficulty of completing a specific manuscript "when the relapse of my ocular suffering set in, which abandoned me to a period of penal boredom" (*Tb* 1862:125). {"Als der Rückfall meines Augenleidens eintrat, welcher mich einer Zeit peinlicher Langeweile Preis gab."}

50 One of the editors of the published edition, Anneros Meischner-Metge, argues that, while Fechner never expressed plans for publication, "the imposed boredom had an effect only as triggering motive for the diary; afterward he might have made the document with consideration and purpose." Meischner-Metge, "Einleitung," xii. {"Die erzwungene Langeweile nur als auslösendes Motiv für das Tagebuch wirkte, im Weiteren dürfte er wohlbedacht und zielstrebig dieses Dokument geschaffen haben."} This conclusion is based on his extensive editing, both small (stylistically) and large (new pages taped over old, the many additions and cross outs), as well as on the number of lengthy and well composed treatments on topics related to his published output. Yet conversely, Fechner's extremely extensive published oeuvre and his habit of making changes and tacking on addenda up to the moment of publication (*Tb* 1862:325) suggest the opposite. As a meagerly pensioned and mostly independent natural researcher and writer for nearly the entire period of the journal, he had only incentives and largely no impediments to publishing the more polished material from his diaries. The incessant editing, large and small, seems on the other hand to be a

The first mention of "Langeweile" came in an entry dated 13 October 1842: "If the boredom of sitting idly begins to become predominant, I set myself to writing in the diary" (*Tb* 1842:271).[51] While the boredom, especially in the critical period of illness, was tied equally to ocular and mental pains, he associated it most consistently throughout his lifetime with his eyes (*Tb* 1845:18; 1870:139; 1874:1; 1875:8; 1877:1). The link between bodily woes (such as his eyes) and boredom went further than the former causing the latter; the body was also subject to boredom's effects. Fechner elucidated this complex interplay in a description he gave of Clara Fechner, his wife, when she was sick with fever and bedridden: "She would very much like to get up for a few hours of the day and sit down with us in an armchair, receive visitors; but she isn't supposed to do either [according to the doctor], until the feverish state is totally past. And when she complains about terrible boredom, the doctor says: in such a state, boredom is the healthiest" (*Tb* 1867:189–90; my interpolation).[52] Physical restriction was thus bound up with its mental expression, not merely the underlying condition of it. Boredom in general was precipitated not by mere idleness (*Müßigkeit*) but by idle sitting and standing ("müßig Sitzen und Stehen"; *Tb* 1842:273); its lack of physical and mental excitation could even combat physical ailments such as fever.

As an equal phenomena of body and mind, boredom was also combated on both fronts. As a remedy for boring lectures, which Fechner noted as a regular scourge (*Tb*

---

particular trait of his overall writing process rather than an indication that the text was intended for wider readers. I thus suggest that we take Fechner at his word that the primary cause of the diaries was boredom but also that boredom was more than merely a "triggering motive" and a simple state of being; it was instead a manifestation of the same ever mutating mind-body connection that animated both his scientific and everyday interests, as channeled via psychophysics and walking. As an aspect of his daily life and related to the primary source base for his walks, I consider boredom here in the context of walking.

51 {"Fängt die Langeweile des Müßigsitzens an, überwiegend zu werden, so setze ich mich zum Schreiben am Tagebuche."}

52 {"Sie möchte gern ein paar Stunden des Tages aufstehen und sich zu uns in einen Lehnstuhl setzen, Besuche annehmen; aber Beides soll sie nicht [nach dem Arzt], bis der Fieberzustand ganz vorüber; und wenn sie sich über schreckliche Langeweile beklagt, so sagt der Doctor: Langeweile sei bei solchem Zustand das Gesündeste."}

1871:15), he recorded the famed Naturphilosoph Lorenz Oken's suggestion: "By clearing one's throat, scraping one's feet, rocking one's chair, and chatting with one another, as if the speaker were not present" (*Tb* 1844:75).[53] Here the antidote to boredom was an orchestrated physical outpouring. Of course, the most prominent physical remedy to his daily boredom was walking: "During the preceding months, I have had altogether little boredom. Reading by dictation, relatively many visits, writing in the diary, as well as written activities with a few other subjects, walking daily 1- to $1\frac{1}{2}$ hours in the garden, and whatever otherwise still presents itself by chance have helped me get over the time pretty well" (*Tb* 1842:514).[54] Yet Fechner walked for many more reasons than just boredom, all of which were recorded in his diary.

Walking, from Leipzig to Rome

Fechner walked both routinely and as a specific activity. The routine walks were among other daily regularities, including writing, reading (both aloud, when his eyes were bad, and by himself), and social visits. One such routine was recorded as follows:

> My current daily labor ordinarily the following. I get up between 6 and 7, then study mathematics about 1/2 hr. to 1 hr., then eat breakfast with my wife, then she reads aloud about 1/2 hr. (Droysens Freiheitskriege); then we walk up and back a few times in the garden; then I go to my main work until 1, when we eat. After the meal, another walk in the garden or I head to the Rosenthal; after 3 I start to work again, until it gets dark; then I mostly take another walk; then it's time to eat and nothing more specific planned, until, mostly around 10, to bed. (*Tb* 1847:1–2).[55]

53 {"Indem man sich räuspere, scharre, mit den Stühlen rücke und sich unterhalte, als wenn der Redende nicht vorhanden wäre."}

54 {"Langeweile habe ich während vorigen Monats im Ganzen wenig gehabt. Lectüre durch Vorlesen, verhältnißmäßig viel Besuch, das Schreiben an dem Tagebuche, so wie auch schriftliche Beschäftigung mit einigen andern Gegenständen, tägliches 1- bis $1\frac{1}{2}$ stündiges Spazierengehen im Garten, und was sich etwa noch zufällig sonst darbot, haben mir verhältnißmäßig gut über die Zeit hinweggeholfen."}

55 {"Mein jetziges Tagewerk in der Regel dieses. Ich stehe zwischen 6 und 7 Uhr auf, treibe dann etwa $\frac{1}{2}$ St. bis 1 St. Mathematik, frühstücke dann mit meiner Frau, dann liest sie etwa $\frac{1}{2}$ St. vor (Droysens Freiheitskriege);

While the routine walks were related, especially during the worst of his illness, to his need to pass the time while unable to see or think and aimed at improving his overall health, they took place regularly during good health as well. During routine walks of sickness and health, he often recorded specific thoughts, conversations, or observations, just as he did when they occurred at home or in other settings.[56] His pointed walks, in which the walk was set apart from the everyday routine in some notable way, served similarly as settings for his diary entries. These pointed walks included excursions to nearby towns to see friends as well as longer hikes while on a trip. And despite any seeming distinction between an afternoon stroll through his own garden and a four-hour excursion along the left bank of Lake Brienz in Switzerland (*Tb* 1862:51), Fechner recorded them under the same name and with parallel aims and forms, as an everyday vehicle for his observations. While he was on holiday trips, working and walking remained consistently the two poles of his everyday life, as Kuntze noted.[57] "In Rome, he [Fechner] saw more of the streets than the ruins," Kuntze reported, further relaying the observation of Fechner's friend, publisher, and fellow traveler Hermann Härtel: "Fechner went walking in the Roman Forum exactly as he did on the 'Täubchenweg' in Leipzig, where at home, he was in the habit of strolling pensively, absorbed in himself."[58]

In Leipzig and environs, the most common routes and sites for walks routine and

---

dann gehen wir ein paarmal im Garten auf und ab; dann gehe ich an meine Hauptarbeiten bis 1 Uhr, wo wir essen. Nach Tische wird wieder im Garten spaziert oder ich gehe auch ins Rosenthal; nach 3 Uhr fange ich wieder an zu arbeiten, bis es dämmert; dann gehe ich meist wieder spazieren; dann wird gegessen und nichts bestimmtes mehr vorgenommen, bis, meist gegen 10 Uhr, zu Bette gegangen wird."}

56 Fechner's routine was in fact not particularly regular, with order, length, and, to a lesser extent, composition of activities neither fixed nor even planned daily. He did, at one point, remark positively on the common moral imperative to overtly consider, in the mornings, what was to be done, and in the evenings, what was done; he, however, always failed to stick to it, despite "that without it, man gets stuck in slackness or will soon sink back in there" (*Tb* 1844:122). {"Daß ohne sie der Mensch immer mehr oder weniger im Schlendrian stecken bleiben oder bald dahin zurücksinken wird."}

57 Kuntze, *Fechner*, 283.

58 Kuntze, *Fechner*, 284. {"In Rom sah er [Fechner] mehr die Straßen als die Ruinen"; "Fechner sei auf dem römischen Forum spazieren gegangen gerade wie auf dem 'Täubchenweg' in Leipzig, wo er nachdenklich in sich versunken daheim sich zu ergehen pflegte."}

otherwise were the gardens of the properties on which he lived, across town to Rosental park, and to nearby towns including Gohlis to the north and Connewitz and Stötteritz to the south.[59] In the primary years of Fechner's remaining diary, 1842 to 1879, the family lived in two places, both just outside the city center and former city walls: the garden house of a larger property owned by Härtel on Große Windmühlengasse and then the second floor of a building on Dresdner Straße (*Tb* 1842:317–19; 1873:31–32).[60] As with many of the early constructions in the districts immediately adjacent to the center, both properties had sizable gardens (especially Härtel's). While the limits of the garden meant walking up and back,[61] he made a distinction between that repetition and the pacing he occasionally did in his room, which did not qualify as a Spaziergang.[62] The homes were roughly equidistant to Rosental park, lying northwest of Leipzig center; the park was a lifelong destination for Fechner and offered the setting for his opening reflections on the day view in *Die Tagesansicht gegenüber der Nachtansicht* (*Tb* 1831:13; 1878:19). Of this setting, he wrote, "The scene of the text's first emergence is a kind of semicircular opening in the bushes, by which there runs past a path through the great meadow. Three stone benches are spread at the perimeter of the opening, and I enjoy sitting on the first, as counted from the Schweizerhäuschen [a café], in order to look out on the great meadow,

59 These three were incorporated into Leipzig before 1900.

60 The former was first Leipzig house number 884, then Große Windmühlengasse 14 from 1842, and finally Windmühlenstraße 14 from 1844. Fechner, *Tagebücher*, 139n232, 140n234. The move to Dresdner Straße 36 in 1850 was a major event in the family's life, mostly due to its immediate cause, "the discord and tension in relations" between Clara Fechner and Luise Härtel (*Tb* 1862:18–20a). The Fechners lived on Dresdner Straße, in a house that still stands, until his death.

61 "*Visitors*. . . . At around half past five, as I walked in the garden, Prof. Erdmann, with whom I continued going back and forth in the garden for about 1 hr" (*Tb* 1842:344). {"*Besuche*. . . . Um etwa halb Sechs, als ich im Garten spazierte, Prof. Erdmann, mit dem ich etwa 1 St. fortfuhr, im Garten auf- und ab zu gehen."}

62 "Now I get up early at 8, and my occupation during the day consists in being read to, playing chess, and much idle going up and back [*müßigen Hin- und Hergehen*] in the room, little walking [*Spazierengehen*]" (*Tb* 1845:3). {"Ich stehe jetzt früh um 8 Uhr auf, und meine Beschäftigung während des Tages bestehen in Vorlesen lassen, Schachspielen, und vielem müßigen Hin- und Hergehen in der Stube, wenig Spazierengehen."} He did occasionally use the term *promenieren* (to promenade, walk, stroll) to refer to walking in the garden and walking in his room, but did not use the term *spazieren* for his inside pacing. See *Tb* 1843:4 for an entry where he used *promenieren* to refer to both walking in the garden and in his room.

where a small bosket on the expanse of the meadow jumps out to the eye" (*Tb* 1878:19; my interpolation).[63]

In terms of the physical aspect of his walk, as already noted, Fechner thought himself rather hardy and wore neither scarf nor stockings even during bad weather.[64] Kuntze offered a detailed picture of Fechner's manifestation while on the go:

> I already spoke of Fechner as a walker. For years, he walked with a hat whose visor, jutting out, made him recognizable at great distance, or armed with blue glasses. He was thus a well-known personality on the streets. He strode along lost in thought, paying little attention to those he came across. His gait was nonetheless quick and light, remaining so until old age, and about which his wife was addressed and congratulated. He paid little attention to his wardrobe, and if he had his own very specific opinions of taste, even about ladies' formal wear, he still didn't think anything of keeping himself in harmony with fashion; often, his wife's care forced on him new or warmer clothes, with great reluctance. As simple and unpretentious at home and in uniform, he was also by habit not sensitive to the cold. In his youth, he had hardened himself, and sometimes at night through the open window, snow fell on him, onto the bedcover, without harming him; he rarely buttoned up his coat, and even during storms and cold, under repeated admonitions, he was scarcely moved to close his apparel.[65]

63 {"Der Schauplatz der ersten Entstehung der Schrift ist eine Art halbkreisförmiger Ausschnitt im Gebüsch, an dem ein Weg durch die große Wiese vorüberführt. Am Umfange des Ausschnittes sind drei steinerne Bänke vertheilt, und auf der ersten, vom Schweizerhäuschen [einem Café] her gerechnet, sitze ich gern, um auf die große Wiese zu blicken, wobei ein kleines Bosquet auf der Fläche der Wiese ins Auge fällt."} In 1897 on this site, a bust of Fechner was placed, which is today in a slightly different location. Fechner, *Tagebücher*, 1133n2263.

64 The combination of a hardy self-image as a walker and lifelong health issues is certainly not easy to reconcile. The hardiness seems to have something to do with Fechner's perceived absent mindedness regarding the external world while walking, while the illness related directly to his internal world, which was omnipresent for him. This relation between inner and outer while walking, specifically in terms of both sensory perception and attention, occupy the next section of the chapter.

65 Kuntze, *Fechner*, 323–24. Here Kuntze probably drew upon the aforementioned passage regarding clothing in Fechner's journal. In that same passage, Fechner noted the detail, repeated by Kuntze, that he often slept by an open window, snow landing on his bed (*Tb* 1842:41).

{"Ich sprach schon von Fechner als Spaziergänger. Jahre lang ging er mit einem Hute dessen vorragender Schirm ihn weithin kenntlich machte, oder mit einer blauen Brille bewaffnet. Er war daher auf den Straßen eine bekannte Persönlichkeit. Er schritt in sich gekehrt einher, auf die Begegnenden wenig achtend. Sein Gang war aber rasch und leicht, bis in sein hohes Alter, worüber oft seine Gattin angeredet und beglückwünscht wurde. Auf seine Garderobe achtete er wenig, und wenn er auch über Damentoiletten seine sehr bestimmten Geschmacksansichten hatte, so dachte er doch nie daran, sich selbst in Einklang mit der

Fechner certainly did care about his dress as he walked, as evidenced by a long and contentious conversation he had with his wife about an old and a new vest before heading out: "*I*. But with my regular robe, the new vest will then look like one single sunspot on a gray misty region.—*She*. Now, it's not yet really that bad with your jacket; and it just comes down to you to purchase another one or to put on the one you already have.—*I*. I see now, I will have to bring myself to part with the good friend who grew old and gray with me. But when I hand over the vest, I certainly won't right then take off the jacket too" (*Tb* 1842:368).[66] But, while contradicting part of Kuntze's description, Fechner's self-depiction here confirms the eccentric vision Kuntze portrayed, and there is no other evidence that overtly contradicts it.

In terms of temporal and spatial aspects, he walked for hours a day, at least four at the extreme during his illness (*Tb* 1844:9). By the time he was sixty-three, his pace had slowed somewhat, limited to one hour of walking before tiring while in "the Leipzig air"; but when on vacation, he was once again fresh and able to walk the entire day (*Tb* 1864:134). As already noted, he more or less failed to keep a consistent routine but mostly attempted three walks a day while working in Leipzig, while the longer holiday walks took up at least half the day. "With my 76 years, I don't feel really capable in the feet but also don't feel any

---

Mode zu halten; oft nöthigte ihm die Fürsorge der Gattin eine neue oder wärmere Kleidung unter großem Widerstreben auf. Wie in Stube und Tracht einfach und anspruchslos, so war er auch in der Gewöhnung gegen Kälte nicht empfindlich. In seiner Jugend hatte er sich abgehärtet, der Schnee war ihm manchmal des Nachts durch's offene Fenster aufs Deckbett gefallen, ohne ihm zu schaden; seinen Rock knöpfte er selten zu, und selbst bei Sturm und Kälte war er durch wiederholte Ermahnung kaum zum Schließen der Kleidung zu bewegen."}

66 {"*Ich*. Aber die neue Weste wird dann zu meinem übrigen Gewande aussehen wie ein einzelner Sonnenfleck auf einer grauen Nebelgegend.—*Sie*. Nun, so schlimm ist es doch mit deinem Rocke noch nicht; und es kommt blos auf dich an, einen andern anzuschaffen oder den, den du noch hast, anzuziehen.—*Ich*. Ich sehe schon, ich werde mich bequemen müssen, von dem guten Freunde, der mit mir alt und grau geworden ist, zu scheiden. Aber wenn ich die Weste hergebe, will ich mir doch nicht gleich auch den Rock mit ausziehen lassen."} This passage may have been Kuntze's source for his claim that Fechner paid little attention to fashion, based on Fechner's attachment to old clothes. Yet Fechner clearly cared about style, if not that of the newest fashion than that of the stalwart single-minded scholar.

longer like walking as far as I probably could" (*Tb* 1877:45), he wrote.[67] By eighty-four, he had cut back on even the main daily walk to Rosental;[68] but then in his last year, as his eyes finally totally gave way and reading aloud could only take up part of the day, "primarily walking must help kill time."[69] Spatially, his walks were mostly of three sorts: up and down in his garden, to regular specific destinations (both in Leipzig and while traveling), and unbounded longer walks, most often when away from Leipzig. He often recorded what he ate and drank while on the latter two, though only occasionally did he add other observations from along the route.

But where was Fechner's work on the mind-body in all these walks? It wasn't with a specific type of walk, time of day, destination, or other basic factor that his walks suddenly gained significance in terms of the mind-body; the pursuit of the mind-body relation was always there during the everyday walks in their many guises. One only has to consider them in the right light.

THE MIND-BODY ON FOOT, THREE WAYS

My interpretation of Fechner's walking as an everyday investigation of the mind-body centers around critical in-the-thick-of-it accounts of his walks as everyday experiences. These accounts build directly on the theoretical sources explored in the introduction to this dissertation: Michel de Certeau's science of the everyday, Gayle Salamon's critical phenomenology, and Clifford Geertz's thick description. I look through the kaleidoscope of his daily life as recorded in his diaries and draw out the walks as particularly patterned shapes; these shapes were constituted by the walk's enunciative and appropriative forays into and of the surroundings (per Certeau) and by its competing meanings for Fechner

67 {"Ich mit meinen 76 Jahren fühle mich nicht mehr recht rüstig in den Füßen, habe aber auch nicht einmal mehr Lust, so weit zu gehen, als ich wohl könnte."}
68 Fechner, "Lebensabriss," 302.
69 Fechner, "Lebensabriss," 305. {"Hauptsächlich muß Spazierengehen helfen, die Zeit todt zu schlagen."}

and other participants (per Salamon). To then interpret them as part of an investigation into the mind-body, I decode them via the "thick" psychophysical context in which Fechner's life was enmeshed (per Geertz). And as the decoding is key to the analysis as a whole, this psychophysical context is my starting point.

Just as psychophysics took the mind-body relation as an object apprehensible from outside and inside and thus bifurcated into an outer and inner approach (*EP* 1:1–11), Fechner's walking operated via the same structure with regard to the same object, now taking an outer standpoint, now an inner one. Fechner himself even described such an alternating standpoint when it came to life in general (in contrast with the standpoints of natural science, the science of mind, and Naturphilosophie): "The views of life are based on the alternation of standpoints" (*EP* 1:6).[70] Yet whereas psychophysics built on adjacent empirical tools in physics for its outer approach and physiology for its inner approach (*EP* 1:11), walking as a parallel pursuit had no such explicit resources or precisely delineated subdomains (such as stimulus and sensation for psychophysics). Thus while the specific distinction between outer and inner psychophysics—that is, between mediate relations of the mind-body and immediate ones—is important for my analysis, I ultimately build more broadly on *Elemente*'s basic perspectival formulation of psychophysics, in which the outer standpoint was external to the mind-body while the inner one was internal to it (*EP* 1:4).

In my reading of Fechner's walks, I ultimately identified three modes of walking, each with its own specific axis of outer and inner standpoints and attendant view of the protean mind-body relation: a physiopsychical mode for the individual mind-body; an interpersonal mode for the social mind-body; and a universal mode for the omnipresent natural mind-body.[71] These modes step serially through three major

70 {"Die Ansichten des Lebens fussen auf dem Wechsel der Standpuncte."}

71 I use these three names of the modes for simplicity and ease of reference and without any additional meaning than the two ends of each named axis. This is especially important in terms of the *physiopsychical* mode, which refers simply to the body-mind axis; the cumbersome coinage is meant to avoid connecting this mode

conceptual conjunctures in *Elemente*: The physiopsychical walks laid out the fundamental embedded nature of the mind-body, in which the observing mind was the same as the observed one and the mind-body was approached as a single sensorium; here was the most basic challenge for psychophysics in establishing a valid measurement principle. The interpersonal walks brought forward the question of attention and the different reactions of the mind-body in varying social situations; here was the transition from outer to inner psychophysics and shift from one sort of stimulus-sensation relation to another, in which the mind-body had a different relation with the exterior world. Finally, the universal walks elevated from the level of the human to the broader mind-body and its relations as general phenomena of nature; here was the elaborated wave schema and the question of broader psychophysical continuity and discontinuity, from the mind of human to that of the universe.

These modes are, of course, my analytic categories. As such, they occurred across the great variety of Fechner's walks—whether at home, while traveling, lengthy or short, with a specific destination or not—and were not mutually exclusive. Walks could and did vacillate between the outer and inner standpoints and shift between different modes. Ultimately, this alternation between outer and inner revealed each side's inextricability from the other, a fundamental intertwining emerging from the mind-body object itself as processed via the messiness of everyday life; similarly, the shifting between modes only reinforced the interrelation of the many manifestations of the mind-body relation.

The Physiopsychical Walk: Body and Mind

The first mode of Fechner's walks, to body and mind, is both the simplest and the one explicitly considered as such by Fechner himself. The mirrored exercises he recorded

---

more strongly than the others with psychophysics. All three were in combined pursuit of the mind-body object and worked equally in conversation with Fechner's psychophysics.

in 1842, cited in the opening to this part of the dissertation, were one such example; rephrasing from my opening version into a perspectival idiom, one exercise subjugated the inner perspective of the mind-body to the outer and the other on doing the reverse (*Tb* 1842:333–35). While these exercises were moments in which Fechner highlighted the physiopsychical aspect of walking, they were not its only expression. Even when focused specifically toward either the outer or the inner, physiopsychical walks struggled to separate its two sides. As Fechner wrote in *Elemente*, while the world was composed of many examples of objects (e.g., the solar system) that were unitary but could be seen differently from two points of view, the mind-body was a special case: "The self-appearance of the mind is gained from a *true* inner standpoint of the essence underlying the mind toward itself, from the standpoint of coincidence with itself; the appearance of the corresponding corporeality is gained in contrast from a true external standpoint, from the standpoint of noncoincidence with this corporeality" (*EP* 1:4).[72] Establishing this particularity, the embeddedness of the mind in the mind-body object, was a cornerstone of psychophysics: "The preceding manner of presentation covers the most fundamental conditions between body and soul, which every fundamental view on the topic should seek to cover" (*EP* 1:5).[73] But in the context of Fechner's physiopsychical walks, where only his own mind-body was under investigation, such a fundamental fact played out differently: instead of allowing for something like the clean cut of outer and inner psychophysics, it tugged inexorably at each side, the inner standpoint never fully separable from the outer and vice versa.

The outer standpoint spanned from the mechanics of his stride to specific physical

72 {"Die Selbsterscheinung des Geistes wird von einem *wahren* inneren Standpuncte des ihm unterliegenden Wesens gegen sich selbst, dem der Coincidenz mit sich selbst, die Erscheinung der zugehörigen Körperlichkeit von einem wahren dagegen äusserlichen Standpuncte, dem der Nichtcoincidenz damit gewonnen."}

73 {"Somit deckt die vorige Vorstellungsweise die fundamentalsten Verhältnisse zwischen Leib und Seele, die jede Grundansicht darüber zu decken suchen sollte."}

sensations. As captured in Kuntze's vivid portrayal, Fechner's stride possessed a notable quality, "quick and light," though Fechner himself did not leave a record of its specifics.[74] He did describe the strides of two of his nephews, Artur and Karl Volkmann—the former "a knotty gait like a still-young clumsy dog," the latter "taut like a man made small with a petit bourgeois walking stick"—indicating some idea of his attention to the art of the stride, both in its narrower physicality and its expressive style (*Tb* 1867:101).[75] Also already mentioned was his self-perceived durability, related both to his dress and the extent of his walking (*Tb* 1842:41, 368; 1844:9; 1864:134; 1877:45). He was more overtly attentive to his exterior senses, especially sight, whose recording he undertook with verve and feeling. About the bloom of various flowers in the garden during high summer 1844, he wrote, "If one takes a look out over it in entirety, it's a jumble of red, white, green, to which still some other flowers give their shades. I cannot however say that the eye, through this sight, finds itself altogether spoken to; the disorderly tangle of colors has precisely a bewildering effect upon it" (*Tb* 1844:35).[76] In the end, such a "jumble" of sensations prompted Fechner to prefer fields of just one varietal, "the peculiar pleasure of the color effect on a massive scale" (*Tb* 1844:36).[77] Here was the tension between uncontrollable sensation, such "disorderly tangle of colors," and what Fechner abstractly preferred or understood, the mind-body as lived in versus the mind-body as considered. This tension recurred later the same year, as Fechner and walking compatriots tried to sort out why the autumn afternoon sun, as glancing against houses and spires in the distance, was so beautiful in contrast with its spring version (*Tb* 1844:104–5). The next day, on "a beautiful autumn morning, full of

74 Kuntze, *Fechner*, 323.

75 {"Einen baumlichen Gang wie ein noch junger tollpatschiger Hund"; "straff wie ein kleiner gemachter Mann mit einem philiströsen Stock."}

76 {"Ueberblickt man ihn im Ganzen, so ist es ein Gemeng von Roth, Weiß, Grün, wozu noch manche andere Blumen ihre Töne geben. Ich kann doch nicht sagen, daß das Auge sich durch diesen Anblick im Ganzen angesprochen fände; das regellose Gewirr von Farben wirkt eben nur verwirrend darauf."}

77 {"Den eigenthümlichen Genuß der massenhaften Farbenwirkung."}

brightness, stillness, and freshness," Fechner was able to somewhat harmonize bodily sensation as felt and bodily sensation as understood:

> The morning sky curved broadly and blue over Härtel's house and was covered completely with red lambs; the rosy dawn shined gloriously through the still-vigorous green of the great Canadian poplar by the house. The smoke from the steam pipe, passing as a brown stripe by the morning clouds, and the smoke of the neighboring brewery, ascending more upright, only further enhanced the lightness and stillness of the sky through their dark coloring and movement. A kitten peeped over the garden's vine fence, a crow swung itself from a poplar into the expanse and drew onward with heavy flight; a flock of starlings flapped hurriedly into the distant blue. The garden, however, looked nearly half devastated; the wilted flowers already had the upper hand over the blooming ones, and I preferred looking out into the sky rather than at the earth. (*Tb* 1844:110)[78]

The corresponding inner standpoint of the walks was described more overtly by Fechner himself and hewed closely to the exercises mentioned above. In 1847, looking back at his illness from several years later, he declared his head to have "complete clarity of thought"; nevertheless, he continued, "it is still difficult for me to ward off thoughts."[79] He then outlined how he still practiced a version of the mental exercise developed during his illness: "It is still my constant exercise and effort, during walks and at times when I don't want to work, to prevent the further spinning of the thoughts with which I have busied myself at work, and to always divert myself from a new thought onto trivial objects or those that grab into real life. This is partly because I feel the disadvantage that this

78 {"Ein schöner Herbstmorgen, voll Heiterkeit, Stille und Frische." "Der Morgenhimmel wölbte sich weit und blau über Härtels Haus, und war ganz mit rothen Schäfchen bedeckt; auch schien das Morgenroth durch das noch kräftige Grün der großen canadischen Pappel am Hause herrlich hindurch; der Rauch der Dampfesse, als brauner Streifen vor den Morgenwolken vorbeiziehend und der Rauch des nachbarlichen Brauhauses, mehr gerade aufsteigend, hoben durch ihre dunkle Färbung und ihre Bewegung die Helle und Stille des Himmels nur noch mehr. Ein Kätzchen guckte über die Weinplanke des Gartens, eine Krähe schwang sich von einer Pappel ins Weite und zog mit schwerem Fluge dahin; eine Schaar Staare aber flatterte eilig ins ferne Blaue hinein. Der Garten aber sahe schon halb verwüstet aus; die welken Blumen hatten schon die Oberhand über die blühenden, ich sah lieber den Himmel hinein als auf die Erde."}

79 Fechner, "Krankheitsgeschichte," 125–26. {"Vollkommene Klarheit des Denkens; aber immer noch fällt es mir schwer, die Gedanken zu bannen."}

further spinning of thoughts has for my mental self-power and strength and partly because I become unable, as a result of the spinning, to take part in the interests of life."[80]

In 1844, Fechner had already described this continuing practice of directed thought while walking (*Tb* 1844:226). In addition to aiming at "trivial objects or those that grab into real life,"[81] the practice also sought to produce "an attention onto everything that I encounter and a mood of fantasy tying on to all this every possible association" (*Tb* 1844:226).[82] Though he was convinced that he needed to end the "further spinning of thoughts," he wasn't able to fully banish thought and instead put his energies toward *redirecting his thought in a directionless manner*, here toward "trivial" objects, there toward a series of fantastical associations. He specifically opposed this mental activity to *Nachdenken* (thought, reflection, or, literally, thinking over): "It is of an entirely other constitution, into which the mind must be transferred, as reflection [*Nachdenken*]; and with my much greater tendency toward the latter [*Nachdenken*] than the former, it necessitates on my part great tension and strain of the will, not only in eliciting such a constitution each time I want to proceed to it, but also in keeping myself in it for a while" (*Tb* 1844:226–27; my interpolations).[83] Fechner never recorded a pure description of this mental work, what sorts of objects and associations he passed through while strolling.

80 Fechner, "Krankheitsgeschichte," 126. {"Anstatt daß Andere die Gedanken suchen, ist es immer noch bei Spaziergängen und zu Zeiten, wo ich nicht arbeiten will, meine stete Uebung und Mühe, das Fortspinnen der Gedanken, mit denen ich mich bei der Arbeit beschäftigt habe, zu verhindern, mich immer von Neuem auf gleichgültige oder in's Leben greifende Gegenstände abzulenken, da ich theils den Nachtheil spüre, den dieses Fortspinnen der Gedanken für meine geistige Selbstmacht und Kraft hat, theils dadurch unfähig werde, an den Interessen des Lebens Theil zu nehmen."}

81 Fechner, "Krankheitsgeschichte," 126.

82 {"Eine Aufmerksamkeit auf Alles, was mir begegnet, und eine Stimmung der Phantasie, hieran alle möglichen Association zu knüpfen."}

83 {"Es ist eine ganz andre Verfassung als zum Nachdenken, in welche man den Geist hiebei versetzen muß, und es erfodert bei meiner so viel größeren Tendenz zu letztrer als erstrer große Spannung und Willensanstrengung von meiner Seite, eine solche nicht nur jedesmal hervorzurufen, wenn ich dazu übergehen will, sondern auch mich eine Zeit lang darin zu erhalten."}

Maybe processing such experience into writing required *Nachdenken*, the very formation of thoughts it was intended to avoid.

But Fechner did, in the midst of his illness, record the outcome of a more restricted version of these mental exercises, one that brought the inner approach to the mind-body back around to its outer counterpart. On 9 September 1842, after describing his issues with sustained thinking and an early form of the mental-direction exercise, he took to the garden and recorded what happened:

> Early today, I walked as usual with blindfolded eyes in the garden for an hour, where I resolved as much as possible to think nothing whatsoever but instead merely to surrender the ear and brain to the sensuous impression of individual audible sounds passively. Although this admittedly succeeded only incompletely—for the in-between thinking cannot be cut off for someone habituated to thinking—I nevertheless from time to time brought my brain into a state just like, I believe, the one that must occur with a newborn child; such a brain does not yet think but rather merely takes in sense impressions, and it was pleasing to place myself into this state. What I heard was: Rustling of the wind in the trees, constant traveling of partly lighter, partly heavier wagons, hammering and knocking from probably 6 different places in different rhythms, with different sound and different strength, noise from the digging work of the worker busy in the garden, chirping of birds, time to time barking of a dog and distant human voices, striking of shutters on the house from the wind, the house bell.—In these attempts, the influence of attention on the perception of sounds was very considerable. Thus, for a long time, I had perceived the rustling of the wind virtually not at all; it rustled incessantly and I knew nothing of it, despite my resolution to take note of all the sounds that would arise around me. But due simply to its continuousness, it had not particularly fixed on to my attention. Indeed, I did not hear the rustling of my own steps during the attempt's entire time.— (*Tb* 1842:113)[84]

84 {"Heute früh ging ich, wie gewöhnlich, eine Stunde lang mit verbundenen Augen im Garten, indem ich mir vornahm, so viel möglich gar nichts zu denken, sondern blos das Ohr und Gehirn dem sinnlichen Eindruck der einzelnen hörbaren Töne passiv Preis zu geben. Wiewohl dieß freilich nur unvollständig gelang, denn das Zwischen-Denken läßt sich bei einem an's Denken Gewöhnten doch nicht abschneiden, brachte ich doch mitunter mein Gehirn in einen Zustand, wie er, glaube ich, bei dem neugeborenen Kinde Statt finden muß, welches auch noch nicht denkt, sondern blos Sinnes-Eindrücke aufnimmt, und es gefiel mir mich in diesen Zustand hinein zu versetzen. Was ich hörte war: Rauschen des Windes in den Bäumen, beständiges Fahren theils leichter, theils schwerer Wagen, Hämmern und Pochen wohl von 6 verschiedenen Orten her in verschiedenem Tackt, mit verschiedenem Klang und verschiedener Stärke, Geräusch von der Grabe-Arbeit

Here Fechner showed the inextricability of the two approaches to the mind-body. The basic urge to end his incessant thinking—"to think nothing whatsoever"—was satisfied only by the transformation of the brain to its presumed newborn form. But, just as he noted the very impossibility of fully denying his thinking and the persistence of "in-between thinking," his account of his bodily "sense impressions" was formed, processed, and recorded by his mind. The writing was at once lyrical and precise, the rhythm of his account matching the rhythm of the "hammering and knocking from probably 6 different places in different rhythms, with different sound and different strength." Then, the mental came back even more forcefully, as the recognition of his own attention and its effect on his sensory impressions. With his attention pitched toward specific tones, he let continuous tones pass him by. Both the rustling of the wind and that of his own stride escaped his perception—until, of course, he *did* notice their persistence and determined why they had previously been absent. Energy expended by part of his mind-body, whether focused on the outer or inner side, affected its complement; the embeddedness of the mind to its object, the fundamental premise of the physiopsychical walks, came forward in the description produced of the object itself.

This echoed the relation Fechner laid out in *Elemente* between psychical and physical energy, subject to the general law of the conservation of energy: "Precisely as someone was in the process of intense bodily work, there comes to him a thought, which occupies him more than usually; immediately the arms sink and remain hanging, as long as the thought and consequently the psychophysical activity of it work intensely internally."

---

des im Garten beschäftigten Arbeiters, Zwitschern der Vögel, mitunter Bellen eines Hundes und entfernte Menschenstimmen, Anschlagen der Fensterläden an das Haus durch den Wind, die Hausklingel.—Sehr beträchtlich war bei diesen Versuchen der Einfluß der Aufmerksamkeit auf die Perception der Töne. So hatte ich das Rauschen des Windes lange Zeit so gut als gar nicht wahrgenommen; er rauschte fortwährend und ich wußte nichts davon, ungeachtet meines Vorsatzes auf alle Töne die um mich entständen, Acht zu haben, aber eben wegen seiner Continuirlichkeit hatte er meine Aufmerksamkeit nicht besonders fixirt. Ja das Rauschen meiner eigenen Tritte habe ich während der ganzen Versuchszeit völlig überhört.—"}

(*EP* 1:38).[85] The line here between outer and inner work was less clear, and his practices nearer to this middle ground than his reference to "intense bodily work"; yet the necessary flow between mental and bodily, and between inner and outer standpoints, was still a primary feature.[86] This very tethering of outer and inner work, bodily and mental activity, and the two standpoints was ultimately the very basis for the possibility of measuring the mental: "The living force that is used for wood chopping and the living force that is used for thinking, that is, for the underlying psychophysical processes, are according to the preceding quantitatively not only comparable but even convertible into each other, and hereby both outputs themselves are, in accordance with the bodily side, measurable by a common yardstick" (*EP* 1:43).[87] While this recording of a walk did stand out for its acuity and depth, the walk itself wasn't marked out in any way particular way. The diary entry in general and the place of the walk within it were typical. These two paragraphs (both the full report quoted here and the preceding general statement of issues with his head and his attempts to remedy them) were sandwiched in the midst of a long entry, following an account of Sophocles's *Philoctetes* and preceding one of that evening's gathering, with no fanfare. In that sense, Fechner's eyes-bound walk of 9 September 1842 was just like any other number of walks during his life: an experiential investigation of his own mind-body

85 {"Noch eben war Jemand in einer starken körperlichen Arbeit begriffen, da kommt ihm ein Gedanke, der ihn mehr als gewöhnlich beschäftigt, sofort sinken die Arme und bleiben hängen, so lange der Gedanke und mithin die psychophysische Thätigkeit desselben innerlich stark arbeitet."}

86 To be clear, the relation between outer and inner work described in *Elemente* was between aspects of work that did not employ psychophysical activity and those that did, which was not the case in these physiopsychical walks (*EP* 1:37). Not much space was devoted in *Elemente* and by Fechner in general to bodily work that didn't employ psychophysical energy; further, based on his overall picture of psychophysical activity, it seems unlikely that there is actually any bodily work that occurred completely outside of it (e.g., the involuntary activities of his stomach, described in the opening exercises, while not subject to voluntary psychophysical activity obviously could produce sensations via that same activity).

87 {"Die lebendige Kraft, die zum Holzhacken verwandt wird, und die lebendige Kraft, die zum Denken, das ist zu den unterliegenden psychophysischen Processen verwandt wird, sind nach Vorigem quantitativ nicht nur vergleichbar, sondern selbst in einander umsetzbar, und hiemit beide Leistungen selbst nach körperlicher Seite durch einen gemeinsamen Massstab messbar."}

connection, without any scientific intent or apparatus, yet fundamentally tied to that work as he pursued it otherwise.

The Interpersonal Walk: Social and Private

The next mode shifts from considering Fechner's walks as phenomena of the body and mind proper to that of social interaction. A passing remark in *Elemente* highlighted the core of this interpersonal mode and what structured its outer and inner standpoints. In a long chapter detailing observations and remarks on various phenomena of inner psychophysics, Fechner considered why people had distinctly differing abilities to produce memory images,[88] chalking up their strength or weakness in this arena at least partially to a person's "*habituation*, brought about by predisposition, vocation, and life conditions . . . to direct his attention more to the outer world or to abstract it from that world" (*EP* 2:487).[89] He counted himself and his philosopher colleagues Rudolf Hermann Lotze and Christian Hermann Weiße among the weak. "Of myself, I must confess," he added as an example of such lacking outward attentiveness, "that I usually must first particularly prompt myself or be prompted to see and hear what goes on around me, and that after walks I have sometimes not surely known which of two entirely different branching paths I have taken" (*EP* 2:487).[90] It was precisely this inwardness that defined Fechner's inner-private walks, totally unconcerned with the outer world in any form (social or not). The very prerequisite, however, of such an inner focus—ignoring the outer world—was

88 The main two examples of phenomena in inner psychophysics were memory images (*Erinnerungsbilder*) and afterimages (*Nachbilder*), with the latter continuous with the sensory experience and the former not. Memory images were thus subject to a person's will and fantasy, while afterimages were not (*EP* 2:469).

89 {"Durch Anlage, Beruf, Lebensverhältnisse herbeigeführten *Gewöhnung* . . . seine Aufmerksamkeit mehr auf die Aussenwelt zu richten oder davon zu abstrahiren."} On the next page, he mentioned the complementary element in this ability to outward attentiveness: "The ease in internally reproducing them" (*EP* 2:488). {"Die Leichtigkeit, sie innerlich zu reproduciren."}

90 {"Von mir muss ich gestehen, dass ich mich gewöhnlich erst besonders anregen oder angeregt sein muss, zu sehen und zu hören, was um mich vorgeht, und nach Spaziergängen manchmal nicht sicher gewusst habe, welchen von zwei ganz verschiedenen Zweigwegen ich gegangen bin."}

impossible when that world talked back, in the shape of family, friends, and colleagues. From that outer-social standpoint, habituated attentiveness of any individual was trumped by the standard demands of conversational dynamics and their control over attention; while these dynamics were shared with other social settings, such as the home or café, the social walk ultimately channeled them in another direction. Fechner's interpersonal walks turned on and sharpened the question of attention as a primary factor of the mind-body, ultimately refracted through the issue of the differing purpose of outer-social and inner-private walks.

The defining element of the social walks was conversation, which ranged as widely as the general topics of his diary, from deeply serious research-related topics to gossip and joking anecdotes. On an evening walk to Connewitz near Leipzig with four of his closest intellectual compatriots in 1844, "all sorts of examples of absent mindedness and thoughtlessness were mentioned," which included the following gem from Weiße, encountering a locked door on his room after reading in the garden: "Now he [Weiße] indeed held the key to the door in his hand; but instead of unlocking with it, he stuck his books through the garden fence, took the key into his mouth, and just clambered over the fence" (*Tb* 1844:58; my interpolation).[91] This variety, in which the group dynamic dictated the topic rather than specific topics directing the dynamic, pointed to the unpointedness of Fechner's social walks. This nonpurposive core of his social walking was best recorded in a short sketch he wrote around 1830 about his friend from university Friedrich Grimmer, which began, "I enter into Grimmer's place; he's writing" (*Tb* 1830–31:1).[92] Grimmer was unconcerned with Fechner's arrival and kept working on the song he was composing. Fechner surveyed the room: "A dismal melancholy lies in his entire room, the lamp burns

91 {"Allerlei Beispiele von Zerstreutheit und Gedankenlosigkeit wurden erwähnt"; "nun hielt er zwar den Schlüssel zur Thür in der Hand; anstatt aber damit aufzuschließen, steckte er seine Bücher durch den Gartenzaun, nahm den Schlüssel in den Mund und kletterte nun über den Zaun."}

92 {"Ich trete ein bei Grimmern; er schreibt."}

with a high smoking flame and spreads a suffocating vapor; an empty snuff tin sits like an open casket on the table" (*Tb* 1830–31:1).[93] Grimmer was undergoing an attack of his usual melancholy, which Fechner attempted to accompany with his own "despairing thoughts" before transitioning to engaging in some fooling and joking around (*Tb* 1830–31:2). When this only annoyed Grimmer, Fechner invited him for a walk; their friend Weiße was waiting for them at a restaurant, and they would stroll to join him. Grimmer refused, for six (miscounted) reasons: because first he had a letter to write (already three weeks late), because second his stomach was upset, because third he was already wearing his dressing gown, and "because fourth, fifth, and seventh he really didn't feel like it" (*Tb* 1830–31:4).[94] After trying to rebut these reasons, while the maid lit a fire, Fechner gave up and grabbed his hat to go: "Indisputably, it seemed to him now, since the fire just started to burn, that the moment of necessary nonpurposiveness [*Unzweckmäßigkeit*] in going out had come; he asked me thus, whether I wanted to then go alone, and without anything further came along too" (*Tb* 1830–31:5).[95] For Fechner, the social walk was a spur to action, not with specific conversation or company as the intended goal, but as something specifically *unzweckmäßig* (nonpurposive) with regard to its own sociality. The sociality was the purpose.

This nonpurposive sociality extended so far that Fechner even took walks that displeased him when accompanied by those important to him; here nonpurposiveness stood in overt relation to outer-focused attention of the mind-body. During the summer holiday of 1864, the Fechners were joined in Elgersburg, another town near the Thuringian

93 {"Eine trübe Melancholie liegt in seiner ganzen Stube, die Lampe brennt mit einer hohen rauchenden Flamme und verbreitet einen erstickenden Dampf; eine leere Schnupftabaksdose steht wie ein geöffneter Sarg auf dem Tische."}

94 {"Weil er viertens, fünftens, und siebentens keine Lust habe."}

95 {"Unstreitig schien ihm jetzt, da das Feuer eben anfing zu brennen, der Zeitpunkt der erforderlichen Unzweckmäßigkeit zum Ausgehen gekommen; er fragte mich also, ob ich denn allein laufen wollte, und ging nun ohne Weiteres mit."}

Forest, by the Weiße family. He wrote of a habit the Weiße daughters had inherited from their father and was thus a hallmark of the summer's outings: "When it comes to going through a new beautiful area or taking a rest there, he [Weiße] always takes a look all around, to see whether the area of an easily reachable neighboring elevation could look all the more beautiful; and he surely climbs it, when it promises him something and time isn't too pressing. He also often stops, in order to attend to a scenic view and draw attention to it" (*Tb* 1864:137–38; my interpolation).[96] Such walks were premised on outward-facing attention and the perpetual seeking of further things to bring to one's attention; this almost contentless repetition was encapsulated in the response by one of the daughters, Lisa, to the bounty of attention-grabbing views: "The German language is so poor that one can only ever say *wunderschön* [wonderfully beautiful]" (*Tb* 1864:136; my interpolation).[97] The habit irked him and, he believed, other fellow walkers, especially if they didn't share Weiße's aesthetic sensibilities; these extended pursuits of views resulted in the walks having "something uncomfortable " (*Tb* 1864:138). Weiße's inclination toward "misty mountain outlooks, in which the contours cannot be rightly made out" was particularly repugnant to Fechner (*Tb* 1864:138).[98] Though it's possible such view-seeking could be understood as the purpose of the Weißes' social walks, it was clearly not for Fechner; for him, the outer-attention-directing aspect of the walks was part and parcel of their nonpurposiveness. Despite his distinct cantankerousness, in both everyday habit and philosophical outlook, he allowed himself to take even "uncomfortable" walks when alongside friends and colleagues as part of their nonpurposive character for him.

96 {"Wenn es durch eine neue schöne Gegend zu gehen oder darin zu ruhen gilt, sieht er [Weiße] sich immer rings um, ob nicht von einer benachbarten leicht erreichbaren Höhe die Gegend sich um so schöner ausnehmen könnte, und besteigt sie sicher, wenn sie ihm etwas verspricht und die Zeit nicht zu sehr drängt, bleibt auch oft unterwegs stehen, um auf eine landschaftliche Ansicht aufzumerken und aufmerksam zu machen."}

97 {"Die deutsche Sprache ist so arm, man kann nur immer sagen wunderschön."}

98 {"Nebligen Gebirgsaussichten, in denen man die Umrisse nicht recht erkennen kann."}

His private walks, on the other hand, were precisely not this; they were *zweckmäßig* (purposive).

The main purpose of Fechner's private walks was to kill time. He specifically highlighted this when his eyes were bad, writing in 1844, "For killing time, I take walks" (*Tb* 1844:55).[99] This was in fact the same reason that he took up journaling; both were activities that released the pressure of his *Nachdenken* or scientific writing and the boredom that resulted once these activities had reached their limit. While both extended far beyond the confines of this starting impetus, ultimately including everything in his journal and the other modes of walking discussed here, killing time was a persistent motive. This shared impetus was made clear in the first and most detailed of his regular recordings of his daily routine: "If the boredom of sitting idly begins to become predominant, then I set myself to writing in the diary (with the help of the hand-leading device), even if the state of my head allows earnest reflecting [*nachzudenken*] on something, on other things. If the weather is passable, then I walk with blindfolded eyes in the garden probably $\frac{1}{2}$ hour or so. . . . The afternoon is then again spent, as best as can be done, with writing, walking in the garden, and often admittedly also, for a large part, with idle sitting and standing not without boredom" (*Tb* 1842:271–73).[100] One notable distinction between journaling

99 {"Zur Tödtung der Zeit gehe ich spazieren."} In this same entry, he also mentioned reading aloud and playing chess as activities intended to kill time; yet these two activities, in contrast with walking and journaling (the other major boredom killer he engaged in), played for the most part a restricted role for Fechner with only one use, whereas walking and journaling encompassed far more than merely killing time. Chess did show up once in a particularly vivid variant of his bed as a important scene of thought: "I still play 3 to 4 games of chess daily. When I now wake up at night, I am often faced with whatever I may then be thinking of appearing to go on as if on a chess board. With each thought, an association is formed with a chess position or a move of a piece; it is as if only through such moves would I be able to think. If, with a thought, I am unable to make up my mind about something, this is then accompanied by the mental picture as if I wanted to move a piece (notably, it was today a knight), and I dithered about where" (*Tb* 1844:152). {"Ich spiele noch täglich 3 bis 4 Schachs. Wenn ich nun Nachts aufwache, begegnet es mir oft, daß, was ich auch denken mag, wie auf einem Schachbrett vorzugehen scheint; mit jedem Gedanken associirt sich eine Schachstellung oder ein Zug einer Figure; es ist, als ob ich nur durch solche Züge denken könnte; kann ich mich bei einem Gedanken über etwas nicht entscheiden, so begleitet sich dieß mit der Vorstellung, als wenn ich eine Figur (heute war es besonders ein Springer) ziehen wollte, und darüber schwankte, wohin."}

100 {"Fängt die Langeweile des Müßigsitzens an, überwiegend zu werden, so setze ich mich zum Schreiben am

and walking further marked out the private walks: As his life progressed and the diary he kept to accompany it developed further, the journaling itself as an activity receded from view while its counterpart walking remained more prominent. Between 1842 and 1847, he recorded roughly nine variants of his daily routine (with a tenth in 1862), all in a similar form (*Tb* 1842:270–73, 515–16; 1843:3, 4, 6–7; 1844:84, 223–25; 1845:110–11; 1847:1–2; 1862:323–24). These records marked out the time he spent on various activities, from waking up to going to bed, including meals, walks, some social activities, reading (both by him and aloud by others), specific scientific work (mostly reading and writing), as well as other miscellany. While walking was a fixture in all of these, the main release punctuating his days, writing in his journal—the very act that brought the routine to paper—slowly disappeared from the records, only mentioned in four of the ten entries (*Tb* 1842:270–73, 515–16; 1843:3; 1844:223–25).[101] Journaling became more of an invisible habit as the time he spent keeping one increased, while the walks remained notable individual activities.

In the context of these private walks, killing time was fundamentally a break from both work and boredom, a caesura of both mental and bodily exertion and their subsequent exhaustion. In the last such record of a routine schedule, Fechner strolled both before and after breakfast, "when it has become too light for me to still use my eyes for work," and then again in the afternoon, walking between his house and the café; upon arrival, "there resumed a deliberation with inner occupation, a deliberation that has often

---

Tagebuch (mit Hülfe der handleitenden Vorrichtung), auch wohl, wenn es der Zustand meines Kopfes erlaubt, über etwas ernsthaft nachzudenken, an andern Sachen. Ist das Wetter leidlich, so gehe ich dann wohl $\frac{1}{2}$ Stündchen mit verbundenen Augen im Garten spazieren. . . . Der Nachmittag wird dann wieder, so gut es sich eben machen will, mit Schreiben, Spazieren im Garten, oft freilich auch zu großem Theile mit müßig Sitzen und Stehen nicht ohne Langeweile verbracht."}

101 By 1844, Fechner mentioned usually having "written something" in the afternoon or evenings (*Tb* 1844:84) or specifically writing in either the diary or one of two major scientific projects he was then composing (*Tb* 1844:224); while he obviously continued writing extensively in his journal, it didn't feature on its own in itself. Later mentions of the diary, in 1865, motion to this transition, mentioning it only when he hadn't written for a few months (*Tb* 1865:126, 132).

occupied me in the last few days with no results" (*Tb* 1862:324).[102] While his scholarly and intellectual labor was one sort of inner-focus, it still demanded attention toward an specific object; private walking, in contrast, allowed for a complete relinquishing of attention toward anything beyond. These walks were a complete negation of the contradictory primary productive scenes of thought he identified: his bed and the café. In the former, the lack of outer stimuli facilitated his thinking, while in the latter, the hubbub gave further charge to his thinking.[103] The private walks served instead to shut off the world totally, both in itself and in thought. Following from this purpose, his recordings of these walks were basically completely absent any content. Occasionally, a happenstance encounter in nature or the city derailed this purpose, but then the walking mode shifted to something different.[104] His inner life, scientific work, and social and familial goings on, all of which were regular topics of the diary, remained the province of *Nachdenken* and thus

102 {"Wenn es für mich zu dämmrig geworden ist, um die Augen noch zur Arbeit zu gebrauchen"; "nahm da zur innern Beschäftigung eine Ueberlegung wieder auf, die mich in diesen Tagen öfter resultatlos beschäftigt hat."}

103 Of these two primal scenes of thought, Fechner wrote: "It is a peculiar circumstance, that mental production is favored through two kinds of opposing circumstances of mine. Reflection [*Nachdenken*] is most successful for me when early mornings I lie in bed in darkness and stillness; the more the stimulus is absent to the outer senses, the more inner life becomes awake. In second place, however, it is more successful for me in Café Français in the bright surroundings unter the impression of the adorned walls and the company of strange faces, when I can sit in the café calmly at a table or in a corner for myself, than in my monotonous study; the excitation of the senses seems to then also wake the mind. And since the breaking twilight sets an end to my reading and writing, I thus sit sometimes an hour or longer in this way with the afternoon cup and think something out. If only there were always fertile stuff there" (*Tb* 1862:359–60). {"Es ist ein eigenthümlicher Umstand, daß die geistige Production durch zweierlei entgegengesetzte Umstände bei mir begünstigt wird. Das Nachdenken gelingt mir einmal am Beßten, wenn ich früh Morgens in der Dunkelheit und Stille im Bette liege; je mehr der Reiz der äußern Sinne fehlt, desto mehr wird das innere Leben wach; zweitens aber gelingt es mir besser, im Café français in der hellen Umgebung unter dem Eindrucke der verzierten Wände und einer Gesellschaft fremder Gesichter, als in meiner einförmigen, Studirstube, wenn ich im Café nur ruhig an einem Tische oder in einer Ecke für mich sitzen kann; die Anregung der Sinne scheint dann den Geist mit zu wecken; Und da die einbrechende Dämmerung meinem Lesen und Schreiben ein Zil [Ziel] setzt, so sitze ich manchmal eine Stunde und länger in dieser Weise bei der Nachmittagstasse, und sinne etwas aus. Wenn nur immer ein ergiebiger Stoff dazu da wäre." (My interpolation.)}

104 These happenstance encounters were mostly presented by Fechner with himself as a removed observer rather than an engaged social interlocutor and are the subject of the following universal mode of his walks.

excluded from his private walks. They were ephemeral, serving a basic purpose and then disappearing.

The contrast between walking as private, ephemeral purposiveness, aimed at negating attentional demands, and walking as social, lasting nonpurposiveness, subject to the varying attentional demands of fellow walkers, was made clear in the first record of his routine. In the summer and fall of 1842, the Volkmann family stayed in Leipzig longer than anticipated due to an accident, before returning to Dorpat (today Tartu), where Alfred Volkmann was then employed. For this period, during Fechner's illness, the lives of the two families became quite intertwined, and both Gustav and Clara were thoroughly distraught by the Volkmanns' departure (*Tb* 1842:251). Fechner's first recording of his routine, on 13 October 1842, was framed in their wake: "Since the Volkmanns left, the way I spend my day is very regularly the following" (*Tb* 1842:270).[105] He drew direct contrast several times between his present routine, marked by regular purposive private walks, and that which he had had while the Volkmanns were there, enlivened with the ever-present nonpurposiveness of close family. The days were lacking after this shift, as Fechner noted in his summary of dinner and what followed: "At 8 supper happens. After this, time drags mostly tediously onward and we are glad if we make it to half past nine, for we think ourselves justified in heading to bed. In fact, the little stuff of entertainment that our monotonous life offers has been mostly exhausted during the day, and moreover we are often both weary" (*Tb* 1842:273).[106] He had already recorded, immediately after they departed, a perfect encapsulation of his private walks, now the dominant form of interpersonal walks regularly left to him: "After their departure, I stayed still a while at the

105 {"Seit Volkmanns fort sind, ist die Art wie ich meinen Tag zubringe, sehr gleichmäßig folgende."}

106 {"Um 8 erfolgt das Abendbrod. Nach demselben zieht sich die Zeit meist langweilig hin und wir sind froh, wenn wir es bis halb 10 Uhr bringen, denn nun dünken wir uns im Recht zu Bette zu gehen. In der That, der wenige Stoff zur Unterhaltung, den unser einförmiges Leben bietet, hat sich meist schon während des Tages erschöpft, und oft sind wir überdieß beide abgespannt."}

table sitting reflectively and then (with blindfolded eyes) took a walk in the garden" (*Tb* 1842:251).[107]

Adele and Alfred Volkmann also appeared in the above-mentioned section on attention and memory images in *Elemente*, pointing to where this contrast between outer-social and inner-private walks was present in psychophysics proper. Both were cited as counterexamples to the general tendency of their genders in producing memory images: Women, whose attention usually pointed toward the outside world, were better than men, whose attention turned rather inward. Yet Adele was unable (except for highly specific circumstances) to generate them, while Alfred's weakness in the area stemmed not from his inward inclination (which he did possess) but from an "inborn" characteristic (*EP* 2:488). What these reports, along with others from the Fechners' circle, ultimately told us about inner psychophysics was not totally clear; Fechner recognized the severe limits to receiving "precise, reliable information in this sphere" (*EP* 2:477).[108] Nevertheless, it was only with the transition from outer to inner psychophysics that the question of attention and the relation between the perceiving subject and the outer world truly became an object of psychophysics, the very same relation that was at issue in the social and private walks. Not only did *attention* secure the place of the threshold in inner psychophysics, as shown with Fechner's prized example of the stark afterimage left by the stovepipe opposite his bed, despite his not noticing it when his eyes were open, but the entire wave schema was developed in order to account for the relation between general consciousness and specific sensations as mediated by varying levels of attention. The specific sensations under consideration were the cacophony of everyday life and the general consciousness that of the attention-directing subject moving through that cacophony (*EP* 2:432, 452–

107 {"Ich blieb nach ihrer Abfahrt noch eine Weile am Tische nachdenklich sitzen und gieng dann (mit verbundenen Augen) im Garten spazieren."}

108 {"Genaue, zuverlässige Angaben in diesem Gebiete."}

64).[109] Inner psychophysics was ultimately built upon the testimony of this cacophony and the perceiving subject: "Every perception of things we know through life, of a house, of a person, draws along a quantity of other ideas through association; these remain in the unconscious yet still, in this way, unconsciously constitute for us the meaning of the house, of the person, which would besides merely count as a fleck of color in the eye" (*EP* 2:461).[110] And as no experimental apparatus as yet could be formulated for this cacophony, Fechner relied on the reports of his family, friends, and colleagues. His and their experiences of memory images, afterimages, and all the phenomena in between (hallucinations, dreams, etc.) repeatedly confirmed, though in different configurations, the same keystone position attention took up for the overall mind-body relation, just as Fechner's interpersonal walks also developed.

The Universal Walk: World and Self

The final mode takes another step further from the human mind-body proper to considering Fechner's walks as phenomena of the world at large and the more general relation between the psychical and the physical. Though the perspectival approach of psychophysics clearly set out the mind-body relation within the relation "more generally between the bodily and mental world, the physical and psychical world" (*EP* 1:8), it was only in one of the final chapters of *Elemente* that Fechner actually moved beyond the

109 Outer psychophysics mostly took into account one specific stimulus at a time, ignoring the influence of others, with only a brief look at "mixture phenomena" of multiple stimuli for the same sense (*EP* 1:329–36); similarly, varying levels of attention, between different sensory organs, different subjects, and different times and places, were smoothed out by the relative definition of sensitivity, experimental protocols taking into account varying conditions, and the subsequent statistical analyses of different series of experiments (*EP* 1:45–53, 88–93; 2:122–41).

110 {"Jede Anschauung von Dingen, die wir durch das Leben kennen, eines Hauses, einer Person, zieht durch Association eine Menge anderer Vorstellungen mit, die im Unbewussten bleiben, und doch so unbewusst die Bedeutung des Hauses, der Person für uns constituiren, welche ohnedem blos als Farbenfleck für das Auge zählen würden."}

mind-body of individual humans.[111] Chapter 45, as well as the "short, popularly aimed text, which partly summarized and partly expanded the content of some earlier texts," *Über die Seelenfrage* (1861) that accompanied *Elemente*, outlined views "that open themselves from a most general version of psychophysics out into the sphere of religion and Naturphilosophie" (*EP* 2:ix).[112] At the base of these views was a simple question: What of the human psychophysical structure and function that Fechner had detailed over the preceding 861 pages applied beyond the human? Put another way in *Über die Seelenfrage*, this was the question of the soul, "the most urgent question,"[113] beneath which he ranged a series of subquestions: "Are humans ensouled? Are animals ensouled? Are plants ensouled? Are stones ensouled? Are heavenly bodies ensouled? Is the world ensouled?"[114] *Elemente* and *Über die Seelenfrage* considered these questions via the natural-scientific evidence on the psychical-physical relation in each of these elements of nature, extended by *naturphilosophische* analogical analysis. Yet Fechner was already interrogating them in his walks, where the outer-inner axis between a possible soul of the world and his soul formed the backbone of this universal mode. There this "most urgent question" of the soul was just steps away.

The world at large that Fechner noted while walking was dominated by facets of nature rather than those of humans. Just as his diaries in general contained only a few notes of contemporary politics and goings on, observations of the changing political economy of Leipzig and the corresponding changes to the built environment while on

111 {"Allgemeiner zwischen körperlicher und geistiger, physischer und psychischer, Welt."}

112 {"Den Inhalt einiger früheren Schriften theils resumirende, theils erweiternde, kleine populär gehaltene Schrift." "Die sich von einer allgemeinsten Fassung der Psychophysik aus ins Gebiet der Religion und Naturphilosophie eröffnen."}

113 Fechner, *Über die Seelenfrage*, 1.

114 Fechner, *Über die Seelenfrage*, 2 (each question on a new line in original). {"Sind die Menschen beseelt? Sind die Tiere beseelt? Sind die Pflanzen beseelt? Sind die Steine beseelt? Sind die Weltkörper beseelt? Ist die Welt beseelt?"}

foot were limited.[115] His rare mentions of architecture focused, as befit his general interest, on the aesthetic draw of the buildings (*Tb* 1862:106, 142–45). Occasional mentions of strangers who were also out walking were similarly reported as objects of interest and possibly study rather than compatriots undertaking a shared activity.[116] One scene from a park in 1844, describing a herd of carousing children competing for the branches being then trimmed from the trees, encapsulated his investigative naturalizing attitude toward all he encountered on foot. After jointly rushing to the next shorn branch, each sought to grab it away. "He who had seized it at first with a certain superior power," he wrote, "seemed to appeal to a sort of right to it, and cried: 'it is mine!' If he was then able to assert the right of the stronger for a short time, while he was able to pull the branch more strongly in his direction than the others, then the others soon gave way, as if by dint of a sort of tacit convention; and they let him withdraw with his booty, without its coming to a brawl or insults, which rather amazed me" (*Tb* 1844:160).[117]

115 On his few political observations, see Meischner-Metge, "Einleitung," xviii–xix, and more broadly, Arendt, "Fechner [. . .] und die Leipziger bürgerliche Gesellschaft." While on a walk with his friend Johann Heinrich Traugott Müller (a mathematician), they discussed at length the advantages and disadvantages of industrialization and how society as an organic whole responded to such changes (*Tb* 1842:16–19). But specific observations of these changes in Leipzig, which took off especially over the latter half of his lifetime, were infrequent.

116 Two records of overheard speech from the proletariat echoed each other on this count. In 1843, he noted running into two children "from the lower class," one of whom declared to the other, "Hey you, the man is blind!" He fit this into a pattern of children's curiosity about "my cap's large visor and the black blindfold over my eyes," expressed when "they sometimes ducked way down in order to see me under the large visor" (*Tb* 1843:41). {"Aus der niedern Klass"; "du, der Mann ist blind gewesen!"; "meinen großen Mützenschirm und meine schwarze Binde vor den Augen"; "sie duckten sich manchmal ganz nieder, um mir unter den großen Schirm zu sehen."} In 1869, he heard two workers complaining about the Lord's Prayer, which he took as "an alarming example of how it now stands with the religious views in the proletariat." "The ecclesiastical rubbish simply lie to us," said one worker to the other, "the rag buffoons fool us with a hotchpotch, which we are supposed to believe; but there is nought in it. I too have studied, admittedly only as much as I could tolerate—may God strike me down" (*Tb* 1869:51–52). {"Einem erschreckenden Beispiele, wie es jetzt mit den religiösen Ansichten im Proletariat steht"; "das geistliche Gelumpe belügt uns blos"; "die Lappen-Bajazzo's machen uns eine Mährte vor, die sollen wir glauben; aber es is nischt daran. Ich habe auch studiert, freilich blos bis an den Hals, Gott straf mich."}

117 {"Wer ihn zuerst mit einer gewissen Uebermacht gepackt hatte, schien eine Art Recht daran anzusprechen, und schrie: 'er ist meine!' wußte er dann das Recht des Stärkeren noch eine kurze Zeit geltend zu machen, indem er den Ast stärker als die anderen nach seiner Richtung zu ziehen vermochte, so gaben, wie vermöge

This same observing attitude, at once distanced and astonished, of course extended to the plants, stars, mountains, and other nonhuman features of nature he came across and noted.[118] One particularly evocative moment of such observation was of a forest fire in the Harz mountains (safely observed with the wind blowing obliquely to his party's direction): "To a large extent, the ground was only smoking and here and there a small flame darted forward out from the smoke. But through the very dry moss and heather, the blaze quickly propagated itself farther; the flames became more visible and taller; and entire trees and, at one place, a large woodpile went up in high flames. It was as if one looked into a Gohennah [Gehenna]" (*Tb* 1864:46; my interpolation).[119] On the whole, this walking attitude toward nature was summed up in a short remark he made about the garden at Gohliser Schloss, at which he regularly glanced through the iron gates on his morning walks: "For me, this garden has a sort of romantic charm. It is so well stocked in flowers and boskets, but I have never seen a gardener, a garden boy, or someone from the owner's family inside; it is as if enchanted" (*Tb* 1870:142).[120]

Opposite the enchanted nature that delighted and mystified Fechner while walking was Fechner himself. While the encounters above were recorded with precision and verve, the observer rarely played more than a passing role (as with the Gohlis garden). Yet at other times, these enchanted encounters prompted reflection from the observer. In these, he mused on his own status as a creature of nature and motioned toward an inner cosmological intertwining. This reflective stance was best illustrated, perhaps ironically, in

---

einer Art stillschweigenden Convention, die anderen bald nach, und ließen ihn mit seiner Beute ziehen, ohne das es irgendwie zu Schlägerei oder Schimpfreden kam, was mich einigermaßen verwunderte."}

118 Some of these that were described via the particular effect they had on Fechner's senses are cited above.

119 {"Der Boden rauchte nur in großer Ausdehnung und hier und da züngelte eine kleine Flamme daraus hervor. Durch das sehr trockne Moos und Heidekraut aber pflanzte sich der Brand rasch weiter fort; die Flammen wurden sichtbarer und höher, ganze Bäume, an eine Stelle ein großer Holzstoß loderten hoch darin auf; es war als wenn man eine Gohennah [Gehenna] sähe." (My interpolation.)}

120 {"Dieser Garten hat für mich eine Art romantischen Reiz; so gut gehalten in Blumen und Bosquets er ist, habe ich doch niemals einen Gärtner, Gärtnerburschen oder jemand von der Familie des Besitzers darin gesehen; er ist wie verzaubert."}

remarks he made about walking with his most common companion, his wife, Clara. One summer, Clara suffered from "a great exhaustion of energies" and couldn't walk regularly. "I was very sorry," Gustav lamented, "since no one is as receptive as she to the charm of such shared walks through a beautiful area; and it was for me as if I walked along only in half" (*Tb* 1864:94).[121] It was precisely this receptivity that underlay Gustav's reflections on himself, whether part of a walk alone or with Clara or even in reflection on a walk of Clara's; these reflections were most often solo affairs, but the Fechners' intimacy was such that Clara was clearly a further spur in the self-directed attitude.[122] One entry in 1843 recorded three moments in the garden from the past three years of his illness, when both Fechners were particularly weighed down by the circumstances: In the first, Gustav was on foot and glimpsed "the beautiful red foliage of the wild vines on the gazebo. There, with particular vivacity, the thought struck my heart [*Gemüt*]: how is it, that even your life, poor in blooming and more so withering, should not be granted beautiful appearances of joy" (*Tb* 1843:25).[123] In the third, it was Clara walking, and "there at once the sun descended with bright red light beneath the layer of clouds, which rested not quite on

121 {"Einer großen Abgeschlagenheit der Kräfte"; "es tat mir sehr leid, da niemand empfänglicher für den Reiz solcher gemeinsamen Spazirgänge durch eine schöne Gegend ist als sie; und es war mir, als gienge ich nur halb mit."}

122 There is much more to say about Clara Fechner, whose book of children's stories, *Die schwarze Tante* (1848), was immediately translated into English and went through numerous editions in her lifetime (many more than any of her husband's books), and who comes across in the diaries as far steadier than Gustav but also just as fiery. Yet we are hampered by a near total lack of archival material. It is furthermore difficult to overestimate how intertwined their daily lives were, where they often shared deeply the particulars that animate around this study. Notably Gustav's struggles with reading and writing, a consequence primarily of his poor eyesight, were equally dealt with by Clara. They shared the duty of copying his diary from years in which the handwriting was particularly bad (*Tb* 1842:1a; 1862:152); she was similarly one of the primary people who read aloud to Gustav when he could not (*Tb* 1844:55). This reading aloud ultimately furthered the shared struggle between the couple, with Clara developing a persistent pain in her throat that Gustav saw as paralleling his own eye pain from reading in low light (*Tb* 1862:148–49). Their intimacy around reading, writing, and attendant ailments is further evidence that Clara played a particularly crucial role in Gustav's self-based walks. Overall, their relationship was clearly crucial for Gustav's life and work. Yet the limitations of the archive prevent my being able to say much more.

123 {"Das schöne rothe Laub des wilden Weins an der Gartenlaube. Da traf mein Gemüt mit besondrer Lebhaftigkeit der Gedanke: wie, sollte nicht auch deinem blütenarmen Leben noch im Verwelken ein schöner Freudenschein beschieden seyn."}

the horizon, and gilded the tips of the poplars on the edge of the garden, such that they pointed like luminous fingers toward the sky. She recounted this to me and said she was rather comforted by it" (*Tb* 1843:27).[124] What exactly these brief moments of comfort and even joy prompted by nature meant, whether portending "a lovely autumn of one's life" or something else, was unclear, "since here the interpretation was formed by a subjective deception of the soul that never completely gives up hope and holds it out until the very end" (*Tb* 1843:27).[125]

One such encounter Fechner had was so strong, he remembered it roughly a decade later. On a walk through Rosental park with an unnamed fellow walker, he came across "a half-trampled worm lying there, which wriggled and writhed pitifully" (*Tb* 1843:11).[126] Though he felt sorry for the worm, he refrained from fully crushing it and continued on his way. Yet he couldn't shake the image of it, returning in his head over and over to the worm and its pain but without turning back to kill it.[127] He recalled the feeling now, seeing himself in the worm: "There I was overcome by the thought: how is it, when you are doing exactly the same as this worm, that you ought to suffer pathetically without being able to either live or die and that you would yearn in vain for the foot that would trample you completely. And this thought cut deep into my soul; but it was now too late to turn back" (*Tb* 1843:11–12).[128] Over the years of his "bodily and mental suffering" (*Tb* 1842:12),

124 {"Da sunk auf einmal die Sonne mit hellrothem Schein unter die, auf dem Horizont nicht ganz aufliegende Wolkenschicht herab, und vergoldete die Spitzen der am Gartensaum stehenden Pappeln, so daß sie wie leuchtende Finger, nach dem Himmel wiesen. Sie erzählte mir dieß und sagte, sie sei recht dadurch getröstet worden."}

125 {"Einen schönen Lebensabend." "Da die Deutung hier wohl mehr durch eine subjective Täuschung der, die Hoffnung nie ganz aufgebenden, und zuletzt bis ans Lebensende verschiebenden, Seele entstand."}

126 {"Einen halbzertretenen Wurm liegen, der sich jämmerlich krümmte und wand."}

127 He gave two, quite meager, reasons for not killing the worm: on the first pass by, "since I would have had to turn sideways in order to completely trample it," while afterward, it was the presence of his companion that prevented him from turning back (*Tb* 1843:11). {"Da ich etwas seitlich hätte biegen müssen, um ihn vollends zu zertreten."} The flimsiness of these reasons seems part of the deep mark the experience left on him.

128 {"Da überkam mich der Gedanke: wie, wenn es dir ebenso gienge, wie diesem Wurm, daß du dich jämmerlich quälen müßtest, ohne weder leben noch sterben zu können und dich vergebens nach dem Fuße

he again returned over and over to this experience with the worm and his own refusal of compassion. Fechner's life itself, most acutely obvious during his illness, took on the same contours as a walk in the woods, an encounter between an enchanted self and enchanted nature.

The two sides of this encounter and of Fechner's universal walks more broadly were brought together in his morning walk on Sunday, 31 August 1845:

> Today during my morning walk, the sight of the swan pond in the park gave me much pleasure. A very light morning mist drew, as if voluntarily and following its own fancy, to and fro over the pond. A few carps burst upward. A great throng of swallows moved to and fro across the mirror of the pond and every now and again beat their wings into the water, which each time gleamed silverly on the spot. If one looked over the water in its entirety, there always appeared at once several such spots that swiftly vanished, while elsewhere they again flashed, and from each such spot a swallow came out. One saw well how the swallows set out particularly to graze the water in just the right way, toward which they always took a particular approach; and sometimes they seemed unable to hit it exactly right. I enjoyed myself there a long while; the sky was rather overcast. (*Tb* 1845:180–81)[129]

On the surface, here was Fechner recording as per usual an engrossing encounter with nature, attempting to understand the how and why of a specific phenomenon. The sparkle and glimmer of each swallow's wing breaking the glassy surface, entrancing when the performance of the entire flock of swallows was taken together, led to a query on the specifics of each bird's plan of attack. And while Fechner himself seemed almost

---

sehntest, der dich vollends zerträte, und dieser Gedanke schnitt tief in meine Seele ein; aber es war jetzt zu spät umzukehren."}

129 {"Der Anblick des Schwanenteiches im Park machte mir heute bei meinem Morgenspaziergange viel Vergnügen. Ein ganz leichter Morgennebel zog wie willkührlich und nach eigener Lust über den Teich hin und her. Einzelne Karpfen sprangen empor. Eine große Menge Schwalben fuhren über den Spiegel des Teiches hin und her und schlugen immer hin und wieder mit den Flügeln ins Wasser, daß es an der Stelle jedesmal silbern erglänzte. Sahe man aufs Wasser in seiner Gesammtheit, so zeigten sich immer mehrere solche Stellen auf einmal, die schnell verschwanden, während anderswo wieder solche aufblitzten, und von jeder solchen Stelle fuhr eine Schwalbe aus. Man sahe wohl, wie die Schwalben es besonders darauf absahen, das Wasser nur eben in rechter Weise zu streifen, dazu immer einen besondern Anlauf nahmen, und manchmal nicht schienen gleich das Rechte treffen zu können. Ich unterhielt mich lange daran; der Himmel war ganz trübe."}

completely removed, merely a pretense for the episode's recording, he was here in fact glowing with his own ocular convalescence. The next day's entry began, "For me, the most important and very gratifying change in the preceding month was that the state of my eyes improved very considerably" (*Tb* 1845:182).[130] While on that day he specified his reading and writing as the main activities he could now pursue with his improved eyesight, he had in fact in the wild celebrated this improvement the day before. The impersonal pronoun "one" who twice looked at the pond, the swallows, and their interplay ("one looked over the water"; "one saw well") was of course Fechner himself. While two years earlier, he had compared himself to the wounded worm, now he admired the repeated attempts of the swallows in glancing the water just right, their planning, and the subsequent hits and misses. The sky was overcast, but his life was not.

Both with the worm and the swallows, bearing an overcast or sunny demeanor, Fechner affirmed the question of the soul, bringing his into contact with the soul of the world. This of course accorded with his answer in *Elemente* and *Über die Seelenfrage*: yes, humans were ensouled, animals were ensouled, plants were ensouled, stones were ensouled, heavenly bodies were ensouled, the world was ensouled. The final argument in *Elemente* was that the fundamental psychophysical structure of the individual, in which a psychical unity and a physical manifold were joined (as attested by physiological experiments in humans and animals), could be extended across individuals.[131] Fechner called this psychophysical continuity and discontinuity and adapted the wave schema, first introduced to relate specific phenomena and general consciousness, to represent multiple individuals, or psychophysical entities: "Here, a, b, c represent three organisms or rather

130 {"Die wichtigste und sehr erfreuliche Veränderung in vorigem Monate war für mich die, daß sich der Zustand meiner Augen sehr bedeutend gebessert hat."}

131 The exact nature and function of psychophysical activity between organisms would of course not necessarily be the same as within each of the organisms, but the nature of psychophysical activity was itself also still not certain (*EP* 2:529).

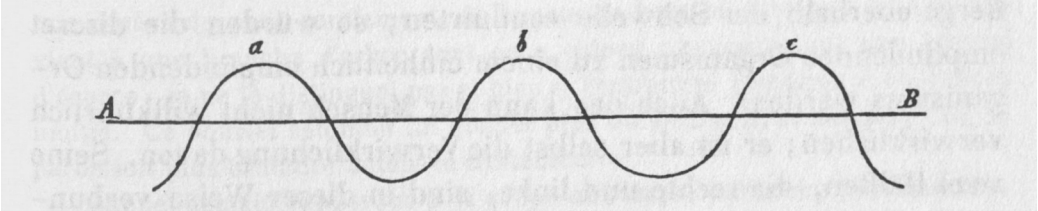

Figure 3.1. The first wave schema of psychophysical continuity and discontinuity in nature. The three peaks a, b, and c were three organisms, each with a united consciousness above AB, the threshold of consciousness (*EP* 2:529).

the psychophysical primary waves of three organisms, and AB the threshold. That which from each wave peak sticks out over the threshold coheres in itself and carries one united consciousness; that which is under the threshold, in carrying unconsciousness, divides the conscious, while it yet still sustains the physical linking between them" (*EP* 2:529; see fig. 3.1).[132] Fechner considered two possibilities that would bring the three organisms a, b, and c into conscious continuity, neither of which humans could bring about voluntarily: the wave train could be moved as is entirely above the threshold or the peaks could be pushed together eliminating the troughs (*EP* 2:530). These were merely conjecture, another analogical link between the psychophysical structure internal to an organism and that of all organisms. But encountering the soul of another organism was not such a theoretical matter; it in fact took place daily, as his universal walks showed.

THE "HIGHEST AND LAST THINGS" AS SEEN ON FOOT

Fechner's universal walks and their incarnation of the wave schema from *Elemente* brings us back to the final move the threshold enabled in that same text, from psychophysics to Naturphilosophie and religion. As discussed in the previous chapter, chapter 45 featured one further visualization of the wave schema (see fig. 3.2). This was the psychophysical

132 {"Hier stellen a, b, c drei Organismen oder vielmehr die psychophysischen Hauptwellen dreier Organismen vor, AB die Schwelle. Was von jedem Wellenberge die Schwelle überragt, hängt in sich zusammen und trägt ein einiges Bewusstsein; was unter der Schwelle ist, trennt als Unbewusstsein tragend das Bewusste, indess es doch noch die physische Verbindung dazwischen unterhält."}

tiers world and represented, on the level of the individual, the coordination of specific sensations and general consciousness and then again, on levels beyond the individual, the coordination of higher and lower individual psychophysical systems. "The consequence of this conception," Fechner wrote modestly, "leads to the view of a God, omnipresent and conscious in nature, in which all minds live, weave and are, just as he in them, with individual mental intermediate stages between him and us; these stages are inherent to heavenly bodies and carry creaturely minds exactly so unitarily tied in themselves, just as these minds for their part are carried in the divine mind and just as the creaturely minds in turn carry in themselves their sense circuits and these their specific sensations" (*EP* 2:542).[133] Such a view further implied "our own continued existence after death" (*EP* 2:542), which Fechner imagined by analogy with memory images: "When an image in our eye, tied to overwaves, leaves behind a memory reverberation after dying out in the eye—a reverberation that enters into a more general and higher realm of memories and thoughts, one of the general or primary consciousness—then we are allowed to believe that something corresponding will occur to our primary waves, provided that they for their part are overwaves above a deeper threshold, and hence that our minds after death enter into a higher spirit realm in God" (*EP* 2:542–43).[134]

This is a striking image of God and furthermore a statement of belief, one that wasn't relegated merely to this several-page sketch in *Elemente*. Fechner developed his religious

133 {"Die Consequenz dieser Auffassung führt zur Ansicht eines in der Natur allgegenwärtigen bewussten Gottes, in dem alle Geister leben, weben und sind, wie er in ihnen, mit, den Weltkörpern inwohnenden, individuellen geistigen Zwischenstufen zwischen ihm und uns, welche die geschöpflichen Geister eben so einheitlich verknüpft in sich tragen, wie sie ihrerseits im göttlichen Geiste getragen werden, und wie die geschöpflichen Geister wieder ihre Sinneskreise und diese ihre Sonderempfindungen in sich tragen."}

134 {"Unsere eigene Fortexistenz nach dem Tode." "Wenn ein Bild in unserem Auge, geknüpft an Oberwellen, nach seinem Erlöschen im Auge noch einen Erinnerungsnachklang hinterlässt, welcher eintritt in ein allgemeineres und höheres Reich von Erinnerungen und Gedanken des allgemeinen oder Hauptbewusstseins, so dürfen wir glauben, dass etwas Entsprechendes unseren Hauptwellen begegnen wird, sofern sie ihrerseits Oberwellen über einer tieferen Schwelle sind, und dass unsere Geister somit nach dem Tode eingehen in ein höheres Geisterreich in Gott."}

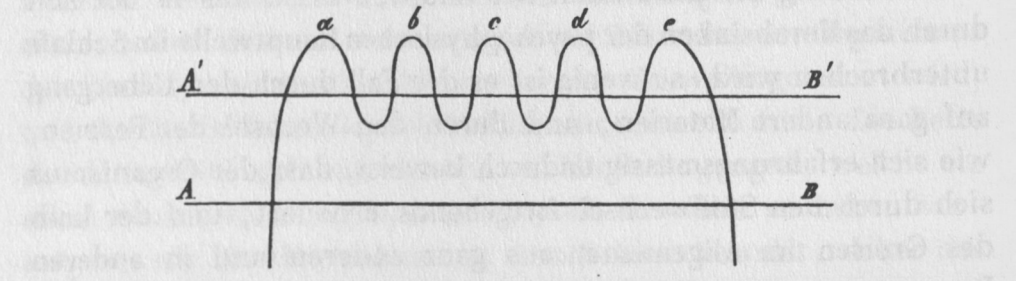

Figure 3.2. The second wave schema of psychophysical continuity and discontinuity. AB was the primary threshold and $A'B'$ the overthreshold. The five peaks, a, b, c, d, and e, were specific conscious phenomena, each discontinuous with the next via a dip below the overthreshold. Fechner subsequently reconceived of them as a series of humans, organisms, heavenly bodies—any system of psychophysical activity—cresting as overwaves above the primary wave of nature but distinct from each other, united in the consciousness of a God in continuity far above a much deeper primary threshold (*EP* 2:540).

views over his entire career, beginning with *Das Büchlein vom Leben nach dem Tode* (1836) and running through *Die Tagesansicht gegenüber der Nachtansicht* (1879), and, despite variation over such a length of time, the fundamental contours of his belief remained relatively consistent.[135] As expounded in the companion text to *Elemente*, *Über die Seelenfrage*, these larger religious views, which built up to this image of an "omnipresent and conscious God in nature," had roughly four basic components:[136] First

135 In *Die Tagesansicht gegenüber der Nachtansicht*, Fechner listed eight primary texts in which he developed his general worldview, "the day view," and which were also the primary outlet for his religious views. The books dealt with different facets of his religious outlook, specifically approaching them in terms of a general popular audience (*Das Büchlein* [1836]), broader philosophical views (*Über das höchste Gut* [1846], *Die Tagesansicht gegenüber der Nachtansicht* [1879]), speculative Naturphilosophie (*Nanna; oder, Über das Seelenleben der Pflanzen* [1848], *Zend-Avesta; oder, Über die Dinge des Himmels und des Jenseits* [1851]), developments in natural science (*Einige Ideen zur Schöpfungs- und Entwickelungsgeschichte der Organismen* [1873]), or basic internal tenets (*Über die Seelenfrage* [1861], *Die drei Motive und Gründe des Glaubens* [1863]).

136 I employ *Über die Seelenfrage* as my guide through Fechner's religion for several reasons: one, it was narrower that the other texts and focused specifically on the religious implications of natural-scientific work and conclusions (both of his own and others'); two, it was written alongside *Elemente* and the empirical work he had undertaken in the creation of psychophysics; and three, *Die Tagesansicht gegenüber der Nachtansicht*, the work that stood most clearly as a summing up of his many views, was written with almost a lifetime of hindsight and framed his views specifically against those of Naturphilosophie, a framing somewhat in contrast with that he expressed in *Über die Seelenfrage* and misleading, I think, in understanding Fechner historically. Fechner, *Die Tagesansicht gegenüber der Nachtansicht*, 72–73; and Fechner, *Über die Seelenfrage*, 102–3. There are, however, good reasons to take *Die Tagesansicht gegenüber der Nachtansicht* as the primary entry into Fechner's views, religious and otherwise, including its breadth, clear organization, and Fechner's relatively even-handed and critical approach to his own oeuvre. This is the

was the driving question of the soul, how it extended throughout nature, across organisms and other bodies (as well as temporally, across life, death, and beyond). He started with the human soul (equivalent to the mind) as the unified essence (*Wesen*) of sensory and higher perception graspable only to itself, and wondered how its relation to a body might apply in other bodies.[137] Second was the framework for answering such a question. As a matter of belief, the question of the soul was not accessible to the tools of natural science. Yet the basic fact of the human soul, graspable only to itself yet whose existence the next soul was sure of, offered a starting point. What could be empirically established for our own soul, and the ensoulment of our own body, via natural science might be extended into the realm of belief for other souls, of which we could catch glimpses of, if not grasp entirely.[138] Third was a step-by-step application of the framework to the question, posed as two specific subquestions: Were plants ensouled? Were heavenly bodies ensouled?[139] In each case, Fechner first countered six negative arguments before adding a complementary series of

---

tack Michael Heidelberger takes, to great profit, in *Nature from Within*, which is more philosophically than historically oriented. A very good general account of Fechner's religious views is Evers, "Der Fechner'sche Gottesbegriff."

137 Fechner, *Über die Seelenfrage*, 1–2, 5, 9–10, 15–16.

138 Fechner, *Über die Seelenfrage*, 4–5, 7, 9, 17–22. This framework also implied a definition of belief, which Fechner developed at length in *Die drei Motive und Gründe des Glaubens* and sketched briefly in *Über die Seelenfrage*, chap. 7. The most import aspect of belief was its aim at reality and its basis in experience, even if that experience was limited in scope to something much smaller than what the belief itself aimed at: "Everything that is real must prove its reality through the property of being experienceable [*Erfahrbarkeit*] or through effect in the experienceable. The objects of belief, however, want and are supposed to be the highest, greatest, most general realities. How then could their existence be extracted from the property of being experienceable?" Fechner, *Über die Seelenfrage*, 108. {"Alles, was wirklich ist, muß seine Wirklichkeit durch Erfahrbarkeit oder Wirkung im Erfahrbaren beweisen. Die Gegenstände des Glaubens aber wollen und sollen die höchsten größten allgemeinsten Wirklichkeiten sein. Wie könnte also ihr Dasein der Erfahrbarkeit entzogen sein?"} He then answered, "so of course our total knowledge [*Kenntnis*] of reality is based in every part only on a relatively small range of experiences of reality; yet it must be based on such a range. And thus also our principle will be to base the cognition [*Erkenntnis*] of the highest and last realities, which far exceed our experience, on that which resides within our experience rather than on that which itself resides beyond it." Fechner, *Über die Seelenfrage*, 108–9. {"So stützt sich freilich unsere gesamte Kenntnis von der Wirklichkeit überall nur auf einen verhältnismäßig kleinen Kreis Erfahrungen von der Wirklichkeit, muß sich aber auch auf einen solchen stützen. Und also wird auch unser Prinzip sein, die Erkenntnis, von den höchsten und letzten Wirklichkeiten, die unsere Erfahrung weit übersteigen, statt auf das, was selbst darüber liegt, auf das zu stützen, was darinnen liegt."}

139 Fechner, *Über die Seelenfrage*, chap. 4–6, 9.

positive arguments, which he ranged together as: the arguments of similarity or analogy, completion (*Ergänzung*), gradation (*Abstufung*), connection (*Zusammenhang*), causality, and teleology.[140] These arguments were at once extremely fine grained and quite abstract, but the basic work was to relate empirically attested aspects of the human or animal soul to those of plants and heavenly bodies, either in discrete parts (e.g., the phenomena of waking and sleeping) or more generalizable wholes (e.g., the origin of souls, such as in, embryos, in an in-between kingdom [*Zwischenreich*]).[141] The conclusion of the arguments was that in each case, with humans, animals, plants, the earth, and heavenly bodies, the body both reflected and carried the corresponding soul, each case in a similar manner.[142] Finally, fourth were the extended consequences of such arguments, understood via both relationships with other religions (notably, of course, Christianity) and a wider worldview and theory of knowledge, empirical but striving the fullness and light of the world under the auspices of a view of "the highest and last things"[143] (in contrast with idealism, materialism, dualism, and monadology).[144] The final such result was the existence of a soul of the world. This single soul, reflected and carried by the entire universe, was not one

140 Fechner, *Über die Seelenfrage*, 47. The arguments of similarity and completion took certain aspects of the human and animal soul and showed logically how that aspect would work in plants or heavenly bodies in a similar or different manner; those of gradation and connection related the structure and function of the souls of plants, animals, humans, and heavenly bodies in terms of differentiated hierarchy or points of overlap within such a hierarchy; and finally those of causality and teleology examined the origin and purpose of human and animal souls in contrast with those of plants and heavenly bodies.

141 Fechner, *Über die Seelenfrage*, 48–63, 99–100.

142 Fechner, *Über die Seelenfrage*, 190–91.

143 Fechner, *Über die Seelenfrage*, 7.

144 Fechner, *Über die Seelenfrage*, 192–222. In Fechner's account, all these other worldviews held "the obscure thing" [*das dunkle Ding*] or "things" as the fixed thing anchoring the world and knowledge of it. Fechner, *Über die Seelenfrage*, 201. He maintained a particular affinity for Christianity, reflecting his upbringing and family background with the church but also his belief in its importance as the first introduction of most people (in his reading public, of course) to a religious worldview that emphasized the "highest and last points of view in belief, knowledge, and life." Ibid., 196. {"Höchsten und letzten Gesichtspunkten in Glauben, Wissen und Leben."} Despite his critique of the actual belief of contemporary Christianity (e.g., emphasis on original sin, damnation of the not elect), he chose to emphasize these "highest and last points of view" as keeping with his vision and a possible focus of a new, different Christianity. Ibid., 192–97.

among many souls but, as the entire world included all the bodies below, in fact included among and within it all the souls below; this soul was God.[145]

This image of God and the beliefs that underpinned it ultimately prompt a number of questions: How did Fechner reconcile (or even countenance) this matter of belief as the conclusion to *Elemente* with its primary thrust, that is, the introduction and elaboration of a new exact and empirical science, one that specifically held itself apart from metaphysics and the doctrines of monism and dualism (*EP* 1:xi, 6, 8–9)? More broadly, how did God, belief, and religion in general fit into his tripartite vocation of belles lettres, speculative Naturphilosophie, and exact experimental natural science? The first of these troublesome questions was already salient during his lifetime. Fechner's own answer was simple: The question of the soul was too important to leave untouched. While there may come a day in which exact natural science was able to answer the question, that day remained in the future. Until then, such science can be charged with establishing basic facts of the matter (which it had hitherto made little effort toward) that can then be extended into the realm of belief via critical analysis.[146] "Why not, one asks, leave the whole question of the soul aside, if only in there being for now no way to come to something certain?" Fechner asked, before answering, "But, for us, the belief in the existence of our fellow humans' souls is necessary, the belief in the existence of the animal soul natural, and a worldview, which includes a reply to the question of the soul, a higher need. Thus exact science can, to be sure, dismiss the question, as long as it is incapable of giving an exact answer to it; we cannot however dismiss it altogether."[147]

145 Fechner, *Über die Seelenfrage*, 191–92, 223.
146 Fechner, *Über die Seelenfrage*, 18–19.
147 Fechner, *Über die Seelenfrage*, 19. {"Warum nicht also, fragt man, die ganze Seelenfrage beiseite lassen, wenn doch einmal für jetzt nicht auf etwas Sicheres darin zu kommen? Aber der Glaube an das Dasein der Seelen unserer Mitmenschen ist uns notwendig, der Glaube an das Dasein der Tierseelen natürlich, und eine Weltansicht, welche eine allgemeine Beantwortung der Seelenfrage einschließt, ein höheres Bedürfnis. Also kann zwar die exakte Wissenschaft die Frage von sich abweisen, solange sie keine exakte Antwort darauf zu geben vermag; wir können sie aber nicht überhaupt abweisen."}

Even in the cacophonous context of the mid-nineteenth-century religious landscape of the Germanosphere, Fechner's answer stood out, drawing some followers but also marking him distinctly apart (both by others and by himself).[148] His beliefs, specifically in a sort of life after death and immortality of the soul as first expressed in *Das Büchlein*, brought him into friendship with the famed Romantic writer Bettina von Arnim in the late 1830s (*Tb* 1842:384–85). At the same time, they generated a significant amount of criticism and distance from more hard-headed colleagues in the realm of professional natural science, notably from the physiologist Emil du Bois-Reymond. In 1849, Du Bois-Reymond wrote to Carl Ludwig, a fellow physiologist of the materialist bent, to lament the recent turn taken by Fechner toward such religious thinking (notably in *Über das höchste Gut* [1846], *Nanna* [1848], and the lectures Fechner had been giving since his partial return to the university in 1846 on similar topics, a turn that Ludwig mentioned in his precipitating letter to Du Bois-Reymond):

> Fechner is decidedly still confused. How can the author of the *Massbestimmungen* abandon himself to such self-delusions without having an organic defect in his brain? It is not possible, and if Volkmann and you don't observe it, perhaps it stems from your being more unfamiliar with his physical works. But just read his work on the Becquerel chain in volume 48 of Pgg. Ann. (1839)—as if that is the work of a dilettante! Certainly he was then such a seriously and truly matter-of-fact natural researcher that it is indisputably and above all in this capacity that he will be preserved for future generations. With all due thanks, I must decline physical poetry, the morbid hermaphrodite child of his clouded powers of mind. It's a shame

148 On this landscape, Frederick Gregory offers an overview of the contours of mainstream Protestant theology, notably tracking the development of the eighteenth-century conflict between pietism and rationalism into a nineteenth-century conflict between liberal, conservative, and other outgrowths of said rationalism, while Todd Weir marks out the contours of post-1840 "secularism" that stood as the fourth confession to the state-sanctioned confessions of Protestantism, Catholicism, and Judaism, encompassing a variety of positions. Gregory, *Nature Lost?*, chap. 2; and Weir, *Secularism and Religion*. Weir makes a persuasive argument in favor of the term *secularism* to describe a variety of positions, noting its capaciousness beyond terms of the day that were restricted to particular submovements (e.g., Free Religion, monism), its positive worldview and negative anticlericalism, and its status as a social and intellectual "creed" in conflict with others. Weir, *Secularism and Religion*, 4.

> about his divine talent. His textbook on galvanism, by its contents and by its incomparable form, will always mark an era.[149]

The beliefs similarly prompted unending argument with more traditionally minded religious thinkers, such as his friend Weiße, the philosopher and theologian, who recurred regularly in his diary on topics including the proper mode of thinking and analysis necessary for a system of belief (*Tb* 1862:239–51; see also, on Protestant doctrine and practice, *Tb* 1842:591–616; 1864:10–11). Fechner moreover found the rigid orthodoxy of both close friends and family (e.g., his nephew and adopted son, Johannes Emil Kuntze) and acquaintances with whom he came into brief contact (e.g., the family of Wilhelm von Kügelgen, a notable painter and old friend of Alfred Volkmann's) difficult to fully understand (*Tb* 1862:34–35; 1864:181–83).

Finally, even within the burgeoning sphere of mid-century secularist religious thinking, which broadly emphasized a natural-scientific basis for wider spiritual beliefs and deemphasized most traditional aspects of religion, Fechner's views stood apart.[150] In

149 Du Bois-Reymond to Ludwig, 17 May 1849, in *Zwei grosse Naturforscher des 19. Jahrhunderts*, 51. The comment on Fechner, and specifically the phrase "physical poetry," was prompted by a letter from Ludwig, who had just stayed with one of the Weber brothers in Leipzig and wrote to Du Bois-Reymond about meeting Fechner: "Fechner was kindness itself; he seems to truly be trying to forget physics, and he is seeking, Weber thinks, to talk himself into believing that the wonderful is the truth. Perhaps I have my close acquaintanceship with those who introduced me to thank for such particularly thoroughgoing expectorations. You simply have no idea what kind of physical poetry he is capable of developing." Ludwig to Du Bois-Reymond, 15 April 1849, in ibid., 47. {"Fechner war die Liebenswürdigkeit selbst; er scheint sich förmlich zu bemühen, die Physik zu vergessen; und er sucht, wie Weber glaubt, sich das Wunderbare als Wahrheit einzureden. Der genauen Bekanntschaft der einführenden Personen verdanke ich vielleicht ganz besonders gründliche Expektorationen. Du glaubst mir aber gar nicht, welche physikalische Poesie er zu entwickeln imstande ist."}

{"Fechner ist doch entschieden noch konfus. Wie kann der Verfasser der Maßbestimmungen sich solchen Selbsttäuschungen hingeben ohne einen organischen Fehler im Gehirn zu haben? Es ist nicht möglich, und wenn Volkmann und Du die Betrachtung nicht anstellt, so rührt es vielleicht daher, daß Euch seine physikalischen Arbeiten mehr fremd sind. Aber lies einmal seine Arbeit über die Becquerel'sche Kette im 38. Bande von Pogg. Ann. (1839), ob das die Arbeit eines Dilettanten ist! Er war damals gewiß so ernstlich und wahrhaft ein nüchterner Naturforscher, daß er auch in dieser Eigenschaft unstreitig vorzugsweise der Nachwelt aufbehalten werden wird. Ich bedanke mich für physikalische Poesie, das krankhafte Zwitterkind seiner getrübten Geisteskräfte. Schade um sein göttliches Talent. Sein Lehrbuch des Galvanismus wird immer Epoche machen, nach Inhalt und nach der unvergleichlichen Form."}

150 On this secularism, see Weir, *Secularism and Religion*.

retrospect, his religious outlook looks ultimately quite similar to secularism in general, whether of a Free Religion, Freethought, pantheistic, or atheistic bent, sharing a critique of present modes of institutional religion, an insistence on empirical natural science, and a near equivalence of nature and the divine. Yet Fechner himself mocked these movements. In a late paragraph in *Über die Seelenfrage*, he contrasted his doctrine (*Lehre*) with its contemporaries.[151] In addition to derisively enumerating characteristics of the various creeds of Feuerbach, Schopenhauer, Hegel, Schelling, and Herbart (except for Schelling, all longtime major philosophical opponents of Fechner's), he marked his doctrine off from materialist atheism as well as Free Religion and Freethought, two major poles in secularism: "Does our doctrine join together with materialism toward the abolition of God? Does it disparagingly name the perspective into a beyond foolishness? Does it call upon humans not to see the summit and the destination above and beyond this life but instead to keep their vision down and to seek, with wise eyes, the way in this world? . . . Or is it a homily for the congregation that—nurtured by materialism, billowed by idealism, proud of the use of a reason that finds the bond in lack of a bond—calls itself free?"[152] Beyond the atheistic strains that were deeply contrary to Fechner's way of being and thinking, secularism also embodied another trait antithetical to Fechner; it was a social and political *movement*, playing a major role in German history across the century beyond the religious arena proper. Fechner was ornery and a strident nonjoiner, never allowing his

151 Fechner was specifically concerned with how his doctrine should hold itself in regard to Christianity, specifically in terms of their shared vision of an eternal permanence of spirit, when they are clearly not the same doctrine. Fechner, *Über die Seelenfrage*, 192–94.

152 Fechner, *Über die Seelenfrage*, 194. {"Verbündet sich unsere Lehre mit dem Materialismus zur Abschaffung Gottes; schilt sie den Ausblick in ein Jenseits Torheit; heißt sie die Menschen statt über diesem und nach diesem Leben die Spitze und das Ziel zu sehen, die Blicke niederhalten und mit klugen Augen den Weg im Diesseits suchen? . . . Oder ist sie eine Predigt für die Gemeinden, die, genährt vom Materialismus, angeweht vom Idealismus, stolz auf den Gebrauch einer Vernunft, die das Band im Mangel eines Bandes findet, sich freie nennen?"} That "free" here referred to Free Religion was observed by the editor of the second volume in an endnote. Ibid., 236n22.

views to be easily associated or assimilated to those of his predecessors or contemporaries.[153] No matter how much harmony his views may have had with those of secularists, their very group identity earned them only his rebuke.

Making full sense of Fechner's religious views within his broader persona remains, thus, a challenge. Even in more recent historiography, the views are often framed via their role as part of a larger worldview and theory of knowledge or via links to the religious thought of Fechner's philosophical and scientific contemporaries and immediate followers.[154] Yet observed from the perspective of Fechner on a walk, these views, including the vivid image of God and its relation to his natural-scientific practice and his broader vocational persona, take on a new cast. In this light, they are transformed from a matter of argument, assertions of knowledge, and book-bound elaboration to a daily encounter of stimulus and sensation, differing slivers of God embodied variously in humans, plants, and heavenly bodies, in the streets of Leipzig and the hills of Thuringia. The oft-cited first pages of *Die Tagesansicht gegenüber der Nachtansicht*—in which the buzzing life of flowers, birds, and sunshine across Rosental park was an example of the fallacious nature of the night view, which declared the vivaciousness of the scene a mere illusion explained by one or another worldview (e.g., materialist, idealist)—become instead an exemplary testament of a truly lived-in experience, transmuted by necessity of the profession to the page.[155]

Fechner at least partially recognized his walks as divine encounters of a sort, framing

153 In a diary passage on the present iteration of his intellectual circle (*Kränzchen*), Fechner described all other members with standard epithets, as idealists, Herbartians, and Kantians, but called himself a "Naturphilosoph of a particular orientation" (*Tb* 1862:270).

154 On the general puzzle of Fechner's religion and the lack of a solution in his diaries, see Meischner-Metge, "Einleitung," xiv–xv. On his religion as a part of the broader "day view," Michael Heidelberger writes, "While we can't deny that some of Fechner's motives sprang from (late) romanticism and religion, this alone does not render his opinion irrational and cannot cancel any significance it may have for the future." Heidelberger, *Nature from Within*, 65, see also chap. 3. On connections between Fechner's cosmological views and those of others' (notably William James), see Marshall, "William James, Gustav Fechner."

155 Fechner, *Die Tagesansicht gegenüber der Nachtansicht*, 3–10.

his first walks in the garden without a blindfold in 1843 as the urscene of the plant soul.[156] Yet psychophysics and the threshold deepened this encounter, providing an account of the empirical foundation of his eyes and nose grasping the new blooms, uniting the scientific and daily pursuit of the mind-body relation. Here on a walk, Fechner could in fact *experience* the very tiers of the world: the pairing of a stimulus and sensation, say the rustling of the wind in some trees, whether conscious or unconscious in his mind-body was felt by God, as was the feeling of the wind itself upon the blooms on the tree. "Thus, for the walker deep in thought," he wrote of such unconscious sensations in *Elemente*, later revealed to be felt by God, "the sunshine, the greenery, the birdsong expresses an unconscious codetermination [*Mitbestimmung*]; he sees and hears nothing of all this and yet feels otherwise, and his flow of thoughts will be otherwise, than if he were thinking in a dark room" (*EP* 2:461).[157]

Fechner was, of course, this walker. His records of walking in his diary united these two aspects of the mind-body relation, the empirical foundations and the "highest and last" divinity, a daily interchange of souls. His communing with plants was one of the most common such encounters. Each year recorded the flowering and withering of varietals, including snapdragon, love-lies-bleeding, stock, mallow, aloe, crocuses, and lilies (*Tb* 1844:158; 1846:1; 1847:3; 1848:5–7; 1849:1). He could only understand the pleasant and unpleasant aromas of various plants, distributed with no apparent reason and unrelated to the visual aspect, to the quality of goodness in humans, emerging from such variegated people (*Tb* 1862:153–54). On 1 April 1864, upon considering "a beautiful hyacinth," he wrote, "It occurred to me to admire nature's unutterable inventiveness in ever-novel forms of plant and animal. I then asked: 'but what is now left for other heavenly bodies, if the

156 Fechner, *Nanna*, 391–92.

157 {"So äussert beim in Gedanken gehenden Spaziergänger der Sonnenschein, das Grün, der Vogelgesang eine unbewusste Mitbestimmung; er sieht und hört nichts von alle dem und fühlt sich doch anders, und sein Gedankenlauf wird anders sein, als wenn er im dunkeln Zimmer dächte."}

possible forms have already exhausted themselves here, and one cannot surely believe, that they just repeated themselves everywhere' " (*Tb* 1864:3–4).[158]

158 {"Eine schöne Hyacinthe." "Es fiel mir dabei ein, die unsägliche Erfindungsgabe der Natur in immer neuen Pflanzen- und Thierformen zu bewundern; dabei fragte ich: 'was bleibt aber nun für andre Weltkörper übrig, wenn sich die möglichen Formen schon hier erschöpft haben, und man kann doch nicht glauben, daß sie sich überall nur wiederholt hat.' "}

Part II

Josef Breuer, Bertha Pappenheim, and the "Talking Cure"

"Zwiegespräch"

A. War ich krank? Bin ich genesen?
   Und wer ist mein Arzt gewesen?
   Wie vergass ich alles das!
B. Jetzt erst glaub ich dich genesen:
   Denn gesund ist, wer vergass.

"Dialogue"

A. Was I sick? Am I better?
   And who was my doctor?
   How did I forget all that!
B. Only now better, I reckon:
   For healthy is the one who forgot

Friedrich Nietzsche, *Die fröhliche Wissenschaft*, prelude rhyme no. 4.

INTRODUCTION

The encounter between Josef Breuer and Bertha Pappenheim from 1880 to 1882 has always occupied pride of place among the many foundational myths of psychoanalysis. As Sigmund Freud himself declaimed in his first lecture on psychoanalysis at Clark University in 1909, "If it is a merit to have brought psycho-analysis into being, that merit is not mine. I had no share in its earliest beginnings. I was a student and working for my final examinations at the time when another Viennese physician, Dr. Josef Breuer, first (in 1880-2) made use of this procedure on a girl who was suffering from hysteria."[1] It was during this encounter that Breuer made the "chance observation" connecting

1 Freud, "Über Psychoanalyse," in *GW* 8:3 / *SE* 11:9. {"Wenn es ein Verdienst ist, die Psychoanalyse ins Leben gerufen zu haben, so ist es nicht mein Verdienst. Ich bin an den ersten Anfängen derselben nicht beteiligt gewesen. Ich war Student und mit der Ablegung meiner letzten Prüfungen beschäftigt, als ein anderer Wiener Arzt, Dr. Josef Breuer, dieses Verfahren zuerst an einem hysterisch erkrankten Mädchen anwendete (1880 bis 1882)."} Famously, he reversed this claim just five years later. Freud, "Zur Geschichte der Psychoanalytischen Bewegung," in *GW* 10:44–45 / *SE* 14:7–8. For translations, I have relied on the *Standard Edition* English versions because of how how significant it has been in the historiography of psychoanalysis; quotations without a note are thus from the *Standard Edition*, whereas any modifications or translations of my own are noted as such.

symptoms to an originating event, an observation that led off Breuer and Freud's *Studien über Hysterie* (1895) and resulted in the famous formulation, "*Hysterics suffer mainly from reminiscences*."[2] The encounter was recounted as the first case history in that book, with the pseudonym Anna O. given to Pappenheim, and has been in turn subject to a enormous amount of commentary: from the hagiographic and celebratory to the debunking and decrying, from the critical and measured, to the fanciful and farcical. Without a doubt, Pappenheim is one of the most famous individual patients in the history of medicine and the encounter between her and Breuer one of this history's most famous treatments.[3]

My aim in these two chapters is to offer a new perspective on this encounter, one quite different from the many that have already been pursued.[4] To do so, I start with a unique element of the Pappenheim-Breuer encounter, one that marked out her case from the four others in *Studien über Hysterie* and from all other treatments of hysteria or other illnesses of the era: the "talking cure." That their encounter was the source of this term is of course famous, as is the fact that Pappenheim herself coined it in English. Yet beyond noting this latter aspect (sometimes as a curio, sometimes as something weightier), very rarely has the term been subject to serious and sustained critical attention, especially considering

2 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:81, 86/ *SE* 2:3, 7. {"*Der Hysterische leide größenteils an Reminiszenzen*."} References to each section of *Studien über Hysterie* are done separately (the forewords, the preliminary communication, each of the five case histories, Breuer's chapter on theory, and Freud's chapter on therapy) because of how central these texts are to my project, their distinct histories and authorships, and the confusing way they have been published in the collected editions (with Breuer's sole-authored material only published in the supplemental volume of *GW*, whereas the entirety of *Studien* is republished as volume 2 of *SE*).

3 In his grand overview of the history and historiography of hysteria, Mark Micale calls Anna O. "probably the single most famous patient in the annals of hysteria." Micale, *Approaching Hysteria*, 27. Whether this means Pappenheim herself is that famous is perhaps another question (and again another: do Anna O. and Pappenheim *continue* now, almost thirty years since Micale, to be so famous?).

4 I use the term *encounter* because it emphasizes the face-to-face meeting between Pappenheim and Breuer and its temporally confined nature. By contrast, the usual term *case* leans instead on one participant rather than both (e.g., the case of Anna O.) and overly narrows the focus to the generic aspects of the medical case history, in addition to causing difficulties in sorting out the relation between Pappenheim and Anna O.

how widely the term spread over the late twentieth and early twenty-first centuries.[5] By contrast, one can read widely on the genealogy and reception of the *cathartic method*, the term Freud used in his parts of the book and which Breuer himself did not use.[6] There are, prima facie, a number of good reasons for this lack of attention: It is a generic term (in contrast with *catharsis*), making connections to other literature and intellectual currents difficult. There is basically no primary material from Pappenheim during this period, and she never discussed it (or her treatment) in retrospect. That it was said in English might be a significant clue or a red herring; either way would require significant attention to Pappenheim's language disorder, which was one of her more persistent and puzzling symptoms, especially in the context of hysteria. And finally, neither Breuer nor Freud used or discussed the term outside of the case history of Anna O., and Freud never engaged with it subsequently in the development of psychoanalysis.

Yet in spite of these challenges—or perhaps in fact because of them—I believe the "talking cure" is precisely the way to an entirely new vista on the encounter between Pappenheim and Breuer. We might ask, Why did Pappenheim call her evening sessions with Breuer in late spring 1881 the "talking cure"? And then why did Breuer decide to preserve it for publication over a decade later but mostly refrain from elaborating upon it? But I believe these causal questions, like so much about the world of pre- and early psychoanalysis, are basically impossible to answer with any security, and an insistence on the primacy of such supposed genealogical whys and wherefores has limited our historical

5 As just a rough metric of this spread: the WorldCat library catalogue lists 682 items with "talking cure" in the title, with all but five from since 1980. WorldCat, s.v. "ti:'talking cure,' " accessed 6 February 2021, https://www.worldcat.org/.

6 E.g., Chertok, "On the Discovery of the Cathartic Method"; Hirschmüller, *Josef Breuer* [English], 155–59; Leuzinger, *Katharsis*; Gobert, "Historicizing Emotion"; Schönle, "Theatrical Catharsis and Its Therapeutic Effect"; and Vöhler, "The Pathological Interpretation of Catharsis." Juan Dalma is usually credited with introducing the connection between the cathartic method and broader debates around dramatic and Aristotelian catharsis in the nineteenth century, specifically the link to Jacob Bernays's work on Aristotle and catharsis. I haven't been able to get a copy of his paper, "La catarsis en Aristoteles, Bernays y Freud."

understanding of this world. I instead ask, What did it *mean* for Pappenheim to use the term the "talking cure," and then for Breuer to later publish it? What made sense to them about this term in their context but failed to translate beyond it to the readers of *Studien über Hysterie*?

Due to the challenges I've just enumerated, answering these questions requires a creative approach. Rather than taking the phrase as a semantic unit of its own, I break it into its two parts: *talking* and *cure*. What did Pappenheim and then Breuer mean and understand by *talking* and by *cure*? Each chapter takes one of these as its object: The first, "Breuer in Conversation," starts with the particular role language and talk played in the Pappenheim-Breuer encounter framed against the wider culture of conversation in which their encounter took place. The second chapter, "Breuer on Balance," turns back to the *cure*; shifting away from the faux empirical question of whether Pappenheim really was cured, I attend instead to the link between Pappenheim's final "psychical balance" and Breuer's lifelong scientific work on the inner ear and the physiology of balance.

Taken together, these two chapters offer *an* interpretation of the Breuer-Pappenheim encounter, an interpretation that goes, as it were, through the ear—both the seat of balance and the viaduct of conversation.[7] This interpretation insists on the contingency and specificity of the "talking cure" and its role in early psychoanalysis: It depended on the cultural and social milieu of the Viennese Bildungsbürgertum, on Breuer's particular embodiment of the physician-investigator and use of the concept of balance, and on Pappenheim's specific attitude and articulation in her encounter with him. At the

7 My proposal that these chapters are "an interpretation" of the Breuer-Pappenheim encounter has been informed by Alexander Nehamas's emphasis on this phrase in his work on Nietzsche. Nehamas is concerned with the fact that attempting to understand Nietzsche's work is challenged by Nietzsche's perspectivism, the very idea that every interpretation is merely one of many possible interpretations. How to then measure interpretations *of* that idea and Nietzsche's work as a whole? Nehamas pursues a modest but I think highly instructive strategy. Each of his chapters gives "an interpretation" of a particular idea of Nietzsche's and shows how it fits into perspectivism overall. Nehamas, *Nietzsche*, 1–3.

same time, the "talking cure" was a transformative experience specific to Breuer and Pappenheim, one that even they struggled to understand. In this way, it remained and remains properly part of this particular moment in the prehistory of psychoanalysis, incapable of transferring beyond without major modifications. Before going any further, I first provide a basic summary of the Pappenheim-Breuer encounter, which will orient the reader for the following chapters.[8]

Pappenheim and Breuer, 1880–1882

In 1880, Berth Pappenheim was a physically healthy, remarkably smart twenty-one year old girl from an orthodox Jewish family. She had finished school and generally found herself lacking in intellectual stimulation; she was willful, composed, and compassionate and disdained lying and falsehoods.[9] Her illness started on 17 July and ultimately had four distinct stages over the next two years: "latent" until about 8–11 December, mostly bedridden until the death of her father on 5 April 1881, a third until December 1881, and a fourth to mid-June 1882.[10]

As the family was on summer holiday, Pappenheim's father fell ill. While Pappenheim anxiously attended her dear father on the night of 17 July, she fell into an "absence" and

8 The only extant sources from participants in the encounter are as follows: a case history Breuer wrote for Pappenheim's admission to the Bellevue Sanatorium in Kreuzlingen, Switzerland, in summer 1882, which cuts off around December 1881 but was written just before her admission in June; thirteen letters and reports by Breuer, Pappenheim, her mother and uncle, and one other Bellevue physician from 1881–1883 (all but two from summer and fall 1882); and the case history of Anna O. published in *Studien über Hysterie*. In matters of fact, structure, and presentation, the extant Bellevue case history accords closely with the published case history of Anna O., with some sentences repeated nearly verbatim; this concordance gives confidence in the veracity of the published case. Albrecht Hirschmüller published the Bellevue documents in his book on Breuer (first in German then translated into English), and it is from his publications that the entire industry of Anna O. literature has powered itself.

9 Breuer, Pappenheim case history (D 23), pp. 1–2.

10 Breuer, Pappenheim case history (D 23), p. 3. These same stages are preserved exactly in the published version, with the second called manifest (as opposed to latent) and the third and fourth given descriptions (the third a phase of continuous symptoms and alternating somnambulism and normal states; the fourth the gradual "unwinding" [*Abwicklung*]). Breuer, "Anna O," in *GW* suppl.:222 / *SE* 2:22 (my translation).

hallucinated black snakes coming from the walls to kill her father; "through this situation," Breuer wrote, "her right arm had become anesthetic and her fingers transformed into little snakes with death's-heads (nails)."[11] She couldn't speak, until she hit upon a saying in English, and then offered a prayer in this language. The absence ultimately broke, but subsequently her absences became regular, her anxiety increased, and related symptoms started multiplying, first during the absences and then more generally: hallucinations, contractures of right arm and leg, not hearing or recognizing others, inability to read, strabismus convergens with double vision and other eye issues, a recurrent cough.[12] Her symptoms remained mostly hidden from her family, except for the cough, which prompted the call to Breuer back in Vienna. He observed, "This was an obvious tussis hysterica; nevertheless I immediately designated the patient as mentally ill, on account of her strange behavior."[13]

In early December, the strabismus convergens became more notable, and on the 11, Pappenheim took to bed with a series of worse physical pains and disturbances. These called attention to the psychical state, now with rapidly changing and oppositional moods, anxiety, hallucinations, and generalized agitation.[14] But she also had periods of clarity and she complained of having "two selves," one experiencing the psychical issues and the other "relatively normal."[15] The distinction between the two selves increased, and the absences that characterized the sick one worsened and took on newer aspects (and were now called

11 Breuer, Pappenheim case history (D 23), p. 4. {"Ihr rechter Arm war durch die Lage anaesthetisch geworden und ihre Finger verwandelten sich in kleine Schlangen mit Todtenköpfen (Nägel)."}

12 Breuer, Pappenheim case history (D 23), p. 4–6. Breuer only learned of these symptoms later, via the "talking cure," and even Pappenheim herself didn't necessarily remember them outside of the cure. Ibid., p. 3. Basically all of the symptoms were later attested by Breuer in the manifest stage, and he found her credible overall, so he trusted her account.

13 Breuer, Pappenheim case history (D 23), p. 6–7. {"Dieß war eine offenbare tussis hysterica, doch bezeichnete ich die Patientin sogleich als geisteskrank, ihres sonderbaren Benehmens halber."} This quote points to the tension or distinction between hysteria proper and mental illness, which was a significant issue throughout the case histories and has become a major element in the literature.

14 Breuer, Pappenheim case history (D 23), p. 7–8.

15 Breuer, Pappenheim case history (D 23), p. 8.

autohypnoses), including a language disorder leading to two weeks of mutism. She ate less and less.[16] At this point, Breuer noticed something crucial: During her daily absences, she acted "in a particular ideational circle"; later in the evening, this was the seed for the sad but pretty stories she told Breuer, which he learned to prompt with a word overheard in the "ideational circle."[17] As she told her stories, her language disorder abated and she calmed herself. This was *the* hallmark of the case and it was what led Breuer to finally record a diagnosis of hysteria. Some of the phenomena lessened as she continued to tell her stories, and on 1 April, she left her bed.[18] Five days later, her father died, halting any progress and initiating the next stage of the illness.

After several days of agitation and stupor, grappling with her father's death, Pappenheim's condition shifted: she was absent for most of the day and was only truly present for Breuer. Her relation with her mother and brother worsened, and she only ate from Breuer.[19] But her evening storytelling continued, as did their striking effect, leaving her "calm and cheerful."[20] Nevertheless, her state worsened, and after several suicide attempts, Breuer decided to bring her to a country villa next to a sanatorium in Inzersdorf, on the outskirts of Vienna. In the countryside, they continued the daily rhythm of storytelling, formalizing it further until Pappenheim called it the "talking cure."[21] After Breuer's five-week holiday, her condition had again worsened, and her stories shifted from poetic creations to the hallucinations and annoyances of her daily life.[22]

16 Breuer, Pappenheim case history (D 23), p. 8–10.
17 Breuer, Pappenheim case history (D 23), p. 10.
18 Breuer, Pappenheim case history (D 23), p. 10–12.
19 Breuer, Pappenheim case history (D 23), p. 12–15.
20 Breuer, Pappenheim case history (D 23), p. 15.
21 Breuer distinguished two different peaks of Pappenheim's illness: a general one, associated with contracture, aphasia, and visual disturbances, passed in the winter, and then a "psychical" one in June with the suicide attempts, passed upon arriving at Inzersdorf. Breuer, Pappenheim case history (D 23), p. 16. Breuer did not mention this distinction in the published case history, but the general impression that the second stage of the illness was its overall peak remained. Breuer, "Anna O," in *GW* suppl.:224 / *SE* 2:24.
22 Breuer, Pappenheim case history (D 23), p. 15–19.

It was only then that Breuer identified the "talking cure" as dealing with a continuing earlier "psychical stimulus" (from either fantasy or daily life).[23] This was confirmed in two piquant examples, including the dog incident: Pappenheim hadn't had a drop to drink over many weeks, quenching herself only with fruit, and couldn't be compelled to drink. One evening, she told of a particular experience from weeks ago where she witnessed her companion's "disgusting" little dog drink from a glass of water. Five minutes after telling, she gulped down half a bottle of water, and the "drinking inhibition" was gone.[24] Breuer and Pappenheim then turned to talking of and dispatching older symptoms, starting with the contracture of the right leg and continuing back in Vienna through the fall, with both success and setbacks.[25]

In December 1881, the last new element of Pappenheim's illness emerged, initiating its final stage:[26] She began intensely reliving, day in, day out, the previous year's occurrences.[27]

23 Breuer, Pappenheim case history (D 23), p. 19.

24 Breuer, Pappenheim case history (D 23), p. 20. In *Studien*, the timing of this event was less clear. The more temporally complicated version there made it seem as if the dog incident was possibly from the latent incubation period of the illness, that is, the summer of 1880. This would mean that there had been a recurrence in 1881 of the prime symptom, Pappenheim's inability to drink, which was then talked back to its source and disappeared. The Bellevue case history made it clear that this happened entirely during 1881. Breuer, "Anna O," in *GW* suppl.:232–33 / *SE* 2:34–35. Strangely, it was the *other* of the first two incidents of talking back symptoms, as recounted in the Bellevue case history, that clearly linked to the illness's latent incubation stage; yet Breuer only published the "drinking inhibition." The other symptom was the "stocking caprice," and it clearly stemmed from the period of her father's illness and her desire to care for him. Breuer, Pappenheim case history (D 23), p. 19–20.

25 Breuer, Pappenheim case history (D 23), p. 20–22.

26 The beginning of the fourth and final stage is precisely the point where the Bellevue case history cuts off. The remainder of this account follows the published case history, with occasional insights from the other Bellevue documents. The reliving of "anxiety affects" from Hanukkah 1880 in 1881 was the final element of the remaining Bellevue case history. Breuer, Pappenheim case history (D 23), p. 22.

27 Pappenheim's reliving of the previous year appears to me one of the most striking aspects of her illness, one that was crucial for Breuer's theory of hypnoid states and hysteria as he ultimately developed it for *Studien über Hysterie* and that has not received very much attention on its own. In the published case history, he tied it to the first anniversary of her separation from her ailing father (when she took to bed) and discussed it in the language of her "condition seconde," which was a new theoretical concept for the publication. Breuer, "Anna O," in *GW* suppl.:231–32 / *SE* 2:32–33. The Bellevue case history doesn't extend this far, only mentioning the onset of this reliving during the Hanukkah holiday. Breuer did, however, attest to this phenomenon in another contemporaneous document: "In the last half year, she was influenced in all her doings, every single day, by the incidents of the same day from the past year; and she could always, via a stronger sense impression connected to the latter occurrences (of the previous year), be completely ripped

This was confirmed by her mother's diary from that year, as well as by Breuer's own memory.[28] The "talking cure" now had three objects: fresh, daily "phantasms"; experiences and " 'vexations' " from 1881; and the "psychical *events from the incubation of the illness* between July and December 1880, which had produced the hysterical phenomena in aggregate and with whose talking out the *symptoms disappeared*."[29] Prompting Pappenheim's memory to shorten this talking back was impossible and even muddled the matter; for the first time, Breuer purposefully deployed hypnosis during morning visits, taking notes on the many occurrences of a specific symptom. They then used these notes to guide the evening "talking cure," exhaustively going through her disturbances of vision, recurring appearances of a death's head, her problems with reading and hearing, and more.[30] This "laborious analysis of symptoms," going occurrence by occurrence and during which the symptom often reappeared with full force, was

---

over into the situation of the last year, as far as hallucinations." Breuer, report on Pappenheim, late June 1882, D 27, Hirschmüller Documents, Deu. 368 / Eng. 295. {"Im letzten Halbjahr war sie in ihrem Tun u<nd> Lassen Tag für Tag beeinflusst durch die Vorkommnisse desselben Tages im vergangenen Jahr und konnte immer durch einen stärkeren, mit letzteren (vorjährigen) Begebnissen zusammenhängenden Sinneseindruck vollständig in die Situation des vorigen Jahres hinübergerissen werden, bis zur Hallucination."} This emphasis on sense impressions and the day for day aspect was repeated in the published history. Neither Skues nor Hirschmüller say much about the reliving phenomenon.

It is probably relevant that the first mention of this reliving phenomenon happened during a holiday, where traditions repeat year after year, and moreover during Hanukkah, which spans eight days, which isn't religiously significant, and whose primary feature is the hanukkiah, a candelabrum featuring one candle lit for each night—leaving quite a strong sense impression. In 1919, Pappenheim memorialized the intensity of her Hanukkah sense impressions and wider feelings in one of her "Denkzettel" (lit., thinking notes), describing in detail and with great feeling her room and its many memories as she experienced in the light of the last night of Hanukkah. Pappenheim, "Denkzettel: Die Channukkah-Feier," in Pappenheim and Edinger, *Leben und Schriften*, 137–39. The dating comes from Elizabeth Loentz, who further describes Pappenheim's zeal for Hanukkah (and Purim), both in terms of her work with children and the importance of women in those holiday stories. Loentz, *Speak the Truth*, 173–74. N.b., in the Bellevue case history, Breuer referred to Hanukkah as "the Jewish Christmas" but dropped the Jewish specifier for the publication. Breuer, Pappenheim case history (D 23), p. 22; Breuer, "Anna O," in *GW* suppl.:231 / *SE* 2:32.

28 Breuer, "Anna O," in *GW* suppl.:231 / *SE* 2:33.

29 Breuer, "Anna O," in *GW* suppl.:232 / *SE* 2:34 (my translation; "vexations" in French/English and quotes in original; emphasis in original but not in the *Standard Edition*). {"Die psychischen *Ereignisse der Krankheitsinkubation* von Juli bis Dezember 1880, welche die gesamten hysterischen Phänomene erzeugt hatten und mit deren Aussprache die *Symptome verschwanden*."}

30 Breuer, "Anna O," in *GW* suppl.:233–35 / *SE* 2:35–37.

driven by Pappenheim's desire to finish everything by the anniversary of her move to the countryside.[31] In early June 1882, they reached the urevents of July 1880: the snake apparition and arm anesthesia at her father's bedside. "In this way, too, the whole hysteria came to a close," wrote Breuer, also bringing the published narrative to a close.[32]

Yet Pappenheim's overall state in mid-June 1882 was still in need of care. Breuer sent a telegram to Robert Binswanger, the director of Bellevue Sanatorium in Kreuzlingen, Switzerland, requesting a place there for Pappenheim.[33] He emphasized her dependence on chloral and morphine, which Breuer had used to help her sleep; but he also noted some continued hysterical phenomena.[34] She arrived at Bellevue on 12 July. There, the treatment centered on the drug withdrawal but also her facial neuralgia, which had predated the illness starting in July 1880; the resulting report however also mentioned her psychical symptoms, including mood swings, her withdrawn fantasy life, and her language disorder.[35] By her own account, Pappenheim was happy with her treatment and even (in retrospect) enjoyed her time at Bellevue.[36] In these letters and documents

31 Breuer, "Anna O," in *GW* suppl.:236 / *SE* 2:38 (translation modified).

32 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:40 (translation modified). Skues insightfully notes that the poor translation of this line in the *Standard Edition* has contributed significantly to the confusion around the close of the case and Pappenheim's subsequent condition. Where the original says "the whole hysteria" (*die ganze Hysteria*), the *Standard Edition* gives "the whole illness." Skues, *History of Anna O.*, 179n6.

33 Breuer to Binswanger, [13–16?] June 1882, D 25, Hirschmüller Documents, Deu. 366 / Eng. 293. Breuer had already contacted Binswanger about Pappenheim in November 1881. Breuer to Binswanger, 4 November 1881, D 24, ibid., Deu. 365 / Eng. 292.

34 Breuer to Binswanger, [13–16?] June 1882, D 25, Hirschmüller Documents, Deu. 366 / Eng. 293; and Breuer, report on Pappenheim, late June 1882, D 27, Hirschmüller Documents, Deu. 368 / Eng. 295. The hysterical phenomena in question were "slight hyst<erical> insanity" with delusions in the first letter and then the reliving of the past year in the subsequent report (editor's interpolation).

35 Laupus, "Krankheitsverlauf," addendum to Breuer, Pappenheim case history (D 23), p. 24

36 Pappenheim, report on her illness, [September or October] 1882; quotation in Homburger to Binswanger, 23 July 1882; and Pappenheim to Binswanger, 8 November 1882, D 28, 29, 34 Hirschmüller Documents, Deu. 369–72, 379–80 / Eng. 296–99, 305–6. A number of letters from Pappenheim's mother and cousin to Binswanger show that they trusted him and the sanatorium but were greatly worried overall about her progress and considered a number of medical (e.g., electricity treatment, surgery for the neuralgia) and nonmedical interventions (e.g., limiting or allowing family visits). Fritz Homburger to Binswanger, 23 July 1882, 4 January 1883; and Recha Pappenheim to Binswanger, 24 July, 27 August, 7, 15 October 1882, D 29–33, 35, ibid., Deu. 371–79, 380–81 / Eng. 298–305, 306–7.

from Bellevue, Breuer is only mentioned twice, by Pappenheim's mother in letters to Binswanger: she and Binswanger agreed that Pappenheim would need continued care upon release to preserve what she had gained, but Breuer could not be that physician, for reasons unexplained.[37] Pappenheim left Bellevue on 29 October—the register read, "Condition improved. Discharged"[38]—spending two months with family in Karlsruhe and nearby before returning to Vienna in 1883.[39] Though Breuer and Pappenheim surely encountered each other again over the next five years in Vienna, we have no significant direct evidence of these meetings, bringing our knowledge of the saga to a close.[40]

Where's Freud? or, Escape from Psychoanalysis

Readers with some familiarity with the standard history of psychoanalysis might find themselves wondering: That's it—"condition improved"? Wasn't the treatment in fact a tremendous failure? What about the hysterical pregnancy? And where's Freud? The questions stem from the standard story of Anna O., birthed in 1953 by the psychoanalyst

37 Recha Pappenheim to Binswanger, 7 October 1882, D 32, Hirschmüller Documents, Deu. 377 / Eng. 304.
38 Quoted in Hirschmüller, *Josef Breuer* [English], 114.
39 Fritz Homburger to Binswanger, 4 January 1883, D 35, Hirschmüller Documents, Deu. 380–81 / Eng. 306–7.
40 In 1884, writing to Binswanger about another patient, Breuer closed with a mention of Pappenheim: "Today I saw young Pappenheim. She is very healthy, without pains or anything else." Breuer to Binswanger, 13 January 1884, D 37, Hirschmüller Documents, Deu. 384 / Eng. 309. {"Die kleine Pappenheim habe ich heute gesehen. Sie ist ganz gesund, ohne Schmerzen oder sonst was."} From 1883 to 1888, Pappenheim's last years in Vienna before moving permanently to Frankfurt, there is scant evidence of her life and none other from Breuer or herself. There is hearsay via Sigmund Freud in letters with his fiancée, Martha Bernays, and then letters from Bernays herself (by then Martha Freud) to her family, who knew the Pappenheims, based on Bernays's visits with Pappenheim (more on the Freuds in the next two sections). Most important of all, as Hirschmüller discovered, Pappenheim went back three times to the sanatorium in Inzersdorf (quite near Vienna), from 30 July 1883 to 17 January 1884, 4 March to 2 July 1885, and 30 June to 18 July 1887. These times she was in the register officially as a patient and each time diagnosed with "hysteria" and her mental-state examination recorded as "somatic illness." The first and third times had a discharge status of "recovered" and the second "improved." Hirschmüller, *Josef Breuer* [English], 115–16. Richard Skues discusses this evidence at length to counter the "standard version" that sees it as confirming Breuer's ultimate failure and later deceit in the published case history. Skues, *History of Anna O.*, chap. 2. Regardless of your reading of this later evidence, I am concerned solely with the Breuer-Pappenheim encounter and how its participants understood it, which isn't touched by this evidence.

and friend-of-Freud Ernest Jones in the first volume of his biography of Freud.[41] Jones named Pappenheim as Anna O. and detailed Freud's "fuller account" of the encounter,[42] a story of Breuer's counter-transference and marital strife with his wife, Pappenheim's hysterical childbirth and subsequent relapses, and finally Breuer's supposed later disclosure to Freud that Pappenheim "was quite unhinged and that he wished she would die and so be released from her suffering."[43] His contention that Pappenheim's treatment had been partly misrepresented in *Studien* was subsequently furthered upon the basis of new evidence by the historian Henri Ellenberger, who found the Bellevue case history and published a summary of it in 1972. "The patient had not been cured," he concluded. "Indeed, the famed 'prototype of a cathartic cure' was neither a cure nor a catharsis."[44]

Since Jones's publication and Ellenberger's elaboration, all discussions of the Breuer-Pappenheim encounter have had to deal with this new "standard version," and layer after layer of interpretation has been lacquered on, by Freudians and anti-Freudians, retrospective diagnosticians and playful antipositivists, sleuths with new empirical findings and artists with a revivifying bent, and historians of all varieties.[45] Dealing with the

41 Jones, *Sigmund Freud* 1:245–48. Four years after the publication of Jones's first volume, the *Standard Edition* version of *Studies on Hysteria* was published and included a footnote echoing this story and giving it a particular place in the case history. The footnote, placed in the midst of the final narrative paragraph of Breuer's account, after Pappenheim reached the urscene of her illness and dispelled her final symptoms, reads: "At this point (so Freud once told the present editor [James Strachey], with his finger on an open copy of the book) there is a hiatus in the text." Breuer, "Anna O," in *SE* 2:40n1.

42 Jones, *Sigmund Freud* 1:246.

43 Jones, *Sigmund Freud* 1:247. At the same time, Jones was also the first to credit Pappenheim with the discovery of the new method (his rationale for giving her real name) and connect features of her illness with her later social work. Ibid., 245n4, 247n1.

44 Ellenberger, "The Story of 'Anna O,' " 279. Ellenberger in fact saw himself as correcting Jones's version, specifically the hysterical pregnancy. But, as Richard Skues convincingly shows, despite the counter aims of the authors, the Jones and Ellenberger versions ultimately worked together (at least in the subsequent literature) to create a single standard version centered on Breuer's putative failure and published misrepresentation. Skues, *History of Anna O.*, 149, 157.

45 Notable examples in these categories: Freudians: Karpe, "Anna O's Final Identity"; Pollock, "Bertha Pappenheim's Pathological Mourning"; and Pollock, "Bertha Pappenheim"; anti-Freudians: Borch-Jacobsen, *Remembering Anna O.*; retrospective diagnosis: Rosenbaum and Muroff, *Anna O.*; playful antipositivists: Koestenbaum, *Double Talk*, chap. 1; sleuths: Swales, "Freud, Breuer & the Blessed Virgin"; Swales, "Birth of Psychoanalysis"; and Swales, "Anna O. in Ischl"; artists: Freeman, *The Story of Anna O.*; Guttmann, *The*

standard version and adequately canvassing all of this literature would require at least a chapter of its own, if not a short book. Luckily, two recent works, by Richard Skues and Elizabeth Loentz, have done this, so I am saved the task. But, before I give a glimpse of this literature via Skues and Loentz (along with an assessment of Jones's story), there is a particular reason I sequester the standard story as well as Freud's role in general to only a few passages here in the introduction to these two chapters.

The reason boils down to one fact: who Freud was from 1880 to 1882. As Freud himself told us at the outset, he was still a student, if an advanced one, working in the physiological laboratory of Ernst Brücke. At twenty-four years old, he finished his medical degree in 1881, staying with his eel and fish experiments in the lab until the following year. He only met his future wife, Martha Bernays, in April 1882, and they were engaged just two months later. The need to provide for a household pushed him toward clinical practice, which went via academic medicine and the Allgemeines Krankenhaus, starting in summer 1882. Before this, he had had little experience with and only sporadic interest in everyday human maladies.[46] Though he already knew Breuer, their relationship only began to truly develop in fall 1882—when Breuer first told Freud of his encounter with Pappenheim, but also when Freud had only just started exploring Breuer's world of academic medicine and still years before deciding to enter private practice.[47] By then,

---

Enigma of Anna O.; Honigmann, "Ein Buch, das ich nicht geschrieben habe"; and Yalom, *When Nietzsche Wept*; and historians: Forrester, "The True Story of Anna O."; and Forrester and Cameron, "A Cure with a Defect."

46 Gay, *Freud*, 27–46. Despite its well-known flaws, Jones's biography is still the standard, but Gay's work offers some better capsule summaries and benefits from a quarter century of critical work, in addition to being a check on the unverifiable parts of Jones.

47 Jones says that Breuer and Freud met via Brücke's Physiologisches Institut in the late 1870s, but their relationship clearly only grew starting in late 1882, per the *Brautbriefe*. Jones, *Sigmund Freud* 1:245; and Hirschmüller, *Josef Breuer* [English], 113. The best overview of Freud's twisting road to academic medicine and then private practice is Bernfeld, "Sigmund Freud, M.D., 1882–1885." He notes that Freud didn't decide upon the route of a neurological private practice until some time in 1883

Pappenheim was in Germany and Breuer had already declined to take her back on as a patient if and when she returned to Vienna.

The consequences of this fact are twofold. First, Freud played no part in the encounter between Breuer and Pappenheim. He wasn't her physician, he wasn't consulted by Breuer as a specialist, colleague, friend, or even interested party, and he wasn't even a practicing physician; he only heard of the encounter after it was over. Similarly, he only met Bernays—whose family knew the Pappenheims and whose later correspondence furnishes some of the only material evidence regarding Pappenheim during the 1880s—toward the end of the period. Of course, Freud was the spur that ultimately led to the publication of the case, and his relationship with Breuer was extremely significant for both men. Contemporaneous evidence from Freud, specifically in the *Brautbriefe* (betrothal letters) between Freud and Bernays, can flesh out how others perceived the encounter.[48] But, and this is the key, they don't tell us anything directly about the encounter between Breuer and Pappenheim.[49]

48 Like everything to do with the historiography of psychoanalysis, the *Brautbriefe* are complicated as sources by their uneven history post-Freud and the attendant secondary literature. Freud and Bernays were apart for much of their engagement (from 1882 to 1886) and wrote letters nearly every day. A small selection was first published in 1968, with the remainder in different places and subject to different rules of access (on the situation in the 1980s, see Gay, *Freud*, 743). Some unpublished letters were cited, quoted, or published in part by those with access (e.g., Jones). This partial availability and the resulting partial references, combined with difficulties in transcription (particularly relevant for Freud's atrocious handwriting), render the secondary literature based on them less transparent and more difficult to judge. For instance, John Forrester's insightful essay on Anna O. and the emergence of counter-transference in the *Brautbriefe* is based on only a small selection of the letters, prepared for publication by Jeffrey Masson but never published, with no consideration of the overall context of Freud and Bernays's correspondence. Forrester, "The True Story of Anna O." A full edition of the *Brautbriefe* is currently being published (with four of five volumes already out); after the Freud Wars, however, it's unclear if there is enough interest to reconsider all the matters discussed over the literature.

49 John Forrester and Laura Cameron make a similar point, though about a recently discovered later letter by Freud concerning the Breuer-Pappenheim encounter: "It should be noted—and we hope that this reminder is superfluous—that these speculations concerning Anna O.'s illness and Breuer's treatment of her do not bear directly on the actual facts of the matter, but solely on Freud's construal and interpretation of them, as indicated by this newly discovered letter." Forrester and Cameron, " 'A Cure with a Defect,' " 936. The reminder is unfortunately not superfluous, as nearly the entire Freud and anti-Freud industries depend *primarily* upon "Freud's construal and interpretation" of the encounter, often decades afterward and via hearsay (e.g., what Freud told Jung, what Freud told Marie Bonaparte). I suggest that these Freud-lenses have

Second, and even more important, Freud the eel experimenter and single student of 1882 was not yet Freud the author of *Die Traumdeutung* of 1900 let alone the celebrity author of *Das Unbehagen in der Kultur* of 1930, translated immediately into English as *Civilization and Its Discontents*. Freud's medical, scientific, and intellectual development all lay in the far future; even by the publication of the case history of Anna O. in 1895, Freud's project was far from what it would become and he himself remained a relatively marginal figure in the hothouse world of fin-de-siècle Viennese science. That future was anything but preordained in 1882 or 1895, and *Studien über Hysterie* did relatively little if anything at all in moving him in that direction. That psychoanalysis ultimately became a major scientific and intellectual force in the twentieth century and Freud its celebrity progenitor has for too long dominated our understanding of his early years and the milieu in which they occurred. Everything from those years has been read as prologue or precursor; it has moreover been interpreted in a psychoanalytic light, following Freud himself of course.[50]

Most of all, it's the extreme *mass* of Freud, the power that psychoanalysis held as an intellectual movement throughout much of the twentieth century, that has distorted our approach to the Breuer-Pappenheim encounter; in this sense, Freud himself *overdetermines* everything. None of this is to say that Freud's own ideas or psychoanalytic interpretations of the Breuer-Pappenheim encounter have nothing to add (many of which are quite stimulating; also, hence overdetermination) or that we should simply ignore his

---

in fact distorted even contemporaneous evidence (mostly from the *Brautbriefe*) and that we need to escape this framing altogether.

50 In a sense, these two interpretive impulses—looking for the proto- or urelements of psychoanalysis *and* reinterpreting events from the pre-psychoanalytic era in a fully-developed psychoanalytic lens—are in fact at odds: they cast backward psychoanalytic elements, ideas, and concepts to at once identify their crudest, earliest appearances and also reshape and recast those events in these new lights. In the case of Anna O., these were transference and a particular sexual etiology. Of course, this omniscient transhistorical perspective on human affairs is in fact one of the hallmarks and strengths of psychoanalysis. But for that same reason, it's a distinctly defective approach to particular questions in its own history.

relationship with Breuer and the history of *Studien*. Merely that it is a mistake to approach the history of psychoanalysis as its own contained Ptolemaic universe, forever and always orbiting Freud and only understandable from that central position.[51]

In the following, I propose to consider Freud as he was: a significant player in Breuer's life after 1882 and the reason the *Studien* were ultimately written but someone completely unrelated to the Breuer-Pappenheim encounter proper and only one of a number of interlocutors in the development of Breuer's theoretical approach to hysteria (though a significant one, as coauthor). Most important, Freud had nothing at all to do with the Breuer's approach to treatment or "talking cure"—the focus on these chapters.[52]

The "Talking Cure": What It Was, What It Wasn't

In *Studien über Hysterie*, Breuer introduced the "talking cure" at roughly the midpoint of the chronological narrative:

> While she was in the country, when I was unable to pay her daily visits, the situation developed as follows. I used to visit her in the evening, when I knew her to be in her hypnosis, and I relieved her of the whole stock of phantasms that she had accumulated since my last visit. This had to happen completely

51 My thinking about this sort of historiographical problem—the scientific work of significant figures before they reached certain milestones and attained recognition or even fame—has been informed by Michael Gordin's book on Einstein and his sixteen months in Prague from 1911 to 1912. Gordin, *Einstein in Bohemia*.

52 On the history of Breuer and Freud's relationship and the publication history of *Studien*, see Hirschmüller, *Josef Breuer* [English], 133–36, 141–43, 151–54. About the book's elongated history, Hirschmüller asks and answers four important questions: Why a joint publication? Why publish so long after the first precipitating case? And then why in 1893 and 1895? Finally, why the preliminary communication before the monograph? He offers thoughtful and supported answers, if at times speculative ones, relating to the need for more material beyond Pappenheim's case and the drive for priority with an forthcoming publication by Pierre Janet already on the horizon (of which Freud was aware). One point that I think Hirschmüller underplays is Breuer's prominence and personal stature and connections in the medical world in contrast with the still-young Freud's marginal and at times combative position and persona (e.g., Breuer's election to the Akademie der Wissenschaften in 1894 in contrast with Freud's contested work on cocaine and male hysteria of the 1880s). While Breuer and Freud collaborated closely in the late 1880s, it's quite clear that Freud didn't significantly affect Breuer's portrayal of the case of Anna O. The introduction, four-stage scheme, and some moments of reflection were preserved between the Bellevue and published versions. Moreover, much of the language remained the same with some passages repeated nearly verbatim.

> if success should be achieved. Then she was extremely calm and the next day amiable, docile, industrious, even cheerful; but on the second day she was increasingly moody, contrary, unpleasant, and this increased still more on the third day. When she was in this mood, even during hypnosis, it was not always easy to induce her into talking out [*Aussprechen*]. For this procedure, she had invented an apposite, serious name, the "talking cure," and a humorous one, "chimney-sweeping" [both in English]. She knew that after the talking out she would lose all her stubbornness and "energy." And if she was in a bad temper after a longer pause, then she refused to talk [*Reden*]; I had to force the talk from her with prompting and pleading and a few tricks, such as reciting a stereotypical formula she used to introduce her stories.[53]

Both chapters go into depth on how the "talking cure," and both of its constituent parts, developed over the encounter, but several general points are important. Breuer introduced both the question of language and Pappenheim's routine evening storytelling much before the "talking cure."[54] He *did not* hypnotize her during the "talking cure"; she was rather in her regular evening state, which Breuer described using a wide variety of terms (including absence, autohypnosis, "clouds," hypnosis, somnolence). Crucially, Pappenheim became "suddenly awake" upon telling her stories.[55] Though the "talking cure" had a distinctly restorative effect, it was generic and distributed. Only later in the summer did Breuer connect it to the talking away of specific symptoms, and it took more time to develop into

53 Breuer, "Anna O," in *GW* suppl.:229 / *SE* 2:30 (translation modified; my interpolations). The account varied only slightly from the Bellevue case history. Breuer, Pappenheim case history (D 23), p. 18–19.

{"Auf dem Lande, wo ich die Kranke nicht täglich besuchen konnte, entwickelte sich die Sache in folgender Weise: Ich kam abends, wenn ich sie in ihrer Hypnose wußte, und nahm ihr den ganzen Vorrat von Phantasmen ab, den sie seit meinem letzten Besuch angehäuft hatte. Das mußte ganz vollständig geschehen, wenn der gute Erfolg erreicht werden sollte. Dann war sie ganz beruhigt, den nächsten Tag liebenswürdig, fügsam, fleißig, selbst heiter; den zweiten immer mehr launisch, störrig, unangenehm, was am dritten noch weiter zunahm. In dieser Stimmung, auch in der Hypnose, war sie nicht immer leicht zum Aussprechen zu bewegen, für welche Prozedur sie den guten, ernsthaften Namen 'talking cure' (Redekur) und den humoristischen 'chimney-sweeping' (Kaminfegen) erfunden hatte. Sie wußte, daß sie nach der Aussprache all ihre Störrigkeit und 'Energie' verloren haben werde, und wenn sie nun schon (nach längerer Pause) in böser Laune war, so weigerte sie das Reden, das ich ihr mit Drängen und Bitten und einigen Kunstgriffen, wie dem Vorsprechen einer stereotypen Eingangsformel ihrer Geschichten, abzwingen mußte."}

54 Breuer, Pappenheim case history (D 23), p. 9, 10, 18; and Breuer, "Anna O," in *GW* suppl.:224, 228, 229 / *SE* 2:25, 29, 30.

55 Breuer, Pappenheim case history (D 23), p. 18 (editor's interpolation).

a full method.[56] Of the development from "talking cure" through symptom removal into "a therapeutic-technical procedure,"[57] Breuer wrote, "It took me completely by surprise, and not until a series of spontaneous settlings had ensued did there develop a therapeutic technique out of it for me."[58] So while the outcome of the Breuer-Pappenheim case *was* a method or therapy, the "talking cure" did not begin life as one—it had to become one.[59]

These chapters do not thus engage one of the more famous and most discussed concepts from *Studien*: the cathartic method. Breuer did not use the terms *catharsis* or *cathartic* in either of his solo contributions.[60] In the coauthored preliminary communication, Breuer and Freud spoke only of a " 'cathartic' effect," achieved only with the adequate repaying or revenging of an insult.[61] Freud was the one who elaborated this into a method, first in his practice as detailed in his four case histories and then his chapter on psychotherapy. As he wrote, introducing the latter, "It would be unfair if I were to try to lay too much of the responsibility for this development upon my honoured friend Dr. Josef Breuer. For this reason the considerations which follow stand principally under my own name."[62] Of course, Breuer was involved in the broader development, working

56 Breuer, Pappenheim case history (D 23), p. 20; and Breuer, "Anna O," in *GW* suppl.:232–33 / *SE* 2:34–35.

57 Breuer, "Anna O," in *GW* suppl.:233 / *SE* 2:35.

58 Breuer, "Anna O," in *GW* suppl.:243 / *SE* 2:46 (translation modified). {"Sondern ich war aufs höchste davon überrascht, und erst als eine Reihe spontaner Erledigungen erfolgt waren, entwickelte sich mir daraus eine therapeutische Technik."} In both locations where Breuer referred to the therapeutic procedure, he used a reflexive verb with the procedure or technique as the subject, rather than saying that *he* developed it. This small but important point was obscured in the *Standard Edition*, which placed Breuer each time as the subject developing the procedure. This is no mere artifact of the translation, as the German verb *entwickeln* can also be transitive and take an object; Breuer explicitly chose the reflexive form. It is moreover no artifact of the case-history form (which under certain circumstances might prefer the passive voice), as Breuer used the active first-person on nearly every page to describe his work.

59 Breuer did use the "talking cure" to refer to the method of talking away symptoms. Breuer, "Anna O," in *GW* suppl.:236, 238 / *SE* 2:38, 40.

60 This observation was in fact the germ of my entire interest in Breuer and the case of Anna O. When I first read it, I searched over and over for catharsis in her case, since that was ostensibly the germ of *their* entire project. But it's not there! The term was also not in the Bellevue case history or in Breuer's theoretical chapter. This is an extremely curious fact, one scarcely noted in the literature. Richard Skues is an exception in this case (as in many others), noting the fact in footnote. Skues, *History of Anna O.*, 178n4.

61 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:87 / *SE* 2:8.

62 Freud, "Zur Psychotherapie der Hysterie," in *GW* 1:253 / *SE* 2:256. {"Es wäre unrecht, wenn ich versuchen

closely with Freud throughout, and abreaction—the particular process of removing an affect in the cathartic method—was a significant topic in his theoretical chapter.[63] Yet we have no evidence tying Breuer to the theoretical and therapeutic development of the "cathartic method" and, as I've emphasized, the "talking cure" was far from a fully elaborated method of its own.[64] So in what follows, the cathartic method per se plays no part.

The reception of the "talking cure" took time to set in. None of the reviews of *Studien* mentioned the term;[65] their focus was primarily on the overall picture, both theoretical and practical, as outlined in the preliminary communication and then the two concluding chapters, rather than the case histories.[66] They also did not mention the German gloss

---

wollte, meinem verehrten Freunde J. Breuer zuviel von der Verantwortlichkeit für diese Entwicklung aufzubürden. Die folgenden Ausführungen bringe ich daher vorwiegend im eigenen Name."}

63 The editor of the *Standard Edition* noted that both terms were first published in the preliminary communication, but Freud had used "abreaction" previously in a letter to Fließ. Breuer and Freud, "On the Psychical Mechanism of Hysterical Phenomena," in *SE* 2:8n1.

64 As part of the intersection between psychoanalysis and broader intellectual history, catharsis and the cathartic method have received a large amount of attention in the secondary literature. It is, however, puzzling to me that this is so focused on Breuer. Of course, the association of Breuer and catharsis goes back to Freud, though he varied how he spoke of the genesis and development of the cathartic method and his collaboration with Breuer, at times emphasizing collaboration and at others his divergence from Breuer; at least twice he specifically said that Breuer named it "cathartic." Freud, "Über Psychotherapie"; and "Selbstdarstellung," in *GW* 5:16; 14:46 / *SE* 7:259; 20:22; but cf. Freud, "Die Freudsche psychoanalytische Methode"; "Über Psychoanalyse"; and "Zur Geschichte der psycho-analytischen Bewegung" in *GW* 5:3–4; 8:17–21; 10:45–47 / *SE* 7:249–50; 11:22–24; 14:8–10. This all, however, should be taken as part of Freud's complicated (and often unreliable) self-fashioning. In the introduction to *Studies on Hysteria* in the *Standard Edition*, James Strachey said that Breuer was possibly the source for both *catharsis* and *abreaction*, despite Freud's known uses of the latter in his letters to Fließ. Strachey, introduction to *Studies on Hysteria*, in *SE* 2:xxii. For the main statements on the relation between Breuer and *catharsis*, focusing primarily on evidence from after *Studien*, see Hirschmüller, *Josef Breuer* [English], 155–59; Leuzinger, *Katharsis*, 22–30.

65 Berger, "Chirurgie der Seele"; Bleuler, "Studien über Hysterie [review]"; Clarke, "Studien über Hysterie [review]"; Infeld, "Studien über Hysterie [review]"; Jentsch, "Studien über Hysterie [review]"; Strümpell, "Studien über Hysterie . . . [review]"; and Umpfenbach, "Studien über Hysterie [review]." Infeld's and Jentsch's reviews were primarily summaries, and Umpfenbach's an even briefer account focused on split consciousness. Bleuer's and Strümpell's offered brief critical assessments with their summaries (Strümpell's was focused on Breuer, and negatively so). Clarke's (in English for *Brain* in London) was the longest and most in depth. Berger's was surely the most interesting, praising the book for his continuation of the tradition of "literary psychology," in both form and sense for the soul. Havelock Ellis soon discussed *Studien* at some length in an essay review, but also did not mention the "talking cure." Ellis, "Hysteria in Relation to the Sexual Emotions."

66 Clarke and Ellis did discuss some of the case histories, though not Pappenheim's. Clarke, "Studien über

given by Breuer in parentheses after the first mention of the "talking cure"—*Redecur*.[67] The "talking cure" seems to have only come to prominence once Freud referenced it directly in the published versions of his Clark lectures from 1909, which coincided with the second edition of *Studien* and the general growing prominence of Freud and psychoanalysis.[68] The Clark lectures appeared simultaneously in English and in German in 1910, with the English one in the *American Journal of Psychology* and the German in a pamphlet that already had a second edition two years later and a number of further

Hysterie [review]"; and Ellis, "Hysteria in Relation to the Sexual Emotions." With the focus on the preliminary communication and summary chapters, several of the reviews did of course talk about the cathartic method.

67 Breuer and Freud, *Studien über Hysterie*, 23. The gloss is of course excised from the English *Standard Edition* but remains in the *Gesammelte Werke*: Breuer, "Anna O," in *GW* suppl.:229. *Redekur* itself (with *k* replacing *c* of *Cur* following the 1901 orthography changes) was a neologism based around terms like *Badekur* (*spa therapy*). This peculiar gloss offered a particular understanding of *cure*—not simply healing but a directed course of treatment. More on this gloss and its world of nineteenth century cures, which has received almost no attention in the literature, in the chapter on balance. Breuer's gloss left so little an imprint that a well-considered recent account of conversation and therapy *reglosses* the "talking cure" as *Sprach-* and *Sprechkur*. Lang, *Das Gespräch als Therapie*, 8, 18. The only contemporaneous instance of *Redekur* I found via OCR-searching was the name of a racehorse, as reported in the *Reichspost*, 20 September 1899, 7. In Vienna on the previous Sunday, the races at the low-lying Friedenau racecourse next to the famous Prater park went off, despite a flood threat from the high waters of the nearby Danube. At the day's second race, a 1,100-meter handicap for two year olds with a 2,400 Kronen purse, the horse Redecur finished in a dead heat with two other horses, paying out 44 Kronen on a pari-mutuel bet. The three winners were owned by one Mihály Károlyi, a Hungarian count and later a significant player in Hungarian politics. He had been born with a "defect of the palate"; it was surgically fixed by Theodor Billroth in 1889, which then required its own treatment: a *Redecur*. "When I recovered" from the surgery, Károlyi wrote in his memoirs, "there followed a strenuous and exhausting series of exercises in speech, most exasperating and nerve-racking, but they increased my will-power. It was a valuable training for the struggle against the setbacks of later years. It was often said that I was given a golden palate. I may have been born with a golden spoon in my mouth—but not a golden palate." I haven't been able to consult the original Hungarian version, so I do not know what term he used for these exercises half a century after he seemingly named a horse after them. Károlyi, *Memoirs of Michael Karolyi*, 21.

68 The first English translations of *Studien über Hysterie*, also from 1909, did not include Breuer's solo contributions (a full translation only appeared in 1936). Strachey, introduction to *Studies on Hysteria*, in *SE* 2:ix–x. So distribution of the term in nonscientific Anglophone contexts almost certainly derived from the Clark lectures. I found two earlier citations to the "talking cure" in Anglophone literature. The first, by the English psychical researcher Frederic W. H. Myers, who had already taken note of the preliminary communication in 1893, came in an extended summary of *Studien*, while the second was a passing reference to new theories and treatments of hysteria by the American psychologist Stanley Hall. Myers, "The Mechanism of Hysteria," 12–15; Myers, *Human Personality* 1:55; and Hall, *Adolescence* 1:279.

editions over the next decade.[69] Over the following years, the term showed up across a variety of locations, in German and in English, scientific and popular.[70]

In the second half of the twentieth century, the "talking cure" took on a new life.[71] On one side, there was the literature sparked by Ernest Jones's revelation of Pappenheim as Anna O. and his version of the Breuer-Pappenheim encounter; the renewed attention on the person who actually said "talking cure" probably contributed significantly to the term's second life.[72] On the other side, there was a transformation: the "talking cure" became first

69 Strachey, "Editor's Note to *Five Lectures on Psycho-analysis*," in *SE* 11:3–5.

70 These included summaries of Freud's lectures (*Mind* 19:599), semi-technical introductions to psychoanalysis (Kaplan, *Grundzüge der Psychoanalyse*, 58), and summary assessments of psychoanalysis in scientific publications (*Zeitschrift für Pathopsychologie*: Mittenzwey, "Darstellung und Kritik der Freudschen Neurosenlehre," 385; and *The Lancet*: Ormeron, "Modern Theories Concerning Hysteria," 1259) and popular political ones (*Sozialistische Monatshefte*: Stœber-Damm, "Freuds Psychoanalyse," 61). One popularly aimed Anglophone work, which started life in a mass illustrated magazine, *Appleton's Magazine*, was revised and expanded for a second edition in 1916 (eight years after the first); in the revision, some brief references to psychoanalysis were expanded to a full appendix, including Freud's story of Breuer and the "talking cure" (Bruce, *The Riddle of Personality*, 203).

The two most interesting references, going beyond simple summaries of Freud, were in an article by the Berlin sexologist Magnus Hirschfeld, "Die Vergeistigung des Geschlechtstrieb" (1911; The mentalization of the sex drive) and a textbook on psychology and stammering by the Colorado psychiatrist Charles S. Bluemel (1913). While the former foreshadowed the later generic metonymy of using "talking cure" for psychoanalysis and talk therapy at large, the latter inadvertently connected it to its precursor use with Pappenheim's language disorder. Hirschfeld, "Die Vergeistigung des Geschlechtstriebs," 418; Bluemel, *Stammering and Cognate Defects of Speech* 2:250–51.

71 For a rough basis for this claim: a search for the "talking cure" on Psychoanalytic Electronic Publishing (PEP Web) yields 1,550 results, only nine of which come from before 1950 (four of which are Breuer's original use and then Freud's citation thereof in 1909, each in both German and English editions). PEP Web, search, s.v., "talking cure," accessed 5 February 2021, http://www.pep-web.org/search.php?fulltext1=%22talking+cure%22&zone1=paragraphs&zone2=paragraphs&viewperiod=week&sort=year,a. N.b., PEP Web indexes many more searchable items from after 1950 than before (113,163 versus 23,992) and its dating is somewhat wonky; but the results do nevertheless show something about the terms popularity. The vast majority of hits come in fact since 1990 (1,324), indicative of increased and repeated cross-references, many to significant works from the 1970s and 80s.

72 The first two significant texts reconsidering the case of Anna O. in light of her newly known identity as Pappenheim came out in 1961 (Jensen cited "chimney sweeping" but not the "talking cure" until her essay was revised for a translated version in 1970). Karpe, "Anna O's Final Identity"; Jensen, "Anna O.: Ihr Späteres Schicksal"; and Jensen, "Anna O—A Study of Her Later Life." The field was then fortified by the publication of Dora Edinger's collection of Pappenheim's writings with a short biographical introduction (first in German in 1963 then in English in 1968). Pappenheim and Edinger, *Leben und Schriften*; and Pappenheim and Edinger, *Freud's Anna O.* But, as Elizabeth Loentz found, Edinger was unable to place her project with a publisher when it was framed around Pappenheim the feminist and did not have details of her other life as Anna O. Edinger then added those details and repackaged the work as a source for psychoanalysis. Loentz, *Speak the Truth*, 208. Finally, two works published in 1972 gave the literature its

a popular metonym for all of psychoanalysis and before being loosed from psychoanalysis and turning into a generic signifier for any type of talk therapy.[73] But this all lay far in the future when Pappenheim first uttered those words in 1881.[74]

final spur: Ellenberger's summary of the Bellevue case history and Lucy Freeman's novelized biography of Pappenheim, bearing the same title: the story of Anna O. Each featured the "talking cure" prominently, with Ellenberger's mentioning it in the first paragraph and Freeman's using it as a chapter title; Freeman was a popular writer across genres and in 1979 wrote a long article on Pappenheim's contribution to psychoanalysis for the *New York Times* (where Freeman had once been a reporter). Ellenberger, "The Story of 'Anna O' "; Freeman, *The Story of Anna O.*; and Freeman, "Immortal Anna O." To see one example of where this all led, we can read Sidney Bolkosky's summary judgment from 1882: "His [Breuer's] quiet, sympathetic listening to what she [Pappenheim] called her 'talking cure' was a rebellion against 600 years of Habsburg tradition. She, too, was rebelling. Both ventured outside the tradition of masks and facades that hid emotion and feeling, that obscured motherliness." Bolkosky, "The Alpha and Omega of Psychoanalysis," 146.

73 We can trace this transformation roughly using just works with "talking cure" in the title, almost none of which deal with the Breuer-Pappenheim encounter. We find the "talking cure" first as a metonym for psychoanalysis in a popular guidebook, *The Talking Cure: A Concise and Practical Guide to Psychoanalysis Today* (1964) and then an academic edited volume from an interdisciplinary seminar at King's College, Cambridge, *The Talking Cure: Essays in Psychoanalysis and Language* (1986; including Colin MacCabe, John Forrester,and Jacqueline Rose). Another academic volume from the era of high theory, *The Talking Cure: Literary Representations of Psychoanalysis* (1987), deals in fact with psychotherapy more broadly, from Charlotte Perkins Gilman to Doris Lessing, but maintains a tie to psychoanalysis. The tie, now looser (psychoanalysis as ur–talk therapy), still holds in *The Talking Cure: The Science behind Psychotherapy* (1998) and *Talking Cure: Mind and Method of the Tavistock Clinic* (1999). By the 2010s, psychoanalysis is only barely a concern: *The Therapy Industry: The Irresistible Rise of the Talking Cure, and Why It Doesn't Work* (2013), *From ID to Intersubjectivity: Talking about the Talking Cure with Master Clinicians* (2014), *Theory and Practice of Focusing-Oriented Psychotherapy: Beyond the Talking Cure* (2014), *The Value of Psychotherapy: The Talking Cure in an Age of Clinical Science* (2015), and *The Talking Cure: Normal People, Their Hidden Struggles and the Life-Changing Power of Therapy* (2019). In all but one of these examples, the Breuer-Pappenheim encounter is mentioned at most in passing; Pappenheim or Anna O. is sometimes cast as Freud's patient or the neologism itself cited to Freud (*Literary Representations* was the one exception, but it only deals with Breuer-Pappenheim in summary in the introduction). Hunt, Corman, and Ormont, *The Talking Cure*; MacCabe, *The Talking Cure*; Berman, *The Talking Cure*; Vaughan, *The Talking Cure*; Taylor, *Talking Cure*; Moloney, *The Therapy Industry*; Kenny, *From ID to Intersubjectivity*; Madison, *Theory and Practice of Focusing-Oriented Psychotherapy*; Woolfolk, *The Value of Psychotherapy*; and Straker and Winship, *The Talking Cure*. There's even a 1990s psychothriller told from the perspective of a therapist, overtly naming one of the genre's most persistent tropes (think of the films *Dressed to Kill* and *Basic Instinct*). Hoskyns, *The Talking Cure*. Of course, there are also still recent examples that continue to consider psychoanalysis closely (though not Breuer-Pappenheim), e.g., Farber, "Free Association Reconsidered"; and Heaton, *The Talking Cure*.

74 N.b., although many psychoanalysts took part in this post-Freud discussion of the "talking cure," the term did not become a part of the institution of psychoanalysis, Cf. the single passing reference to the term in Laplanche and Pontalis, *The Language of Psycho-analysis*, s.v. "Transference," 460.

Historiographical

As mentioned, Richard Skues and Elizabeth Loentz have both recently undertaken the heroic effort to summarize and critically asses the mass of literature on the Breuer-Pappenheim encounter, but from different perspectives: Skues from that of Freud and the history of psychoanalysis, and Loentz from that of Pappenheim and her literary works and legacies.[75] Skues's *Sigmund Freud and the History of Anna O.* reconsiders the case from the ground up, with extreme attention to the material facts of the matter. He then looks at the secondary literature, showing how, despite their cross-purposes (Jones a Freudian, Ellenberger a revisionist), Jones's and Ellenberger's versions ultimately fused to into the underlying thesis of the main story in circulation today: the treatment was a failure, and Breuer then mislead readers of *Studien*.[76] Ultimately, Skues shows that the extant evidence does not substantiate this thesis; he further argues that most subsequent literature is constrained by the Jones-Ellenberger legend, and thus inadequate in its approach to the Breuer-Pappenheim encounter. Despite this criticism, he assesses the literature with great equanimity, including versions (e.g., retrospective diagnosis, overtly partisan debunkers)[77] that are broadly outside mainstream historiography of medicine.[78] By and large, I find

75 Skues, *History of Anna O.*, part 2; and Loentz, *Speak the Truth*, chap. 6, 7.

76 Skues shoes how the Jones-Ellenberger fusion works for many positions: for the Freudians, Breuer missed the power of sexuality and transference, which were then recognized by Freud, whereas for the anti-Freudians, the first step of psychoanalysis was already a failure and deception. Skues, *History of Anna O.*, 166.

77 On the question of retrospective diagnosis, Skues makes an important point: While mainstream historians of medicine see retrospective diagnosis as anachronistic and foolish (and these at best), this discounts how much historiography itself *depends* on new ideas and knowledge and their employ in changing our perspectives on the past. So we have to at least take accounts that depends aim at retrospective diagnosis seriously, even if it is not our own aim. Skues, *History of Anna O.*, 10–11.

78 On this count, I should note Skues's exemplary handling of the two major proponents of the claim that Pappenheim was simulating. Fritz Schweighofer and Mikkel Borch-Jacobsen. On Schweighofer, Skues highlights his contributions promoting the importance of Pappenheim's neuralgia and drug addiction, though Skues ultimately rejects Schweighofer's simulation conclusion. In contrast, he gives little credit to Borch-Jacobsen, who wrote probably the best-known recent Anglophone work on the case and stands as debunker par excellence. Borch-Jacobsen builds on Schweighofer's simulation thesis, but is more concerned with undoing what he claims is the myth supposedly built on Pappenheim's miraculous cure. I stand with

his thinking creative and enticing and, with a few small quibbles, largely convincing;[79] for anyone curious about Freud's role in this history, including the myth of the hysterical pregnancy, there is no better source than Skues.[80]

Skues does neglect one significant area of literature: works focusing on Pappenheim herself.[81] Loentz, however, remedies this in *Let Me Continue to Speak the Truth: Bertha Pappenheim as Author and Activist*. The book itself does not deal with the Breuer-Pappenheim encounter at length, offering instead a critical appraisal of Pappenheim's later

---

Skues in his assessment: despite Borch-Jacobsen's claims, he ultimately recapitulates the very myth making he accuses others of perpetuating, substantiating his account primarily with hearsay, speculation, and predetermined conclusions. On all matters, Skues is more sensitive to matters of fact, more detailed in his contextual analysis, and more creative in his resulting interpretations and arguments. Schweighofer, *Das Privattheater der Anna O.*; Borch-Jacobsen, *Remembering Anna O.*; and Skues, *History of Anna O.*, 128–32, 140–47.

79 My main quibble is that Skues's emphasis on hysteria and cure asks for a level of conceptual and practice clarity that was not possible to sustain during the day-to-day life of a house physician, especially during such an intense and prolonged treatment. Breuer himself was searching throughout the case, and explicitly divvying up Pappenheim's symptoms as hysterical or not or distinguishing between reconvalescence and full and complete cure was neither possible for nor desired by Breuer and is thus not possible in retrospect either. Skues does recognize that Breuer was a practicing physician, making do with hysteria as a diagnostic category to collate a group of unclear symptoms, but he nevertheless pushes hard to divide Pappenheim's symptoms into the hysterical and otherwise. He also downplays the language disorder, which seems to me a mistake if we are trying to understand Pappenheim's illness overall and the Breuer-Pappenheim encounter more broadly. Nevertheless, such foibles probably emerge necessarily out of such close attention to such documents with the aim of interrogating the broader legacy, which has so poorly portrayed and interpreted them. My version might result in such issues in the eyes of a close reader too.

80 For the curious: Skues traces all sources of the pregnancy story back to Freud (distinct versions by Marie Bonaparte, A. A. Brill, C. G. Jung, and Otto Rank, and the composite one by Jones). He emphasizes that none of these stories in fact deal with Pappenheim's subsequent condition or institutionalization and that there is no evidence that Pappenheim had a crisis (such as a hysterical childbirth) prompting the end of treatment and then institutionalization. Freud's own late letters to Stefan Zweig and Arthur Tansley do deal with her subsequent history, but they were written half-a-century later and do not accord in important ways with the contemporaneous evidence we have. Rather than focus on speculation about something with no contemporary evidence—the hysterical pregnancy—he asks *why* Freud ended up concocting the version he did. He concludes that Freud purposefully created a hypothetical reconstruction, weaving his his later theories of sexuality etiology and transference around his preoccupation with aspects of the Breuer-Pappenheim encounter (mainly the conclusion), which he had only been told of afterwards and which as a secondhand story itself was a long-ago memory; this all then traveled through the back channels of psychoanalysis to form what we have today. Skues, *History of Anna O.*, 58–68, 106–10, 156.

81 On a possibly related point, I have to note that Skues calls Pappenheim by her first name only, Bertha (as did so many others in the literature, including Ellenberger, Hirschmüller, Forrester, and Borch-Jacobsen). Why? This patronizing practice seems even more offensive considering exactly what was at stake: Pappenheim's struggle to become who she was and her expression of this in a treatment she herself initiated and named: the "talking cure."

literary output as it expressed her negotiated identification: between German and Jew, feminist activist and traditionalist, social worker and critic.[82] To this, she adds two chapters on how Pappenheim's life story has been appropriated, reinterpreted, and deployed anew in both nonfiction (scholarly and otherwise) and fiction (written, dramatized, and otherwise). She emphasizes the paucity of contemporary evidence from the encounter not to correct and expose different accounts but to show how the different versions in fact express something about the author themselves. This is framed via Stanley Fish's idea of the "bad game" of biography: For Fish, biography is an inauthentic sham, in which autobiography is truly the main enterprise. Loentz notes that feminist critics have undertaken such a "bad game" on purpose, building on the imbrication of author, subject, and reader to create something beyond a disinterested biography. With this framework, Loentz shows how successive biographers of Pappenheim, including Dora Edinger, Lucy Freeman, Melinda Given Guttmann, and Marianne Brentzel, have reworked such a "bad game"; Guttmann and Brentzel, the most recent biographers, both in fact claim to be Pappenheim's first biographer, despite the work of their many predecessors.[83]

Building on Skues, I pay close attention to the extant material evidence while sequestering the legend (via Freud, and then Jones-Ellenberger); at the same time, I basically leave Freud aside and focus on a particular question in the Breuer-Pappenheim case (the "talking cure") rather than the case overall. Building on Loentz, I emphasize Pappenheim's literary work while attempting to circumvent the "bad game" of biography,

82 Moreover, Loentz is attentive both to the complexities of Pappenheim's Jewish childhood and her later religious perspectives.

83 Pappenheim and Edinger, *Leben und Schriften*; Pappenheim and Edinger, *Freud's Anna O.*; Freeman, *The Story of Anna O.*; Guttmann, *The Enigma of Anna O.*; and Brentzel, *Anna O.—Bertha Pappenheim*. As a standard biography, Brentzel's is probably the most coherent and reliable (Guttmann's is readable but not reliable); hers is still, however, often reliant on Ella Jensen, whose early biography did much of the legwork in establishing many of the facts of Pappenheim's life. Jensen, *Streifzüge . . . Bertha Pappenheim*. Hirschmüller also did much of the legwork on Pappenheim's background, early life, illness, and early years in Frankfurt. Hirschmüller, *Josef Breuer* [English], 95–132.

moving away from the standard psychobiographical readings of her children's stories. But I try to build on this and say something substantive about Pappenheim's illness and encounter with Breuer, which Loentz mostly leaves aside.

Finally, a note on Albrecht Hirschmüller, whose book *The Life and Work of Josef Breuer: Physiology and Psychoanalysis* remains bar none the critical standard on Breuer, the Breuer-Pappenheim encounter, Pappenheim's early life, and the literature up to its publication in the late 1980s.[84] Without his legwork in finding and publishing a number of relevant documents, these chapters would not have been possible. I ultimately see these chapters as complementary to his book—to his biographical and contextual approach, I work via concepts and close readings, to his light psychoanalytic bent, I add a phenomenological perspective. Yet I still diverge from Hirschmüller on a number of counts. While I deal with the smaller but significant issues in footnotes, two broader issues merit mention here.

First, Hirschmüller emphasizes Breuer's relationship with Freud overall; he thus frames Breuer's psychopathological work in *Studien*, as well as his persona in general and his other physiological work, in terms of Freud's life and work. There are some good reasons to do so, and it certainly makes sense in terms of the then-existing literature, but I have already outlined why I choose to leave Freud out. Second, Hirschmüller interprets Breuer's life and work via the lens of his worldview and its embodiment in his character. This worldview was *teleological*, aimed at determining the mechanism of various phenomena (physiological and psychopathological); ultimately, *regulation* emerged as the leitmotif connecting the various mechanisms under investigation. Regulation was in fact embodied in Breuer's character, as seen via his classicist mottoes, one Greek and one Latin: τύχη (*tyche*; "fortune," "chance," "fate") and *suum esse conservare* ("preserve his being").

84 Hirschmüller's book was his dissertation and first published in German before being translated (and slightly revised) in English. Hirschmüller, *Josef Breuers* [Deutsch]; and Hirschmüller, *Josef Breuer* [English].

"Τύχη" was the title of one of Goethe's "Urworte Orphisch" ("Orphic Primal Words"), a cycle of five stanzas from 1820, and was glossed further by Breuer as "upbringing, milieu, reading, vocation, experience"; *suum esse conservare*, more self-explanatory, came from Spinoza's *Ethics*.[85] This is an effective interpretation, to be sure, but takes self-proclaimed ideology and worldview to be explanatory, linking his life and his work, when they in fact call out for more critical consideration.[86] I attempt to provide such scrutiny via close attention to one specific concept—*balance*—in Breuer's work and one particular everyday experience—*having a conversation*—in his life.

Biographical: Josef Breuer (1842–1925), Bertha Pappenheim (1859–1836)

Born in 1842 to Bertha (née Semler) and Leopold Breuer, Josef had in many ways the prototypical upbringing of an upwardly mobile second-generation Viennese Jew.[87] His father was a religious leader and teacher in Vienna; his mother died during his childhood. He attended the Akademisches Gymnasium, one of the first gymnasiums in Vienna established following the modernizing Bonitz-Exner reform plan in the wake of 1848; he then entered the university in 1858; though he knew he wanted to become a doctor, he followed his father's advice that he should first receive a wider education and spent a

85 Both of these mottoes were used by Breuer in a letter to the philosopher Franz Brentano, April 1903, in D 12, Hirschmüller Documents, Deu. 315–16 / Eng. 248.

86 Every self-respecting Germanophone scholar of the late nineteenth century had a worldview and attributed to it great significance. It seems to me a mistake to take this on face value. For an overview of the worldview concept (including both *Weltanschauung* and *Weltansicht*) in nineteenth-century German thought, outlining three major positions (that of Friedrich Adolf Trendelenburg, Wilhelm Dilthey, and Wilhelm Windelband), see Kreiter, "Philosophy as Weltanschauung."

87 Breuer recorded the basic details of his professional life in a curriculum vitae for the Viennese Akademie der Wissenschaften in 1923. This was subsequently published after his death in a small pamphlet (plus a short obituary by Hans Meyer), a copy of which is in the Breuer collection at the Library of Congress; a slightly abbreviated version was translated into English and published in 1953, with the rise of publications on the history of psychoanalysis. Hirschmüller fleshes out the details from Breuer's publication and draws on Breuer's limited Nachlass to elaborate the personal side of his biography. My version draws from Breuer's CV and Hirschmüller's elaboration. "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers; Breuer, "Autobiography"; and Hirschmüller, *Josef Breuer* [English], part 1.

year hearing philosophical, economic, and historical lectures. After his medical studies under, among other notables, the anatomist Josef Hyrtl and the physiologist Ernst Brücke, he finished his medical degree in 1864 and soon became an assistant at the university's General Hospital. Though he wished to pursue an academic career, he was stymied for a number of reasons. In 1871, after the chair of his department died and he was not appointed successor, Breuer set up his own private practice. Though his practice bloomed, he continued to struggle for an academic career, pursuing physiological research at home in his spare time, which led to receiving his habilitation in 1875. He ultimately resigned his position as Privatdozent in 1885, after being unable to move up to a professorship.[88] Based on his physiological research, however, he was successfully nominated by the physicist

88 Hirschmüller goes into depth on the reasons for Breuer's inability to secure an academic position (specifically on the structural issue of lack of patients and the specific question of what role anti-Semitism played) and his subsequent decision to give up the *venia legendi* (teaching authorization) and resign as Privatdozent, which was extremely rare. Hirschmüller, *Josef Breuer* [English], 23–29. The only note I would add is that it is striking how many of Breuer's genus—Viennese Jews in the world of experimental medicine during the era of full emancipation—*stayed* in Vienna, regardless of whether they were able to pursue a full academic career there or not. Mobility among both young strivers and (though to a lesser extant) more established researchers was a hallmark of Germanophone university life in the nineteenth century. Hirschmüller notes that Breuer was offered a position in Innsbruck in the 1870s but turned it down; he thus contrasts Breuer with colleagues such as Richard von Krafft-Ebing and Julius Wagner-Jauregg, who both spent a spell in Graz before coming back to Vienna. Ibid., 26, 335nn149–51. But neither of them were Jews, and Krafft-Ebing wasn't Viennese. The world of late-nineteenth-century bildungsbürgerlich Jews in Vienna was truly a universe unto itself, quite distinct from that of Berlin let alone Heidelberg and other such university towns, and perhaps this affected Breuer's and others' ability to envision themselves elsewhere. The professional aspects of this way of thinking form a subplot in Arthur Schnitzler's play about a controversy at a Jewish-dominated polyclinic in Vienna, *Professor Bernhardi* (1912). The vice director, the German nationalist Dr. Ebenwald, suggests his friend Dr. Hell from Graz to take over a soon-vacant position at the clinic; the director, the Jewish Dr. Bernhardi, mocks Dr. Hell's accomplishments and career path in the provincial town. Compare Freud, who overtly hated Vienna for most of his life but who only considered England and America as destinations in the 1880s and 90s. Jones, *Sigmund Freud* 1:322–23. The importance of mobility in Germanophone universities of the nineteenth century is seen easily in two standard works: Boring, *A History of Experimental Psychology*; and Jungnickel and McCormmach, *Intellectual Mastery of Nature*. Erna Lesky considers this question specifically with regard to physiology, noting that "the somewhat younger Austrian physiologists had to bide their time because of the few chairs available in the country." Lesky, *Vienna Medical School*, 481. But this limitation didn't of course prevent two of Breuer's teachers, the Berliner Ernst Brücke and then the Saxon Ewald Hering, from building their careers in the Habsburg Empire. A better explanation is needed to explain why Breuer and others of his ilk didn't seek appointments elsewhere.

Ernst Mach and the physiologists Ewald Hering and Sigmund Exner as a corresponding member of the Akademie der Wissenschaften in 1894.

As a family physician, Breuer was extraordinarily popular and successful, becoming the house doctor to many of his former teachers and colleagues and a number of Vienna's Jewish elite.[89] His two most famous patients were the novelist Marie von Ebner-Eschenbach, who was both a patient and dear friend and with whom he maintained a long correspondence, and of course, Anna O., as Pappenheim was known in *Studien*; his relationship with each of them is a major subject of these chapters. He married Mathilde Altmann in 1868, with whom he had five children and a "thoroughly happy" household.[90] This happy and lively atmosphere pervaded not only his familial but also his social and professional lives, which were quite intertwined.[91] Such intertwining was common in the milieu, but Breuer's persona and approach to doctoring gave it a particular charge; this charge, which undergirds my conjoint approach to his social life and his house doctoring in these chapters, was described by his daughter-in-law: "I knew such a large number of older people who were his patients—the majority of whom paid nothing—and who, who also had this feeling of happiness when he was there. Just his presence, his way. . . . There was an old lady, with whom we were all close friends. She had lived out there in Döbling [a suburban district] and *the* joy of her life was when he came."[92]

89 Hirschmüller, *Josef Breuer* [English], 31–35.

90 "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers, p. 24.

91 This atmosphere and intertwining, as well as Breuer's role in inculcating them, are attested by an address given by the physiologist Sigmund Exner upon Breuer's seventieth birthday, establishing an endowment in his name, as well as interviews conducted by the Sigmund Freud archives with one daughter, one daughter-in-law, and a great nephew by marriage. Sigmund Exner, address on Breuer's seventieth birthday, D 14, Hirschmüller Documents; and interviews by K. R. Eissler with Bertha Hammerschlag, 1951, box 115; Hanna Breuer, 1954, box 126; and Ernst Hammerschlag, n.d. [ca. 1950?], box 115, Freud Papers. Hirschmüller summarizes his biographical account by noting that "the reports are so unanimous and present such a positive picture of his personality that even when we discount the eulogisms normally found in obituaries and the fact that the witnesses are members of his family and his friends there is hardly any reason to revise the original comments." Hirschmüller, *Josef Breuer* [English], 34–35.

92 Hanna Breuer, interview by K. R. Eissler, 1954, box 126, Freud Papers, p. 28 (ellipsis in original; my interpolation). {"Ich hab' doch eine Menge ältere Leute gekannt, die seine Patienten waren,—meistens

Born in 1859 to Recha (née Goldschmidt) and Siegmund Pappenheim, Bertha too had a prototypical upbringing of Jewish girls in Vienna at the time, though hers—that of a "daughter of high standing" (*höhere Tochter*), as she later put it herself—[93]was of a couple of classes higher than Breuer's.[94] While the Pappenheims had only relatively recently made money in produce, the Goldschmidts were an old banking family from Frankfurt. Following the patriarch, the household was strictly Orthodox, with additional rules and expectations for young girls. Pappenheim nevertheless attended a Catholic school, one of the few options for girls in Vienna at that period, where she learned English, French, and Italian. Whatever path she was on was interrupted in 1880, when first her father and then she took ill; in November, Breuer was called in to attend to her persistent cough, starting the encounter that led to their posthumous fame. In 1888, she moved to Frankfurt, the longtime seat of her mother's family, and by 1895 had started three interrelated vocations that continued for the rest of her life: writing, social work, and feminist organization. These vocations centered on the lives of girls and young women, primarily Jewish orphans, often from Eastern Europe. She wrote fairy tales and political tracts for and about such

---

solche, die nichts gezahlt haben—und die, die auch dieses Glücksgefühl gehabt haben, wenn er da war. Einfach seine Anwesenheit, seine Art. . . . Es hat eine alte Dame gegeben, mit der wir alle sehr befreundet waren. Die hat in Döbling draussen gewohnt und *die* Freude ihres Lebens war, wenn er gekommen ist."}

93 Pappenheim, "Gedanken über Sozialarbeit," in "Bertha Pappenheim: Zum Gedächtnis," 11. The term *höhere Tochter* (lit., *higher daughter*), based primarily on her own use in this later essay, is often used to describe Pappenheim's youth and upbringing. The term had significant purchase over the nineteenth century, identifying the daughters of the burgeoning upper classes; their upbringing balanced an newer emphasis on education with continued (even growing) expectations around women's obligations in the home and thus to marriage at a certain age. For a collection of relevant primary material with a critical apparatus, though focused on the northern city of Bremen, see Drechsel, *Höhere Töchter*.

94 As mentioned, Pappenheim's biography has been a contentious affair since Dora Edinger tried publishing her short collection of Pappenheim's works, with a biographical introduction, in the 1950s. Almost no autograph material survives from her years in Vienna, until 1888, and little from others about her then; much of her later material, including lengthy correspondence, was given by Pappenheim to her close friend Hannah Karminski, who gave it to another friend before she was deported by the Nazis to Auschwitz. Karminski then died, and the materials were destroyed during a bombing. Nevertheless, the work of Edinger, Ella Jensen, Albrecht Hirschmüller, and, most significantly, Elizabeth Loentz has yielded a large body of work, both published and unpublished. Loentz, *Speak the Truth*, 201–3. My account here follows Hirschmüller and Brentzel.

girls, and founded the national Jüdischer Frauenbund (1904; Jewish women's association) and a home for at-risk girls in Neu-Isenberg (1907), just outside Frankfurt, where she worked until her death in 1936.[95]

In 1951, toward the end of her life, Breuer's daughter Bertha Hammerschlag remembered his telling her "that he stumbled ~~a couple of times~~ three times over things (Anna O, the semicircular canals)."[96] My chapters take these stumbles together: first his encounter with Pappenheim and their conversations and then placing his investigation of this encounter when it happened—between his two spells spent investigating the inner ear (1870s, 1890s).[97]

95 Hirschmüller, *Josef Breuer* [English], 98–121; and Brentzel, *Anna O.—Bertha Pappenheim*.

96 Bertha Hammerschlag, interview by K. R. Eissler, box 115, Freud Papers, p. 2. {"Breuer hat ihr später gesagt daß er ~~ein paar Mal~~ dreimal über Dinge gestolpert ist (Anna O, Die Bogengaenge)."} Hammerschlag was about eighty at the time of the interview, which covered her memories of her father, Freud, their relationship, Pappenheim, and other miscellanea from her youth. Hammerschlag's brief memory of Pappenheim, concluding with the quoted statement, confirms one of the more vivid stories recounted in Lucy Freeman's fictionalized biography of Pappenheim: that Breuer once took a carriage ride with both Berthas, his daughter and his patient, during which Pappenheim experienced something like her absences or other symptoms and subsequently only remembered the small bunch of violets worn by the carriage driver. Freeman, *The Story of Anna O.*, 26. Of the three interviews with Breuer's descendants done for the Freud archives, one was closed until recently (2016), the one with Hanna Breuer, a daughter-in-law. But the interview has nothing scandalous or even particularly enlightening about the encounter with Pappenheim. Hanna Breuer merely recounted the story per Jones's version, describing it as "entirely new" to everyone. Hanna Breuer, interview by K. R. Eissler, 1954, box 126, Freud Papers, pp. 14–15. She was, nevertheless, frustrated by Jones's portrayal of Breuer's relationship with Freud and, after expressing this to Eissler, wrote to Jones directly. Hanna Breuer to Ernest Jones, 21 April 1954, in Borch-Jacobsen, *Remembering Anna O.*, appendix 3.

97 There is no explanation for the cross-out of "a couple of times" in favor of "three times" and the interview moves on to another topic immediately. The pen and handwriting were the same for the cross-out and replacement as the original, so it seems to have been done in the moment. The interview is recorded informally and by hand; the transcription thus seems to have happened live in person, unlike most of the Eissler interviews for the Freud archives, which were typed from an audio recording. To my mind, the only possible explanation for the cross-out is that Breuer had two distinct periods of physiological work on the semicircular canals—in the early 1870s and then again from the late 1880s onward (mostly concentrated in the 1890s).

4 BREUER IN CONVERSATION

In September or October of 1882, having been for several months at the Bellevue Sanatorium in Kreuzlingen, Switzerland, Bertha Pappenheim set out a brief account of one of her symptoms: the inability to speak or understand German, her native language. It was an account of her language disorder not only in content but also in form: she wrote in English using Latin script (in contrast with her usual German *Kurrent* script). Despite her spelling mistakes and mildly awkward word choice and phrasing, she wrote with confidence and facility.[1] The account is extremely striking and worth quoting entirely:

> I, a native German girl, am now totaly deprived of the faculty to speak, to understand or to read German. This symptom lasted during the time of a heavy nervous illness, I had to go through, in permanence longer than a year; since about 4 months it only returns regularly every evening. The physicians point it out as something very strange and but rarely to be observed; therefore I will try to give, as well, as a person who never has made any medical studies, [*insert*] can do, [*end insert*] a short account of my own observations and experiences considering this terrible estate.
>
> It appears quite suddenly without the slightest transaction in the very moment I recline in my bed, independend from the hour, which I have varied already between 9 o'clock in the evening till 1 p.mn. Two days I had [*insert*] once [*end insert*] been obliged to stay in bed for some other littl unease, and then the phase begun at 10 o'clock. For some hours then I ame perfectly

1 In terms of Pappenheim's mistakes and phrasing, it is difficult from a present perspective to distinguish which were Germanisms, which were artifacts of her having learned English as a second language, and which were possibly related to her broader language disorder. Regardless, her general competence with English was further evidenced by her handwriting, which is fairly neat and well formed and has only two annotated inserts and no strikes-through. The inserts seem to indicate that Pappenheim had not first drafted the account elsewhere before copying it over; yet, at the same time, their scarcity and the lack of any strikes-through emphasizes her competence. Her Latin script was nonetheless still less developed and more uncertain than her exemplary *Kurrent* script, as seen by comparing her English account and her subsequent letter in German to Robert Binswanger on 8 November 1882. Hirschmüller, *Josef Breuers* [Deutsch], Abbildungen 6–7, 8–9. In the published case history of Anna O., Breuer noted that Pappenheim, when she resumed writing after her first language disorder and contractures in spring 1881, copied her Latin letters from an edition of Shakespeare and wrote with her left (presumably nonfavored) hand. Breuer, "Anna O," in *GW* suppl.:226 / *SE* 2:26. In her autograph report, it seems clear that the year plus since copying from Shakespeare had afforded Pappenheim plenty of practice (and probably allowed her to write with her favored hand).

unable to communicate anything in German, whilst the other languages, which all I have learned later, are present to my mind, and the English I can use nearly to perfection.

When the strong neuralgic pain, from which I am suffering, allows it, I mostly read a French or English book till the happy moment of my recovering to German arrives; (what never occured before midnight, seldom past 2 o'clock in the morning.) The whole going on is not accompanied from the slightest physik sensation; no pain, no oppression or giddyness are to be felt. From the point of any such symptomes the whole thing could pass very well without its being from me remarked at all, but as I do not understand my servant nor am I understood, I dayly must learn anew to find myself in the sad, bitter fact.

Considering my humour, my mental and psychic state during this time, there are some observations to be told. In the first 2 months of my sejourn here, I had shorter or longer absences, which I could observe myself by a strange feeling of "timemissing"; one told me that I used to speak with great vivacity during this absences, but since some weeks, there have been none. What I do not read I am laying, not always very quiet, occupied with my thoughts, and ame quite well able to govern them; I can reproduce the past and make plans for the future; I only get realy nervous, anxious and disposed to cry, when the but too well motivated fear to lose the German language for longer again, takes possession of me. When I have society during this phase I feel much easier, but also when I am quite alone I dont fall into heavy melancholic or hypochondric thinking.

When during this phase two other persons are talking in German, I must take trouble to fix my attention to the conversation, which is quite indifferent me. I feel sorry not to understand; but ame not interested in it. I have bin told that after some hours I get my German language through speaking it very badly.[2]

2 Pappenheim, report on her illness, [September or October] 1882, D 28, Hirschmüller Documents, Deu. 369–70 / Eng. 296–97 (my interpolations). Hirschmüller's transcription ends here, and he notes that the conclusion is missing; without having seen the original, I can't say exactly what or how much seems to be missing (it does break off at an extremely piquant moment for my analysis, and after the end of a seemingly full clause). His original German edition includes a reproduction of Pappenheim's original (which remains at Bellevue) but only of the first two pages (roughly half of the transcribed text). His editorial note (in both German and English) claims the entire document is only one sheet with two pages, though this is manifestly not true from the reproduced image. Beyond the interpolations (which he does not note), my only divergence from his transcription is to use English quotation marks rather than guillemets. Hirschmüller, *Josef Breuers* [Deutsch], Abbildungen 8–9.

Hirschmüller dates the report to about mid-September, but Richard Skues acutely notes that the chronological cues in the document ("about" four months since the return of her language disorder, two months of "timemissing" since her arrival at Bellevue, and "some weeks" since the end of the "timemissing") more likely add up to early October. Skues, *History of Anna O.*, 177n15. (N.b., the English edition of

Pappenheim touched on many though not all of the aspects of her overall illness, some of which were those that made her case so scientifically productive for Josef Breuer and in turn Sigmund Freud: language disorder, acute relationship with doctors, sleep issues, neuralgia, daily rhythms, reading and stories, "time missing" and absences, connection of past and present, self-observation and self-reflection, and affect and mood. Yet the language disorder was predominant: her inability to speak or understand German framed the whole text, determined its English form, and recurred as a topic in each paragraph.

In Pappenheim's encounter with Breuer, her language disorder was one of the more peculiar facets of her illness.[3] Breuer devoted significant time and detail to it in both case

---

Hirschmüller erroneously gives mid-1882 as the dating, which was a mistake in the translation, since the original has the more accurate mid-September.)

3 Pappenheim's language disorder included repeating and loss of words, syntactical and grammatical disturbances, mutism, the loss of her mother tongue, and more. The term *language disorder* is mine, as Breuer didn't have one single term for the bundle of linguistic phenomena. While he distinguished between its parts (notably the paraphasia, the mutism, the loss of native language), he clearly saw them as related and at times seemed to refer to them in bulk, as when he referred generally to her "language disturbances" (*Sprachstörungen*) or talked of her language failing. Breuer, "Anna O," in *GW* suppl.:233, 225, 237, 238 / *SE* 2:35, 25, 39, 40 (my translation). In the introduction of the disorder in the Bellevue case history, he narrated its aspects as a development in the following order: stuck in the midst of speaking, loss for words, grammatical breakdown, simultaneous use of multiple languages, and then mutism, followed by her return to language, but only English. Breuer, Pappenheim case history (D 23), pp. 8–9. Fritz Schweighofer attempts to parse out the specific different elements of the language disorder, revealing supposed contradictions that support his overall simulation thesis. He further connects these contradictions to the mistakes and Germanisms Pappenheim made in her autograph report to show she was composing the sentences first in German in her head before translating and writing them in English (and thus was simulating having lost her mother tongue). Schweighofer, *Das Privattheater der Anna O*, 103–8.

Contra Schweighofer, there was a debate at the time about whether aphasia could affect a mother tongue but leave a more recently acquired language accessible (or allow for that latter language to be recovered more quickly). This debate, between Théodule Ribot (mother tongue was recovered first) and Albert Pitres (most recently or commonly used language was recovered first), seems unresolved today. Pearce, "A Note on Aphasia in Bilingual Patients"; and Mehrpour et al., "Unusual Recovery of Aphasia." Such a loss of mother tongue was dramatized at the time in a shorty story by the Italian writer Luigi Pirandello. See Sghirlanzoni and Pareyson, " 'La Toccatina.' " Of course, Breuer ultimately said Pappenheim expressed *paraphasia*, not *aphasia*, one of the few significant changes between 1882 and 1895: Whereas in the Bellevue case history, he used the term *aphasia* for her disordered speech and mutism, he switched to *paraphasia* for the former and *mutism* for the latter in the publication. Breuer, Pappenheim case history (D 23), pp. 9, 11, 15, 16; and Breuer, "Anna O," in *GW* suppl.:222, 224, 225, 228, 239 / *SE* 2:22, 25, 29, 42. Without further evidence (e.g., no discussion in the theoretical chapter), it's difficult to parse what this change meant to Breuer. His description of her language disorder and specifically her grammatical dysfunction did not correspond exactly to contemporary definitions of paraphasia, which concerned the loss of words and their replacement by the wrong ones due to events in the brain. Syntactical issues such as he described, including

histories, ultimately linking it to the urscene of the illness, the snake hallucination at her father's bedside, when she tried to pray but could only find an English saying.[4] Yet it did not figure significantly in his theoretical account of hysteria. And while Breuer saw it as one of the primary hysterical phenomena, the Bellevue physician, adding his account of Pappenheim's stay to Breuer's case history, distinguished the language disorder from the main hysteria: "The evening loss of her mother tongue, also observed here, lay however completely outside the band of usual hysteria."[5] Pappenheim moreover was the only

---

malformed verbs, were more associated with paraphrasia, which was similar to paraphasia but rested on a mental rather than cerebral events (and, per Eulenburg, easily confusable for paraphasia). Eulenburg, *Real-Encyclopädie der gesammten Heilkunde*, 2 ed., s.v., "Aphasie," 1:593–96. This was, of course, a period of intense research and debate about both aphasia and hysteria, at the nexus of which stood Freud in the late 1880s. The next completely revised edition of Eulenburg, published the same year as *Studien*, described the common occurrence of hysterical aphasia, attributing it to a functional lesion; this echoed Freud's entry on hysteria for a different medical handbook, though there he said hysterical aphasia, part of the hysterical paralyses, was "more correctly dumbness," was always accompanied by aphonia, and didn't affect the ability to write. Eulenburg, *Real-Encyclopädie der gesammten Heilkunde*, 3 ed, s.v., "Aphasie," 2:36–66; and Freud, "Hysterie," in *GW* suppl.:78 / *SE* 1:47. Freud took up the matter of paraphasia in his book on aphasia as a specific cudgel in his critique of Carl Wernicke's localization program. He argued that Wernicke's account of paraphasia was not possible; but he also argued that Wernicke's use of the term was inadequate to describe certain forms of "sensory aphasia," including overabundant, disordered, and deficient speech, perhaps not unlike Pappenheim's. So maybe it was under Freud's influence that Breuer changed *aphasia* to *mutism*, as Pappenheim didn't exhibit aphonia and her writing was affected; but *paraphasia* would then be unexpected, as Freud specifically narrowed use of that term to the standard misuse of related words (e.g., *Berlin* for *Potsdam*, *pen* for *pencil*). Freud, *On Aphasia*, 13–17, 21–23. (N.b., Freud claimed that a native language was never affected while an acquired language was preserved, though his book predated Pitres's publication and he noted the paucity of relevant research. Ibid., 60.) Behind the nexus of hysteria-aphasia research was the debate on localization, which was connected to the question of whether hysteria itself was somatic or functional, neurological or psychical, with Breuer seemingly falling in the former camp (more on this question in the next chapter). On this debate, see Guenther, "The Disappearing Lesion."

4 Breuer, Pappenheim case history (D 23), p. 4; Breuer, "Anna O," in *GW* suppl.:236–38 / *SE* 2:38–40. Breuer described, in brief, the chain of events resulting in the language disorder, as attained via their talking away once the "talking cure" had become method: "Her language failed a) out of fear, since her first hallucination at night, b) since having once again suppressed a remark (by active inhibition), c) after having been unjustly scolded, and d) on every analogous occasion (mortification)." Ibid., 237 / 40 (translation modified). {"Die Sprache versagte a) aus Angst, seit der ersten nächtlichen Halluzination; b) seit sie einmal wieder eine Äußerung unterdrückte (aktive Hemmung); c) seit sie einmal ungerecht gescholten worden war; d) bei allen analogen Gelegenheiten (Kränkung)."}

5 Laupus, "Krankheitsverlauf," addendum to Breuer, Pappenheim case history (D 23), p. 24. {"Gänzlich aus der Breite der gewöhnlichen Hysterie entfiel jedoch der auch hier beobachtete abendliche Verlust der Muttersprache."} Freud later echoed this judgment, saying she "curiously enough [*merkwürdigerweise*] spoke and understood only English." Freud, *Über Psychoanalyse*, in *GW* 8:7 / *SE* 11:13 (translation mine). {"Sie merkwürdigerweise nur englisch sprach und verstand."}

patient in *Studien über Hysterie* who exhibited such a wide-ranging language disorder.[6] Pappenheim's autograph report is the most significant testament to this phenomena.[7]

We see there that the loss of German was noted by her physicians as something curious, prompting the entire effort. Despite its sudden entrance each day, unaccompanied by any other symptom or pain, it reasserted itself once she failed to understand her servant, and daily she had to "learn anew to find myself in the sad, bitter fact." The disorder was contrasted with her ability "to speak with great vivacity during this absences" while it also served as her primary motivating fear, making her "realy nervous, anxious and disposed to cry." Finally, she closed by explaining what happened when others conversed in German during such a state: "I feel sorry not to understand; but ame not interested in it. I have bin told that after some hours I get my German language through speaking it very badly."

This chapter takes as its object the very "conversation" that so dogged Pappenheim in her account: What made up this "conversation"? What in fact did it mean for her to

6 Emmy von N. did have a stammer and vocal tic, which featured not insignificantly in Freud's case history. Freud, "Emmy v. N.," in *GW* 1:110, passim / *SE* 2:57–58, passim. Peter Swales claims that Cäcilie M. (a crucial case for both Freud and Breuer, which was dispersed throughout *Studien* due to "personal circumstances," per Freud) had a similarly broad language disorder, including loss of the native language, but this is challenged by Karlheinz Rossbacher, who is a more reliable source. Swales, "Birth of Psychoanalysis," 71n50 (n.b., Swales's Freud citation here does not in fact mention Cäcilie M. but just an unnamed patient); Freud, "Emmy v. N," in *GW* 1:123n / *SE* 2:69n (translation modified); and Rossbacher, *Literatur und Bürgertum*, 446–47n52.

7 Despite the fact that the report is Pappenheim's only autograph record of her illness, one of the most famous cases with one of the most famous patients in the history of medicine, it has received very little critical attention. This is in part due to its very isolation, in that such a free-floating document without others is even more resistant to sustained and elaborated critical interpretation than one in a series. So even though Hirschmüller found the document and published it for the first time, he doesn't say anything about it in the main text. Both Melinda Guttmann and Marianne Brentzel reproduce it in full (Brentzel in German translation) and utilize it more overtly in their narrative of Pappenheim's stay at Bellevue. Guttmann, *The Enigma of Anna O.*, 82–85; and Brentzel, *Anna O.—Bertha Pappenheim*, 54–56. Guttmann otherwise refrains from interpretation, whereas Brentzel argues that in Pappenheim's loss of German, there is "perceptible a secret resistance against the torments and impositions she felt." Brentzel, *Anna O.—Bertha Pappenheim*, 57. Brentzel's reading is in keeping with a particular socio-structural understanding of late-nineteenth-century hysteria as a culture-bound syndrome. My approach is to connect the report to the question of talk in Pappenheim's case more broadly, thus offering a new interpretive vista. I nevertheless recognize the limitations of this single, floating document and thus use this new vista to launch my chapter rather than read the report more deeply.

"get my German"? And how to reconcile the "vivacity" with which she conversed during her absences with her broader language disorder? As outlined in the introduction to these chapters, the "talking cure" was particular to Pappenheim and Breuer: Pappenheim herself coined the term and Breuer preserved it in his publication of the case over a decade later; beyond their use, it did not gain common currency until much later.

And yet, the *talking* itself was nothing special: any and all talk between Pappenheim and Breuer occurred within the medium of late-nineteenth-century bildungsbürgerlich conversation culture. Just as the *cure* of the "talking cure" only becomes legible when viewed via Breuer's investigations of the inner ear and the sense of balance (as shown in the next chapter), the *talking* requires another such inquiry, here via the everyday experience of *having a conversation*. Breuer's practice as a house doctor had its own particular shape relevant to the "talking cure"; but regardless of any particularity, he was a house doctor like all others, making house calls within the highly regimented social world of Vienna's Bildungsbürgertum. Regardless of the specific role played by the house doctor in caring for patients and the highly particular circumstances of Pappenheim's illness, the *talking* of their daily "talking cure" was circumscribed by the intricate and all-encompassing conversation culture of the era. Even when their conversation escaped or went against the norms and standards of this culture, it could only occur and can only be understood within the culture's terms.

By taking the world of late nineteenth-century Viennese bildungsbürgerlich conversation as the medium in which Pappenheim and Breuer's talk was cultured, this chapter argues that both figures strained against the strictures of this world and engaged in highly particular mode of conversation, both in their encounter and otherwise. This mode of conversing, which I call *duo-talk*, had three major hallmarks in its divergence from the most prominent strain: first, it was open-ended and exploratory, concerned with in its

own unfolding rather than its ends and limitations; second, this exploration took place primarily on the terrain where questions of thinking met questions of the self; and third, it could be practiced by no more than two people at once. While the first was more related to the from of conversation and the second more to its content, such a distinction is nearly impossible to maintain with such a fluid yet highly structured medium as conversation.

Regarding the first hallmark, the dominant mode of conversation was itself already highly self-aware of its form, as well as its aims and limits, for this was how the emerging Bürgertum of the century marked itself out from other classes both above and below, as we will see. In their one-on-one encounters, Pappenheim and Breuer employed the same self-awareness but dropped the predetermined ends and limits, moving into an exploratory mode. Regarding the second hallmark, it's crucial to note that duo-talk was often Pappenheim and Breuer's mode of conversing even where (perhaps *especially* where) their conversation was *not* curative, that is, where it was not part of the "talking cure" proper or doctoring more broadly. Nevertheless, it was precisely in context of the mind-body relationship that questions of thinking and of the self met; thus matters of heath and sickness, both psychical and physical, persisted in this realm of talk.

Of course, it is nearly impossible to tease apart these two elements—the realm of health and sickness and the realm of the physician-patient relationship—yet that is precisely the point. For Pappenheim and Breuer, as for many in their specific milieu and beyond in the nineteenth-century, malady and wellbeing of the mind-body were deeply intertwined as were the professional and social aspects of the attendant physician-patient relationship. It therefore makes sense that just such a relationship would be the site where this other mode of conversation coalesced and became most evident, especially to the eyes of historians considering material evidence. To be sure, Pappenheim and Breuer were almost certainly neither the originators of this other mode of talk nor its only practitioners.

But by naming it, as Pappenheim did, and then publishing it, as Breuer did, they both gave it a particular shape, brought it into the public realm, and turned it into a historical object.

I use the term *duo-talk* for several reasons. First and most simply, it offers analytical specificity and clarity. *Duo-talk* marks out the particular mode of conversation present in the talk of the "talking cure" from other modes while also emphasizing its one-on-one nature, which is the basic condition of its use. It preserves Pappenheim's original English term, "talking," while remaining agnostic about the three major German terms for conversation, each with its own theoretical and historical implications: *Gespräch*, *Konversation*, and *Unterhaltung*.[8] At the same time, I modeled *duo-talk* partly on the

8 A full conceptual history of *Gespräch*, *Konversation*, and *Unterhaltung* would require a large volume and might spend much of its time navigating questions of translation in the highly multilingual contexts of pre-1800 Germanophone literature and thought. Schmölders lays out the lineaments of this pan-European history within the normative but greatly varied arts of conversation since antiquity, from the ancient world of guest-host relations at the table, through the rise of early modern recreational and informal conversation, to the new divisions created by changing public sphere of work and politics around 1800. Schmölders, *Die Kunst des Gesprächs*, introduction. For an example of the complexity of the historical semantics of particular terms, see ibid., 109–10, on the modern translation of Michel de Montaigne's "De l'art de conférer" as "Von der Kunst des Gesprächs," with *conférе* (as a noun) and *conférence* as *Gespräch* throughout. (N.b., modern English versions similarly translate *conférer* (as a noun) and *conférence* as *conversation*, whereas the famous first translation by John Florio used the cognate *conference*; a German edition from circa 1800 used *Unterredung*. Montaigne, "Of the Art of Conferring"; "Von der Kunst der Unterredung"; and "On the Art of Conversation." As Schmölders notes, Montaigne's essay was an instantiation of the new "informal, unsystematic association of thoughts" that defined late Renaissance conversation more than a specific treatise on conversation per se. Schmölders, *Die Kunst des Gesprächs*, 109. In terms of conversation itself, Montaigne praised contradiction, struggle, and argument in search of truth and learning, especially as against staid book learning and the "ordered rhetoric" of the academic arts don. Montaigne, "On the Art of Conversation," 1050.)

For my purposes, what's key is the convergence of the three terms around a particular "verbalization," as Angela Linke puts it, tied to the rise of Bürgertum as a class and Bildung as an ideal, all of which was marked at least in part by the rise of the *Konversationslexikon* after 1800. Linke, *Sprachkultur und Bürgertum*, chap. 7, esp. section 2. As she concludes her sketch of this conceptual history: "The connotative change in the concept of conversation [*Konversation*] lends to it a certain 'ambiguity' in the end: There is the moral charge that seems to accompany its adoption into bürgerlich discourse and into the context of a bürgerlich ethic oriented around the category of work. But this charge fades in favor of a new bürgerlich-elite component of the connotation, which is above all due to the desire for a social boundary 'below' and for an associated language culture directed toward self-representation." Ibid., 149–50. {"Die konnotative Veränderung des Konversationsbegriffs verleiht ihm schliesslich eine gewisse 'Zweideutigkeit': Die moralische Aufladung, die seine Übernahme in den bürgerlichen Diskurs und in den Kontext einer an der Kategorie der Arbeit orientierten bürgerlichen Ethik zunächst zu begleiten scheint, verblasst zugunsten einer neuen, bürgerlich-elitären Konnotationskomponente, die sich in erster Linie dem Wunsch nach sozialer Abgrenzung gegen 'unten' und nach einer damit verbundenen, auf Selbstdarstellung ausgerichteten

German *Zwiegespräch* and *Zwiesprache*, literally *twice* or *two* (*zwie-*) *conversation* or *speech* but usually translated with *dialogue*; but the English *dialogue* can and often does mean more than two people and moreover carries an arid connotation, close ties to scripted theatrical speech, and the reference to classical philosophical discourse. In contrast, *Zwiegespräch* and *Zwiesprache* emphasize the intimate, the private, and even the exploratory.[9] In her collected volume on the many-sided arts of conversation, Claudia Schmölders identifies *Zwiegespräch* as the dominant nineteenth- and twentieth-century idealization of "the idea of an affectively binding and recreational conversation."[10]

Gesprächskultur verdankt."} It's difficult to say whether (or how) the conversation of my two pairs—Pappenheim and Breuer, Ebner-Eschenbach and Breuer—fit this macroscopic two-sided definition. Nevertheless, it is precisely my contention that the self-representational aspect of bürgerlich conversation at the group level ultimately forced participants to see the limits of this practice for their own individual self-representation yielding to duo-talk.

9 *DWDS* / *DWB* (Grimms), s.vv. "zwiegespräch," "zwiesprache," accessed 3 December 2020, https://www.dwds.de/wb/dwb/zwiegespr%C3%A4ch, https://www.dwds.de/wb/dwb/zwiesprache. *Zwiesprache* especially has the exploratory connotation, specifically when someone is in conversation with themselves or someone who isn't present.

10 Schmölders, *Die Kunst des Gesprächs*, 67. Schmölders connects this idealization to the philosophers Ludwig Feuerbach, Ralph Waldo Emerson, Friedrich Nietzsche, and Martin Buber. As she puts it, "Especially with Emerson and his apologia for *Zwiegespräch*, there appears a characteristic entanglement of conversational and natural mysticism, such as that which is also found with the German philosophers Ludwig Feuerbach and later Martin Buber. This entanglement delays the realization: the very social conditions that had expected increasingly more from *Zwiegespräch* had to be those that were no longer in the position to offer sociable *Zwiegespräch*." Schmölders, *Die Kunst des Gesprächs*, 225. {"Gerade bei Emerson mit seiner Apologie des Zwiegesprächs zeigt sich auch eine charakteristische Verschränkung von Gesprächs- und Naturmystik, wie sie sich etwa auch bei den deutschen Philosophen Ludwig Feuerbach und später bei Martin Buber findet. Sie verzögert die Erkenntnis, daß es die gesellschaftlichen Bedingungen sein müßten, die zunehmend vom Zwiegespräch erhoffen ließen, was das gesellige nicht mehr zu bieten imstande war."} Of course, Emerson didn't use the German term but his emphasis on the duo of *Zwiegespräch* and *duo-talk* is unmistakable: "But I find this law of *one to one* peremptory for conversation, which is the practice and consummation of friendship. . . . In good company, the individuals merge their egotism into a social soul exactly co-extensive with the several consciousnesses there present. No partialities of friend to friend, no fondnesses of brother to sister, of wife to husband, are there pertinent, but quite otherwise. Now this convention, which good sense demands, destroys the high freedom of great conversation, which requires an absolute running of two souls into one." Emerson, "Friendship," 349. *Zwiesprache* was furthest elaborated by the aforementioned Martin Buber in his short book of that title, one of many devoted to his dialogical philosophy and theology. *Zwiesprache* is difficult to summarize, both because of the complex terrain of the interwar years that Buber triangulated (Jewish and Christian theology and contemporary social movements, German idealist and Romantic thought, burgeoning existentialism) and because he himself declared that his thought was best expressed in examples, which were themselves quite gnomic. Three aspects seem paramount: One, the dialogical (the term that Buber used more than *Zwiesprache* itself) occurs in daily life and has no privileged relation to thought (thus in contrast with the dialectic). Two, it consists most simply

Friedrich Nietzsche gave certainly its keenest articulation: "The *Zwiegespräch* is the perfect conversation, because everything one says acquires its particular color, its sound, its accompanying gestures *in strict consideration of the other* to whom it is spoken; it thus corresponds with that which happens in a correspondence, where one and the same writer displays ten sorts of psychological expression depending on whether he addresses this correspondent or that one. In a *Zwiegespräch* there is only a single refraction of thought: this is brought out by the co-converser [*Mitunterredner*] as the mirror in which we want to again behold our thoughts as well as possible."[11]

Duo-talk also resonates with Jan Goldstein's concept of *self-talk* in her account of the success of Cousinian psychology in post-Revolutionary France, *The Post-Revolutionary Self*. Beyond mere psychological interiority, Cousinian self-talk was an introspective theory and practice centered on producing coherent, unitary selves, primarily among bourgeois men, in service of stabilizing post-Revolutionary society and politics at large.[12]

---

in the human relation of two people's being turned toward each other, which is a basic condition of life and precedes any communication itself. And three, recognition of dialogue as such allows for a different sort of everyday religious life and relation to the address of God. Buber, *Zwiesprache / Dialogue*. Later in life, Pappenheim became friends with Buber, starting with a critical letter she wrote to him about his new publication, *Der Jude* (The Jew), in 1916. According to Elizabeth Loentz, Buber was the closest male friend of her adult life. Loentz, *Speak the Truth*, 185n113. Considering their correspondence, preserved at Buber's archive in Jerusalem, from the vantage of duo-talk would be fascinating.

11 Nietzsche, *Menschliches Allzumenschliches* 1: § 374. {"Das Zwiegespräch ist das vollkommene Gespräch, weil Alles, was der Eine sagt, seine bestimmte Farbe, seinen Klang, seine begleitende Gebärde *in strenger Rücksicht auf den Anderen*, mit dem gesprochen wird, erhält, also dem entsprechend, was beim Briefverkehr geschieht, dass ein und der selbe zehn Arten des seelischen Ausdrucks zeigt, je nachdem er bald an Diesen, bald an Jenen schreibt. Beim Zwiegespräch giebt es nur eine einzige Strahlenbrechung des Gedankens: diese bringt der Mitunterredner hervor, als der Spiegel, in welchem wir unsere Gedanken möglichst schön wiedererblicken wollen."} Schmölders's joint use of Emerson and Nietzsche as the ideal articulators of *Zwiegespräch* makes sense: as is well known, Nietzsche was an assiduous reader of Emerson and paid particular attention to Emerson's essay "Friendship," evidenced via preserved marginalia. On their relationship, see, for the marginalia itself, Golden, "Emerson-Exemplar"; for a broader scholarly exposition, Zavatta, *Individuality and Beyond*, esp. chap. 4 on friendship; for a playful and highly stimulating approach, hewing to Emerson's and Nietzsche's own line of unsettled thinking on intellectual kinship, Krell, "Emerson—Nietzsche's Voluptuary?"

12 Goldstein, *The Post-Revolutionary Self*, esp. 7–10. Goldstein doesn't give a particular source for the term *self-talk*, though the phrase itself was already widespread in technical sports psychology as well as more popular self-help psychology. This fact seems quite relevant for her broader point about the varying importance of self-talk in different cultures and contexts, though it is most likely not the source for the term.

Yet while one particular version of the self was the intended product of Cousinian self-talk, the duo of duo-talk was not the same sort of product, in that it didn't have analogous particular subforms or broader normative significance; instead, the duo stands in for the many dichotomies that often took shape in its practice and which structure much of the following analysis: outward versus inward expression, health versus sick talk, self-talk versus other-talk, thinking versus not thinking.[13] Duo-talk may not be the most mellifluous term but it serves a distinct purpose here.[14]

This chapter makes two primary interventions in the literature. First, on psychoanalysis and language. This relationship has been the object of significant focus in Anglophone literature since the rise of structuralism and Jacques Lacan.[15] But rather than focus on language as a structure, I consider it as it was *used*—in conversation. On the this question of *talking* and psychoanalysis, I build on a number of works, many of which deal directly with the Breuer-Pappenheim encounter (my engagement with psychotherapy, however, comes in the next chapter). Many of these interpretations follow along with Diane Hunter's compelling argument, where Pappenheim's loss of German and general language disorder expressed a rejection of the stymieing and stifling patriarchal culture of the Viennese bürgerlich household, which was then taken over into male domain of science and medicine by Breuer and Freud.[16] Edward Shorter and Sander Gilman echo this

13 For Goldstein, *self-talk* can refer at once to specific introspective practices aimed at cultivating the self via talk and to broader talk about the self in theoretical psychological and philosophical writing. This flexibility is a strength of the concept and allows for it to link the different levels of her analysis, from specific individuals to society at large. The failure of the "talking cure" per se to gain traction at the time of publication shows how duo-talk did not have the same range as Goldstein's self-talk and why my analysis is limited to these specific figures.

14 Cf. Wayne Koestenbaum's discussion of "double talk" in his book of that title: "When two men write together, they indulge in double talk; they rapidly patter to obscure their erotic burden, but the ambiguities of their discourse give the taboo subject some liberty to roam." Koestenbaum, *Double Talk*, 3.

15 See, for example, Forrester, *Language and the Origins of Psychoanalysis*; and MacCabe, *The Talking Cure*.

16 Hunter, "Hysteria, Psychoanalysis, and Feminism"; see similarly, Duda, "Bertha Pappenheim (1859–1936)," 132, 133, 135; Guttmann, *The Enigma of Anna O.*, 42–46; and Brentzel, *Anna O.—Bertha Pappenheim*, 57. Mary Jacobus offers a more traditionally psychoanalytic and less contextual version of this reading, emphasizing sexuality and transference. Jacobus, "Taking Liberties with Words."

argument about the loss of German, each with his own contextual twist: Shorter places Pappenheim's symptom in a longer history of catalepsy, while Gilman focuses on the *Jewish* aspects.[17] My most significant touchstone on talk and psychoanalysis is Karlheinz Rossbacher's work on the salon culture of literature and conversation in nineteenth-century Vienna, where the focus shifts from talk as symptom to talk as culture (more on Rossbacher in the next section).[18] On this count, I directly follow Rossbacher. But where he centers literature and approaches conversation as an offshoot, I go the other way around, starting with conversation (and approaching Pappenheim's stories, for instance, as an outgrowth from it). This is my primary contribution here: to focus on what the talk (duo-talk) actually *was*, how it was formed, what it contained, and where it aimed for its participants.

Second, in the history of the self. Since Carl Schorske's powerful account, fin-de-siècle Vienna and the rise of psychoanalysis have occupied a central place in the history of the late

17 Shorter argues that forgetting of one's native language was in fact a common symptom of catalepsy across the nineteenth century and then asks why this symptom showed up particularly among women of the Jewish Bildungsbürgertum in Vienna. But he doesn't provide enough examples of this to convince me of its prevalence (he cites the unreliable Swales when he claims that Cäcilie M. exhibited this symptom). Gilman argues that Pappenheim's attempt to pray at her father's bedside in the urscene would have been in Hebrew and that by "jargon" Breuer in fact meant Yiddish (for which *Jargon* was a well-known and at-times derogatory term). While creative, this reading lacks substance: Breuer's account of Pappenheim's "jargon" was clearly of *disordered and dysfunctional* speech that he explicitly called "paraphasic"; moreover, one of his two uses of the term in the Bellevue case history clearly referred to a private "strange technical jargon." Shorter, "The Matter with 'Anna O.' "; and Gilman, *Jewish Self-Hatred*, 260–61; Breuer, "Anna O," in *GW* suppl.:224, 228 / *SE* 2:25, 29; and Breuer, Pappenheim case history (D 23), p. 15. For more on Pappenheim's documented relationship to Yiddish, which in part contradicts Gilman's claims about Pappenheim's later work in Yiddish, see Loentz, *Speak the Truth*, chap. 1.

18 Rossbacher, *Literatur und Bürgertum*, esp. chap. O. While I am by-and-large on board with Rossbacher's claims and readings, I am less than convinced of the utility in reading Pappenheim's later poems and writings as a literature of hysteria. Ibid., 444–45. Birgit Althans has also written about the culture of conversation in early psychoanalysis but via the lens of *Klatsch*—gossip—as women's talk. This fascinating perspective brings the talk of the "talking cure" many places I wouldn't have gone, but I think ultimately misses the earnestness (though not necessarily dourness) of duo-talk and the disdain the Bildungsbürgertum had for gossip (though part of Althans's point is that this disdain prevented the lightening effect provided by gossip, which was then offered in the physician-patient encounter). Althans, *Der Klatsch, die Frauen und das Sprechen*, 327–64.

modern Western self.[19] And while more recent work has challenged his framework, mainly the ostensibly defeat of liberalism prompting a turn inward, his account of the inward turn to the self remains irresistible.[20] I build on this by showing how the turn to the self was not necessarily, however, a turn inward, but occurred in conversation with partner. This move owes much Deborah Coen, who shows that the key sites of the Viennese combined culture of reason and feeling were neither purely public (the café, the university) nor private (the mind) but in fact semiprivate (the household, the holiday home).[21] At the same time, my account emphasizes the *mind-body connection* rather than pure psyche, connecting with other recent revisionist work on this period.[22] Similarly, I focus on three figures who were by no means part of an aesthetic avant-garde and who exhibited relatively moderate if not conservative cultural temperaments, via the old-fashioned genres of the fairy tale and the letter correspondence.[23] Finally, and most importantly, my interrogation of the history of the self stems has its origin in a very particular encounter—between sick person and physician—but mostly considers that relationship, and the various selves at play, *beyond* the confines of sickness and health. This responds most directly to the perennial demand, articulated most forcefully by Roy Porter, for a history of medicine from below.[24] But at the same time, this chapter doesn't center patients qua patients

19 Schorske, *Fin-de-Siècle Vienna*.

20 Pieter Judson lays out this basic critique, showing how the liberals were not exactly defeated in the 1870s and 80s, as in Schorske's account, but in fact set the ideological table, as it were, for fin-de-siècle battles while taking new political forms. Judson, *Exclusive Revolutionaries*.

21 Coen, *Vienna in the Age of Uncertainty*.

22 See, for the reassertion of the importance of the body, George, *The Naked Truth*.

23 This focus accords with other revisionist approaches to "Vienna 1900," emphasizing broader continuities over the entire post-1848 era (including, variously named, the liberal era, Ringstraßenzeit, and Gründerzeit running into the fin de siècle and Jahrhundertwende). For an overview of the call for such a revision and the various responses, see George, *The Naked Truth*, 18–21. For particular examples, see Rossbacher, *Literatur und Liberalismus*; Rossbacher, *Literatur und Bürgertum*; Lorenz, *Wiener Moderne*; Polt-Heinzl, *Ringstraßenzeit und Wiener Moderne*.

24 Porter, "The Patient's View." For a recent consideration of what Porter's call (in 1985) yielded, including the important question of how to analyze in aggregate the many subsequent histories from below, see Bacopoulos-Viau and Fauvel, "The Patient's Turn."

but patients qua humans, considering the sick person–house physician encounter as the everyday social and cultural interaction that it was. Health and sickness were everywhere in nineteenth-century Vienna, and the house physician—Breuer in particular—occupied a privileged role in this milieu; yet neither sickness and health (e.g., pains, recoveries, deaths) nor science and medicine (e.g., diagnoses, treatments, postmortems) were the be-all and end-all of the doctor-patient relation and the patient's broader life.[25]

This chapter proceeds as follows: I start by detailing what exactly constituted the broader culture of conversation in late nineteenth-century Vienna. Then I lay out where exactly duo-talk was in *Studien über Hysterie* and how Pappenheim and Breuer's use of it fit into that broader culture. Next I turn to the children's stories Pappenheim published after the encounter with Breuer and show how they embodied one of the fundamental aspects of duo-talk—the will to expression—and connect Pappenheim's will to her encounter with Breuer and her coinage of "talking cure." Then, in the centerpiece of the chapter, I move to Breuer's years-long postal conversation with Marie von Ebner-Eschenbach, showing how they together worked toward a conjoint articulation of their selves and their thinking and illustrating why the category of *talk* remained salient for Breuer beyond the encounter with Pappenheim. Finally, I conclude with a look at Breuer's final publication on telepathy, asking how it reorients the connection of *talk* and *cure*.

25 Along these lines, gender was a major element structuring the physician-patient encounter, both socially and professionally. And indeed, my analysis builds on many works that have mapped how gender at once shaped and was shaped by this relationship, the category of hysteria, the social world of the Bildungsbürgertum in Vienna, and the history of the self most broadly. While I am attentive to where gender impinged particularly on my story, it does not play a major role in what follows, primarily because I do not take my three highly specific actors, Breuer, Pappenheim, and Ebner-Eschenbach, or the relations between them as particularly representative (hence I similarly do not draw conclusions about the Bildungsbürgertum or Jews). For works that greatly formed my thinking on these matters, see Duden, *The Woman beneath the Skin*; Goldstein, *Hysteria Complicated by Ecstasy*.

THE CEREMONIAL OF CONVERSATION: BÜRGERLICH SOCIABILITY AND ITS DISCONTENTS

Looking back from the 1930s, the Austrian novelist Robert Musil made a passing remark on some surprising intricacies of the so-called civilizing process: Upon a visit to some countryside manors, "it struck Ulrich that he not infrequently saw fruit being eaten from the hand unpeeled or something similar, while in Großbürger houses, the ceremonial of knife and fork was strictly maintained. The same observation could also be made of conversation [*Unterhaltung*], which was of consummate distinction almost solely in the houses of Bürger, whereas in aristocratic circles the well-known informal manner of speaking reminiscent of coachmen prevailed."[26] Ulrich was the titular man of *The Man without Qualities*, Musil's probing account of the unseen unraveling of Vienna's bildungsbürgerlich world on the eve of war, and he rarely knew what to make of his many observations, other than his steadfast sense that things could (perhaps should) be otherwise. This observation, at least, encapsulated the central role played by conversation for the city's Bürgertum, opening a window onto the broader conversational culture against which duo-talk became (and becomes, for us) legible.

Beyond Ulrich's passing observation, what *was* this culture? Angela Linke has done the most to render it historically visible, specifically in her book, *Sprachkultur und Bürgertum*. She argues that language culture (*Sprachkultur*) played a particularly intricate and important role for the Germanophone Bürgertum in its self-definition and representation over the nineteenth century; an extremely heightened consciousness of language marked out the norms and values of Bürgerlichkeit, encompassing the broader mentality of the

26 Musil, *Der Mann ohne Eigenschaften* 1:278. {"Es fiel Ulrich auf, daß er Obst nicht selten ungeschält aus der Hand essen sah oder ähnliches, während in Großbürgerhäusern das Zeremoniell von Messer und Gabel strenge gewahrt wurde; die gleiche Beobachtung ließ sich auch an der Unterhaltung anstellen, die von vollendeter Distinktion fast nur in Bürgerhäusern war, wogegen in Adelskreisen die bekannte zwanglose, an Kutscher erinnernde Redeweise überwog."}

class.[27] While bürgerlich language culture wasn't the dominant norm over the century nor did it remain constant, it was a particularly marked social phenomenon, allowing a direct approach to both the social function of language culture and the history of the Bürgertum.[28]

She focuses on the Bildungsbürgertum as the standard-bearers for the class as a whole, developing, carrying, and openly displaying certain models, norms, and values of the overall culture and mentality; the central elements of this culture and mentality included a positive attitude to work, a distinct division of private family-life and public work-life, liberal values such as tolerance and compromise, "good" modes of behaving, artistic and literary interests, and of course Bildung.[29] Her extraordinary analysis, at once deep and

27 Linke, *Sprachkultur und Bürgertum*, 1–11, 18. As a linguist, Linke is particularly concerned with analytical and theoretical specificity of terms, notably *language culture* (*Sprachkultur*) and, to a lesser extent, *mentality* (*Mentalität*). These needn't concern us, and her usage seems broadly useful from a historical and historiographical perspective (she also notes that she doesn't ultimately make a strong or sharp distinction between culture and mentality). Ibid., 27. It is important to note that her use of *Sprachkultur* diverges from both the everyday usage referring to adherence to the norms of a language and the more historical usage (primarily in the DDR) referring to the cultivation of that adherence. It moreover stands out from other uses in linguistics for its particularly programmatic articulation: "It [the concept *Sprachkultur*] is tied to the idea that the means and forms of human contact and exchange must not be considered only with reference to their *symbolic nature* or to their organizational structure nor only with an eye toward their function and suitability as a *medium of communication*, but that they possess a central function in the *construction and staging of symbolic orders* over and above the mentioned tasks." Ibid., 1. {"Er [der Begriff *Sprachkultur*] ist an die Vorstellung gebunden, dass die Mittel und Formen menschlichen Umgangs und Austausches nicht nur mit Bezug auf ihre *Zeichenhaftigkeit* bzw. mit Bezug auf ihre Organisationsstrukturen und auch nicht nur mit Blick auf ihre Funktion und Tauglichkeit als *Kommunikationsmedium* betrachtet werden dürfen, sondern dass ihnen über die genannten Aufgaben hinaus eine zentrale Funktion bei der *Konstruktion und Inszenierung symbolischer Ordnungen* zukommt."} While *language culture* isn't a great translation, I don't use the term further, so it suffices here. For more on *Sprachkultur* in both its technical and everyday uses, see Davies, " 'Sprachkultur.' "

28 Linke, *Sprachkultur und Bürgertum*, 19.

29 Linke, *Sprachkultur und Bürgertum*, 22–23, 27. The debate over the constitution and significance of the Bürgertum in nineteenth-century Germanophone history is of course enormous. Linke discusses parts of this longstanding debate, specifically the difficulty in identifying characteristics that the Bürgertum shared as a whole (noting that it's often easier to distinguish Wirtschaftsbürger from Bildungsbürger from Kleinbürger than to see what they had in common); in the end, she elevates this heterogeneity to the one of the defining characteristics of the class (via the nineteenth-century journalist Wilhelm Heinrich Riehl), as it was ultimately overcome by a shared feeling and self-understanding across the subgroups in the spirit of Bürgertum. Ibid., 19–21. Linke identifies this shared self-understanding in a newer historiographical formulation, which she associates with Jürgen Kocka's school: "*Bürgerlichkeit as culture* as the constitutive element of the 'social formation' of the Bürgertum." Ibid., 21. (This complexity is why she prefers the

wide-ranging, stems from closely reading conduct manuals (*Anstandsbücher*), letters and diaries, and some literary texts and illustrations to show these models, norms, and values in the making.[30] Of central importance in this making is one element—the conversation.[31] And thanks to the impressive extent of her work, Linke achieves something that is basically otherwise absent in the secondary literature: a material history of conversation as it actually took place.[32]

For my purposes, three points about this bürgerlich conversation are paramount: around and after 1800, the rise of the verbal *Gespräch* and spoken versions of *Konversation* and *Unterhaltung* alongside the emergence of Bildung as something you could *acquire*, which were joined in the development of bürgerlich society; the particular function of this conversation, namely *socialization* of the Bürgertum, which was explicitly recognized

---

term *social formation* to *class* for the category of Bürgertum, though I use *class* for simplicity.) Attention to heterogeneity of the Bürgertum united by a self-conceived spirit—that is, Bürgerlichkeit as culture—is also how Linke and others address the many social and cultural divisions of the Germanophone world, including geographical, confessional, political, and linguistic; so while Linke focuses on the northern part of this world and Berlin in particular, this conception of Bürgerlichkeit allows a transposition to Vienna. Such an approach of Bürgerlichkeit as culture has already been explicitly deployed in the long-running series Bürgertum in der Habsburgermonarchie. Döcker, "Bürgerlichkeit und Kultur"; see also, for the particular (mostly) Jewish bildungsbürgerlich Vienna of which Breuer, Pappenheim, and Ebner-Eschenbach were a part, Rossbacher, *Literatur und Bürgertum*, esp. chap. A, J, K. For a comprehensive account of the historiographical debates around Bürgertum in the German Empire and its predecessor states, see Sperber, "*Bürger, Bürgertum, Bürgerlichkeit, bürgerliche Gesellschaft*." Sperber helpfully delineates the cultural emphasis of Linke and Kocka from the political one of Lothar Gall and his students.

30 Elsewhere, Linke specifically considers the question of space, specifically the furniture and arranged of social rooms via illustrations. Linke, "Körperkonfigurationen: Die Sitzgruppe." Emphasized here is the rise of the small group and its configuration around a variety of furniture constellations, which is again relevant for my analysis.

31 Linke, *Sprachkultur und Bürgertum*, 55, 61–62.

32 While the history of language has a lively and long literature in German, it is often emphasized how difficult an empirical and material history of everyday conversation is (or would be). As Dieter Cherubim remarks in his sketch of a historical-pragmatic account of nineteenth-century bürgerlich language: "Even in the nineteenth century, records of spoken language are still infrequent. Specific manifestations of spoken language can therefore only be indirectly reconstructed for a large part of each linguistic development." Cherubim, "Zur bürgerlichen Sprache des 19. Jahrhunderts," 400. {"Aufzeichnungen gesprochener Sprache sind auch im 19. Jahrhundert noch selten. Spezifische Erscheinungsformen gesprochener Sprache können daher für einen großen Teil jeder Sprachentwicklung nur indirekt rekonstruiert werden."} Even when such reconstructions are made, conversation itself and conversational culture are only part of the story. See, for example, on particular forms of bürgerlich speech, Kettmann, "Die Existenzformen der deutschen Sprache," 41–51; Elspaß, "Briefe und Tagebücher"; and Döcker, " 'Wider Die Schmeicheley Der Schmarotzer?' "

as the ends of conversation itself and more important than any content of conversation; and the emergence and significance of the semi-public, semi-private sphere, temporally in the daily visit and spatially in the drawing room, which then combined in the form of the salon.[33] In this world of conversation, light and varied content was emphasized, drawing from the news, theater, art, literature, and public entertainment and which could be private but not too individuated; but this content often added up to a particular nothingness or idleness, with the shared knowledge again that the *socialization* rather than the content was the point. The small group was the primary unit, and women were charged with maintaining balance among participants of topics, speakers, and moods.[34] Following Georg Simmel, Linke argues that this all ultimately resulted in the transformation of social conversation into a game of sociability centered on detachedness, which was nevertheless in itself "a communicative achievement with its own social value."[35] This achievement was exactly what Musil saw in bürgerlich houses.

This image of the bürgerlich conversation is fleshed out with Viennese particulars in the equally illustrative study by Karlheinz Rossbacher, *Literatur und Bürgertum*, on the social and literary world of five interrelated Jewish families (Auspitz, Gomperz, Lieben, Todesco, and Wertheimstein). Overall, Rossbacher shows how the high era of rigid socialization produced isolated individuals in extremely close social contact; literature and its surrounding culture was *the* medium in which these individuals interacted and could express themselves. This balance between extreme sociability and isolation was also present in small salon conversation (which he takes as part of the larger culture of literature), where participants could escape the "blasé" stance that was the everyday rule

33 These points are developed mainly in Linke, *Sprachkultur und Bürgertum*, chap. 7, 9; chapter 9 is the kernel of her overall argument about conversation, language culture, and Bürgertum.
34 Linke, *Sprachkultur und Bürgertum*, 190–99, 205–219.
35 Linke, *Sprachkultur und Bürgertum*, 222.

in the ever-expanding metropolis (again, per Simmel) while remaining comforted by the ever-present rules that warded off unwanted intimacy.[36]

The late nineteenth-century salon thus took on a particular function: "To be a sort of stock market for one's own status, for the social market-value of the person. Thus out of the place of reasoning [in the Classical and Romantic salon] there became the place where one presented oneself and scrutinized others. The presentation is on the one hand marked by cool reserve—a critical aphorism by [the writer Marie von] Ebner-Eschenbach reads, 'In the grand world of society, nothing pleases so much as the indifference about whether you please this world'; on the other hand, skillfulness of mind, that is esprit, is welcome as a weapon in the struggle for self-validity."[37] Rossbacher's primary example is the Wertheimstein salon, at whose center stood the matriarch, Josephine von Wertheimstein (1820–1894), and which lasted from 1843 until around 1900, first in Vienna's central first district before moving to a suburban villa in Döbling. At once unpretentious and lavish, the salon avoided ideology and its flood of new isms, instead aiming at harmony and pleasant mixing of its highly varied guests. Among those guests were two of this chapters main characters, the physician Josef Breuer and the writer Marie von Ebner-Eschenbach; the third main character, Bertha Pappenheim, was just beyond its bounds.[38]

This is the world from which duo-talk sprang and against which it struggled: It

36 Rossbacher, *Literatur und Bürgertum*, 82–90. Rossbacher distinguishes between large and extremely prominent salons, such as the Todesco salon, from smaller ones, epitomized in his study by the Wertheimstein salon. Ibid., 89.

37 Rossbacher, *Literatur und Bürgertum*, 102–3. ("Eine Art von Börse des eigenen Status, des sozialen Kurswerts der Person zu sein. Damit wurde aus dem Ort des Räsonnements der Ort, wo man sich selbst präsentiert und die anderen mustert. Die Präsentation ist einerseits geprägt von kühler Zurückhaltung—ein kritischer Aphorismus von Ebner-Eschenbach lautet: 'In der großen Welt gefällt nichts so sehr wie die Gleichgültigkeit darüber, ob man ihr gefällt'—, andererseits ist Gewandheit des Geistes, also Esprit, als Waffe im Kampf um Selbstgeltung willkommen.")

38 Rossbacher, *Literatur und Bürgertum*, 104–7, 109, 112, 113. Breuer was the closest to this circle, both house doctor and friend to many of the five families; Ebner, on the other hand, was only a fleeting visitor. Ibid., 109, 112. About Pappenheim, Rossbacher notes that she knew the family of Theodor Gomperz, Josephine von Wertheimstein's brother, but wasn't exactly of the same segment of the Jewish Bürgertum in Vienna as his five families. Ibid., 443–44.

was a culture of semi-public, semi-private, highly practiced close exchange that was also armored against overt intimacy and emotional sharing. It was a marketplace of the self that nevertheless strictly regulated what selves were permissible and judged them accordingly. And it was all finely orchestrated around the self-consciously balanced conversation. Duo-talk was nourished by the fundamental skills furnished by this culture; it was still shaped by the same self-consciousness and attuned to but not necessarily guided by the goal of talk for talk's sake. But it gained its greatest charge in struggling against the culture's regulation of self and self-expression and its broader harmonic dictates.

As noted above, it was precisely at the edges of primary bürgerlich social interactions, as with Breuer and his patient-friends, that duo-talk gained salience, at once drawing on and reacting against the dominant modes. In the interactions between Pappenheim and Breuer and then Ebner and Breuer, this relation of duo-talk and general conversation was built on a specific social formation of contradictions prone to such a dialectical development: The starting premise of the interactions—a sick person calls for a doctor—provided the highly intimate subject matter of health and allowed for repeated and prolonged, one-on-one encounters across a number of sharp social divides (gender, age, and profession for both pairs, plus confession and class for Breuer and Ebner). At the same time, this unorthodox subject matter and divided encounter demanded an even higher awareness of the standard rules and forms of conversation from which they departed.[39]

39 Both Linke and Rossbacher discuss questions pertinent to the unorthodox form and content of duo-talk. Most important is the key role played by women in conversation: As Linke notes, the nineteenth century saw an increase in the importance of women within the Bürgertum, which was itself accompanied by a rise in rigidity of gender roles. Hence the proliferation of conduct manuals written *by* women and the ever-younger target age range of these books. Linke, *Sprachkultur und Bürgertum*, 213–214. Women were furthermore at the center of conversational culture, expected to discipline conversations via a dual role as models of a particular disposition for all participants regardless of gender and as actors in the conversation deploying a "fine tone" where it was lacking. Ibid., 219. This all required a particular skill in balancing activity and passivity and the ability to steer conversation without necessarily taking the over lead. Ibid., 217. In terms of content, health and sickness, gender-specific topics (e.g., hunting for men, the household for women), and asking for advice were explicitly banned; but, as Linke emphasizes, this explicit ban tells us that they were in fact important and spoken of, only not explicitly. Ibid., 203–6. Especially with advice, the

This fundamental contradiction was perfectly encapsulated in a long disquisition on gender relations written by Emilie Exner, director of an art school for women and member of one of the most prominent scientific families in Vienna, and published pseudonymously as a series of letters from a matriarch to her physician in 1895. Exner herself was such a matriarch, and Breuer was her family's longtime physician. In the antepenultimate letter, she described the stilted but practiced world of salon conversation and its gendered straitjacket with disdain:

> At home, the women and daughters sit with housework or in the most eager exchange of words with other neglected ones. But if society brings both sexes together, one can observe how the men stick together, darkening a corner of the salon with their black coats, and when there is eventually no longer any chance at all for them to remain among themselves, how the most piteous everyday occurrences seem to them sufficient as a topic of conversation to leave for the women. The women by contrast listen closely, silently, and respectfully to the dialogues [*Wechselreden*] that become more lively after the first emptied bottles of wine; after all, no one left at the table takes the slightest consideration of whether the adopted topic might interest the women, be it wine labels or *shop*, as the English characteristically say. And the abhorrent pub tone strikes through the tad stiff and boring veneer of society that their lordships are accustomed to regarding as the only requirement of sociability.[40]

---

threat of personal intimacy was a specific danger to sociality and harmony. Rossbacher's portrait of Vienna largely confirms Linke's, especially as regards the organizing role Wertheimstein played for her salon. One particularity about the Jewish Bildungsbürgertum of Vienna stands out: The next generation of young women in Wertheimstein's milieu—he draws here specifically on Wertheimstein's niece Ana von Lieben and Rosa Mayreder (later a writer and leader in the women's movement like Pappenheim), but this would also include Pappenheim—faced a peculiarly contradictory atmosphere at home. While Bildung was still the primary family leitmotif and education highly prized, young girls were often forbidden from much of it, instead channeled to aesthetic modes apart from either the formal Bildung of their brothers and any sort of professional education; they often nevertheless learned via those brothers informally and by proxy. Rossbacher, *Literatur und Bürgertum*, 38–40. All this is to emphasize the already-contradictory or at least double-sided aspect to women's roles in the dominant conversational culture that was then transcended in the one-on-one of duo-talk.

40 Exner, *Die Emancipation in der Ehe*, 59 ("shop" in English in original). {"Daheim sitzen die Frauen und Töchter bei der Hausarbeit, oder auch im eifrigsten Wortaustausch mit anderen Vernachlässigten. Vereinigt eine Gesellschaft aber die beiden Geschlechter, so kann man beobachten, wie die Männer zusammenhalten, eine Ecke des Salons mit ihren schwarzen Röcken verfinsternd, und wenn ihnen endlich gar keine Möglichkeit mehr bleibt, unter sich zu sein, die erbärmlichsten Alltäglichkeiten ihnen ausreichend erscheinen, um für die Frauen ein Gesprächsthema abzugeben. Die Frauen hingegen lauschen stumm und ehrerbietig den Wechselreden, die nach den ersten geleerten Weinflaschen lebhafter werden, und schließlich

Yet the very premise of the collection was the continuation of conversation between the addresser and addressee, between the patient and the doctor, who had recently moved to a new city. As Exner wrote in the first letter:

> The hours of animated chatting that developed from your doctoring visits had become for me a dear necessity. You weren't only a physician, you were a friend in my house, and over the course of the years, I had become accustomed to debating with you everything that preoccupied me, a restless woman.
>
> There was scarcely a topic in art and literature, in social affairs, that you wouldn't have shown me through the sharp spectacles of your knowledge of the world and of humans; no topic, however, has kept us both more busy than the woman question. How often have you scolded me, called me sensitive? How often have we tangled with hard words? And yet we knew full well what an excellent and proven friendship it took in order to discuss these things unreservedly as man and woman. How many obscure sides of the question have you enlightened for me with your physician's knowledge? How many scientific publications have you placed in my hands, which mostly remain locked away from us women?[41]

This was the fundamental contradiction propelling the consolidation and rise of duo-talk: the regimented, precise, and moldy world of social conversation and the highly aware departure from that world in the one-on-one encounter of doctor and patient, yielding

---

nimmt niemand an der Tafelrunde mehr die geringste Rücksicht darauf, ob das angeschlagene Thema, Weinmarken oder *shop*, wie die Engländer bezeichnend sagen, die Frauen interessieren könne, und der abscheuliche Wirtshauston schlägt durch das bißchen steife und langweilige Gesellschaftstünche, welches die Herren der Schöpfung als einziges Erfordernis der Geselligkeit anzusehen gewohnt sind."}

41 Exner, *Die Emancipation in der Ehe*, 5. {"Die angeregten Plauderstündchen, die sich aus Ihren ärztlichen Besuchen manchmal entwickelten, waren mir ein liebes Bedürfnis geworden; Sie waren nicht nur Arzt, Sie waren Freund in meinem Hause, und alles, was mich unruhige Frau bewegte, hatte ich mir im Laufe der Jahre angewöhnt, mit Ihnen zu verhandeln."}

{"Da gab es kaum ein Thema in Kunst und Litteratur, in sozialen Angelegenheiten, das Sie mir nicht durch die scharfen Brillen Ihrer Welt- und Menschenkenntnis gezeigt hätten, keines aber, das uns beide mehr in Atem erhalten hat als die Frauenfrage. Wie oft haben Sie mich da gescholten, mich eine Sensitive genannt, wie oft sind wir mit harten Worten aneinander geraten und wußten doch ganz genau, welch tüchtige, erprobte Freundschaft dazu gehörte, um als Mann und Frau diese Dinge rückhaltslos zu besprechen. Wie viele dunkle Seiten der Frage haben Sie mir mit Ihrem ärztlichen Wissen aufgeklärt, wie viele wissenschaftliche Publikationen in meine Hände gelegt, die uns Frauen meistens verschlossen bleiben."}

something new, ongoing, and extremely meaningful to its participants. "If only you were still here and I could share my reflections with you over a cup of tea," Exner exclaimed.[42]

Ultimately, this consolidation and rise of duo-talk has something to do with Rossbacher's perceptive diagnosis of the decline of the Wertheimstein salon (and Viennese salon culture in general) after Wertheimstein's death and the illness of her daughter, Franziska, which precipitated a turn inward: "Whoever is too busy sounding themselves out cannot set off sociability. Already strongly privatized, the Wertheimstein salon had no further basis in a society where sociable communications were no longer filled with social reasoning."[43] I would invert the order, emphasizing that the practice of "sounding oneself out" didn't emerge on its own but in conversation, that is, in duo-talk, and that this practice and duo-talk thus only became possible with the institution of the social conversation rather than emerging separately and then occasioning its end.[44]

42 Exner, *Die Emancipation in der Ehe*, 6. {"Wären Sie doch noch hier und ich könnte bei einer Tasse Thee Ihnen meine Bedenken mitteilen."} For more on Emilie Exner, see Coen, *Vienna in the Age of Uncertainty*, esp. 172–76, 199–201 on *Die Emancipation in der Ehe* and the woman question. Coen suggests that the unnamed doctor in this collection was modeled on Breuer, which makes sense, though the only highly particularly characteristic of this anonymous doctor (called only Dr. Amicus)—that he moved from the city where he had met the author—does not fit Breuer. Ibid., 200. Nevertheless, Exner's portrayal of the doctor's particular knowledge does point to Breuer. After explaining why she could not accept "widely held views" on the woman question, Exner said of the addressee, "I could not always accept your conclusions either; even you draw from the murky spring of abnormal conditions, and many normal psychological processes have remained unknown to you." Exner, *Die Emancipation in der Ehe*, 5. {"Auch Ihre Schlüsse konnte ich nicht stets annehmen, auch Sie schöpfen aus dem trüben Born der anormalen Verhältnisse und viele normale psychologische Vorgänge sind Ihnen unbekannt geblieben."} The preface, ostensibly written by the addressed physician, Dr. Amicus, gave voice to a vision of the doctor-patient relationship very much like Breuer's own, as discussed in the next chapter. Ibid., 3–4.

43 Rossbacher, *Literatur und Bürgertum*, 113. {"Wer zu sehr damit beschäftigt ist, sich selbst zu sondieren, kann nicht Geselligkeit auslösen. Ohnehin schon stark privatisiert, hatte der Salon Wertheimstein in einer Gesellschaft, in der geselliger Verkehr nicht mehr mit gesellschaftlichem Räsonnement erfüllt war, keine Basis mehr."} Rossbacher emphasizes that the Wertheimstein salon was already late in the history of the salon, so marking its end tells us something more broadly about the history of the salon and Bürgertum.

44 Rossbacher goes on to explore further this question of causality with respect to self-sounding-out and the decline of the salon: "Moreover, if the capsule-self doesn't find any further opening into the communitarian world; or if (as the radical opposite) the image of humanity, which differentiates it between intimate and public, just fades away; or if (as in the present) it is taken over by multifarious therapy operations looking after everything intimate—regardless, there is no more room for salon sociability. The mentioned factors are better suited than salon conversation to serve the social-historically long-term tendency of individualization." Rossbacher, *Literatur und Bürgertum*, 113. {"Findet zudem das Kapsel-Ich keine Öffnung mehr ins

Where and what exactly was the duo-talk in *Studien über Hysterie* and the case of Anna O.?[45] To start with the where, that is, the broader social context, Breuer and Freud already identified it clearly in the book's first preface: "Our experience derived from private practice in an educated and literate social class, and the subject matter with which we deal often touches upon our patients' most intimate lives and histories."[46] While the authors as well as many subsequent commenters emphasized the second part of this statement—that is, the intimate content of these histories that caused them to refrain from publishing "the most instructive and convincing of our observations," thus limiting the work's scientific scope—the first part is equally crucial.[47] This "educated and literate social class" was of course the Bildungsbürgertum, and regardless of the intimate nature of the work, Breuer's and Freud's practices as house doctors took place within the customs of this class; it was these customs, compounded by the relative narrowness of Breuer's and Freud's particular Jewish tranche of the class, that both set the stage for duo-talk and made the publication of

---

Kommunitarische, oder schwindet gar, als das radikale Gegenteil, das Menschenbild, das zwischen intim und öffentlich unterscheidet, oder übernimmt es, wie in der Gegenwart, der vielfältige Therapiebetrieb, das Intime zu betreuen, dann ist ebenfalls nicht mehr Raum für Salongeselligkeit. Die genannten Faktoren sind besser als das Salongespräch geeignet, die sozialhistorisch langfristige Tendenz der Individualisierung zu bedienen."} He then remarks that sociability and conversation cannot be capitalized, thus further depriving conversation of its basis in society. I'm less certain that the end of sociable conversation (or the rise of duo-talk) can be pinned to either the march of individualization or capital but this has more to do with our differing theoretical aims and commitments than a historical disagreement.

45 While there are some archival documents from the Pappenheim-Breuer encounter that deal with duo-talk, I'm here first interested in establishing duo-talk as it was published, where we can see what Breuer found significant enough to include and attempt to think through how it would be understand in the broader milieu. As explained in the introduction to these chapters, the archival documents, specifically Breuer's case history sent to Binswanger at the Bellevue Sanatorium, accord with the published account in almost all aspects. I employ this archival material where it fleshes out some particular points of the published version. Furthermore, I attend to the other relevant archival documents later in this section, where I show how duo-talk functioned for Pappenheim and Breuer beyond their encounter.

46 Breuer and Freud, "Vorwort zur ersten Auflage," in *GW* 1:77 / *SE* 2:xxix. {"Unsere Erfahrungen entstammen der Privatpraxis in einer gebildeten und lesenden Gesellschaftsklasse und ihr Inhalt berührt vielfach das intimste Leben und Geschick unserer Kranken."}.

47 Breuer and Freud, "Vorwort zur ersten Auflage," in *GW* 1:77 / *SE* 2:xxix.

some of its more intimate details impossible.[48] The same customs furthermore determined the context for Pappenheim and Breuer's particular encounter as it was portrayed in the published account. This context started with the basics of Pappenheim's background, notably her educational background and commitment to caring for the poor and sick, and was further emphasized by the social framing of her primary symptoms, including waking dreams interrupted by others, her trouble with recognizing relatives, and of course her language disorder.[49] It then extended to the sites and rhythms of the overall course of illness and treatment, including her summer in 1881 at a country house by the Inzersdorf sanatorium, the punctuations of Breuer's own vacations, and then daily visits by Breuer, all of which was then doubled when she began reliving the previous year in late 1881.[50]

Drawing out the specific what, that is, the form and content, of Pappenheim and Breuer's duo-talk from the "talking cure" itself is somewhat difficult, as the curative aspect of the cure was paramount in Breuer's telling: the talking out of symptoms was of course the "chance observation" that led Breuer and Freud down this path and with which they opened their first preliminary publication of 1893.[51] But it is in fact precisely the *moment* of this "chance observation" that reveals the duo-talk that preceded and undergirded the cure: for Breuer had already introduced the importance of talk in the case of Anna O.

48 Two of the case histories in *Studien über Hysterie* dealt with, however, women who were distinctly not of the Bürgertum: Katharina and Lucy R. Katharina, who worked at her mother's inn at the top of a mountain Freud climbed regularly while on vacation in 1893, was probably the farthest from this class, while Lucy R., a young English governess working at the house of a factory owner, was a at least part outsider to it. On these women, see Appignanesi and Forrester, *Freud's Women*, chap. 3 (but n.b., their account of Anna O. is mostly contained by the old Jones-Ellenberger myth). Nevertheless, Breuer and Freud were specifically concerned with the privacy of their patients who were better known among their tranche of Vienna's Bürgertum (notably Cäcilie M.), partly explaining the inclusion of two cases from outside. On Cäcilie M., real name Anna von Lieben and member of the extended and interrelated Auspitz-Gomperz-Lieben-Todesco-Wertheimstein family, and other family members who were patients of Breuer's and Freud's, see Rossbacher, *Literatur und Bürgertum*, esp. chap. G, H, O.

49 Breuer, "Anna O," in *GW* suppl.:221–222, 225–26 / *SE* 2:21–22, 25–26.

50 Breuer, "Anna O," in *GW* suppl.:227–31 / *SE* 2:27–33.

51 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:81, 85 / *SE* 2:3, 6.

before he gave an account of what she called the "talking cure," which itself significantly preceded when a symptom was talked away (note the different preposition) via its originating event for the first time. Accordingly, we can roughly trace an arc of talk in the case, from their first conversations as duo-talk most generally, through the introduction of the "talking cure," and finally into the regularized therapeutic method of talking away symptoms. This arc ran over all of 1881, from when Breuer took on the case around the time Pappenheim took to bed on 11 December 1880, through her father's death in April and her move to the countryside for the summer, and finally with her return to Vienna and the start of her reliving the previous year in December 1881. Clearly distinguishing phases in this arc is not possible (and would be misleading): On the one hand, the slow development of duo-talk into a therapeutic method was not guided, purposeful, or even recognizable until long after; on the other, the chronology of Pappenheim and Breuer's encounter is obscure in *Studien*, taking a nonlinear and recursive shape in order to emphasize particular aspects (it is slightly clearer in the Bellevue case history).[52]

Nevertheless, the above-noted three points of the arc of talk are clearly identifiable in the published case history: the first mention of talk in the case history and an attendant specific conversation between Pappenheim and Breuer; Breuer's introduction and elaboration of the "talking cure" per se; and finally the linking of specific symptoms and originating events via memory, all joined in an instrumentalized and therapeutic *talking*

52 Breuer broke the chronology of the published case most explicitly just after Pappenheim was moved to the countryside in June 1881: "Before continuing my account of the case, I must go back once more and describe one of its peculiarities which I have hitherto mentioned only in passing." Breuer, "Anna O," in *GW* suppl.:227 / *SE* 2:28. {"Bevor ich den weiteren Verlauf schildere, muß ich noch einmal zurückgreifen und eine Eigentümlichkeit des Falles darstellen, die ich bisher nur flüchtig gestreift habe."} (N.b., in the English *Standard Edition*, this break is marked with a space as is another break two pages later just before the introduction of the "talking cure"; these spaces were not in the original nor in the *Gesammelte Werke*.) This description of particularities elaborated on the daily rhythm of absences, ideational circles, somnolence, and then talking out of stories; but it also referred both backward and forward in the text and in time, explicitly and implicitly. I have done my best, relying on the Bellevue case history (which itself engaged in some but much less such foreshadowing and recursion), to draw out the development of their conversations in an accurate and clear way.

away (*absprechen*) of symptoms. As I've hinted at, these three points roughly match three different particular terms related to talk: talking out (*Aussprache*, *aussprechen*), the "talking cure," and talking away (*absprechen*).[53] Breuer himself pointed at this arc in *Studien* (emphasizing the curative endpoint), after describing the famous first talking away of a symptom (her inability to drink) and her other early symptom removal: "From these experiences—that the hysterical phenomena with this patient disappeared as soon as the event that had caused the symptom was reproduced in hypnosis—there developed a therapeutic-technical procedure, which left nothing to be desired in terms of logical consistency and systematic implementation."[54] The overall rough arc, with an emphasis on the form and content of duo-talk, is as follows.

Breuer first mentioned talk early in the history, when describing Pappenheim's increasing symptoms during her bedridden period of winter and spring 1880–81: In addition to her contractures, she developed "a deep-going functional disorganization of her speech. It first became noticeable that she was at a loss for some words, and this difficulty gradually increased. Later her speaking lost all grammar, all syntax, and the entire conjugation of verbs; finally she used only wrongly formed infinitives, mostly from weak past participles, and no articles. With further development, she was at nearly

53 Breuer didn't employ either term—*talking out* or *away* (*Aussprechen*, *Absprechen*)—in the Bellevue case history. There, he mostly described Pappenheim's talking in terms of stories and narration or telling (*Erzählungen*, *Erzählen*), and twice said she had "narrated away" (*wegerzählt*). Breuer, Pappenheim case history (D 23), p. 15, 18. Though preserved this term in the published case history, he used it only once in quote marks (and another time its pair, "aberzählt"), and ultimately developed the more common terminology of *Aussprechen* and *Absprechen*. Breuer, "Anna O," in *GW* suppl.:233, 240 / *SE* 2:35, 43. This was all complicated by inconsistent (and poor) translations in the *Standard Edition* (where *Aussprache* was rendered with *verbal utterance*).

54 Breuer, "Anna O," in *GW* suppl.:233 / *SE* 2:35 (my translation). {"Aus diesen Erfahrungen, daß die hysterischen Phänomene bei dieser Kranken verschwanden, sobald in der Hypnose das Ereignis reproduziert war, welches das Symptom veranlaßt hatte—daraus entwickelte sich eine therapeutisch-technische Prozedur, die an logischer Konsequenz und systematischer Durchführung nichts zu wünschen ließ."} Breuer repeated this in the penultimate paragraph of "Anna O," emphasizing again that the technique had "developed." Ibid., 253 / 46. As previously noted, the *Standard Edition* here obscured Breuer's repeated use of the reflexive *sich entwickeln* (to develop) with the technique as the grammatical subject; instead, Strachey imputed the active development to Breuer himself, which Breuer seems to have actively avoided claiming.

an entire loss for words; bit by bit, she collected them laboriously from four or five languages, with which she was hardly comprehensible anymore."[55] The final outcome of this disorganization was two weeks of mutism, after which Breuer introduced their conversations for the first time: "And now for the first time the psychical mechanism of the disorder became clear. As I knew, she had felt very much offended over something and had determined not to speak about it. When I guessed this and obliged her to talk about it, the inhibition, which had made any other kind of utterance impossible as well, disappeared."[56]

What is crucial about this first appearance of talk is twofold: on the one hand, its informal and everyday form and content, structured around Breuer's attempt to elicit a comment about what had offended Pappenheim; on the other, the resulting nonspecific improvement in Pappenheim's overall condition. Regarding the former, the conversation didn't take place during autohypnosis and wasn't structured around her storytelling; the subject wasn't a memory or originating event but a recent grievance.[57] Regarding the

55 Breuer, "Anna O," in *GW* suppl.:224 / *SE* 2:25 (translation modified). {"Denn zugleich mit der Ausbildung der Kontrakturen war eine tiefe, funktionelle Desorganisation der Sprache eingetreten. Zuerst beobachtete man, daß ihr Worte fehlten, allmählich nahm das zu. Dann verlor ihr Sprechen alle Grammatik, jede Syntax, die ganze Konjugation des Verbums, sie gebrauchte schließlich nur falsch, meist aus einem schwachen Partizip preateriti gebildete Infinitive, keinen Artikel. In weiterer Entwicklung fehlten ihr auch die Worte fast ganz, sie suchte dieselben mühsam aus vier oder fünf Sprachen zusammen und war dabei kaum mehr verständlich."} See my discussion of aphasia, paraphasia, and Pappenheim's overall language disorder in the introduction.

56 Breuer, "Anna O," in *GW* suppl.:224 / *SE* 2:25. {"Hier wurde nun zuerst der psychische Mechanismus der Störung klar. Sie hatte sich, wie ich wußte, über etwas sehr gekränkt und beschlossen, nichts davon zu sagen. Als ich das erriet und sie zwang, davon zu reden, fiel die Hemmung weg, die vorher auch jede andere Äußerung unmöglich gemacht hatte."} The Bellevue case history illuminates what had offended Pappenheim, or rather *who* had: her father, though the specific subject of the offense was still unspecified. Moreover, the order of events was given in more detail: While Pappenheim's speech disorganization was introduced similarly (though using the category and language of aphasia, as already discussed), Breuer specified that she had first decided not to speak as a result of her father's offense before she had her two weeks of mutism. It is not unimportant to my emphasis on duo-talk that her voluntary decision ("beschlossen" in both versions) to not talk *preceded* her symptom of involuntary mutism, though like many of the specifics of the case, it is important to avoid the temptation of overinterpretation. Breuer, Pappenheim case history (D 23), p. 9.

57 It's somewhat unclear what exactly Breuer meant by saying that he "obliged her to talk about it" ("sie zwang, davon zu reden"), specifically whether such obliging or compelling had a particular means.

latter, the result of the conversation wasn't the disappearance of a particular symptom attached to a memory but rather an overall lessening of the severity of her overall illness. Pappenheim's return to speech "coincided with" the end of contractures on her left but not right side and the end of her paraphasic disordered speech but not her inability to speak German; other physical symptoms lessened (strabismus, neck paresis) and she was ultimately able to leave her bed (though only four days before the death of her father, which precipitated a new set of symptoms).[58]

Rather than a cure or any sort of methodical treatment, this was simply a conversation, if an emotionally laden one—in another word, duo-talk. Breuer described the tenor of their exchange expressly. After the death of her father, when Pappenheim struggled with recognizing her relatives, she nevertheless always recognized Breuer: "I was the only person whom she always recognized when I came in; so long as I was talking to her she was always present and lively."[59] They had started to build the rapport that was the hallmark of their encounter, and it centered on their conversations. With Breuer's regular visits (twice a day at this point), the duo-talk persisted and developed, joining with the evening autohypnoses and dealing with the goings-on of her daily life, most notably her many sudden absences. These absences often featured a particular "ideational circle" (*Vorstellungskreis*) that was indicated by "a few muttered words"; in the evening, these became the subject of their conversation.[60] When it took full form, Pappenheim's side of the talk appeared in stories seemingly patterned after the famed Danish writer Hans Christian Andersen: "The stories were always sad and some of them very pretty. . . . As a rule their starting-point or central

58 Breuer, "Anna O," in *GW* suppl.:225 / *SE* 2:25.
59 Breuer, "Anna O," in *GW* suppl.:225 / *SE* 2:26 (translation modified). {"Nur mich kannte sie immer, wenn ich eintrat, blieb auch immer präsent und munter, solange ich mit ihr sprach."}
60 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29 (translation modified).

situation was of a girl anxiously sitting by a sick-bed. But she also built up her stories on quite other topics."[61]

Looking back, Breuer described these as "more or less freely-created poetical compositions," but he never went into further detail about their content.[62] Due to her continued language disorder, she often struggled at first to speak coherently; "but the longer she went on," Breuer wrote, "the more fluent she became, till at last she was speaking entirely correct German."[63] He had elaborated upon this phenomenon in the Bellevue case history, writing, "The fact that her aphasia temporarily waned with the increase in her psych<ical> activity during the absence, and the entirety of the facts of the matter, brought me to establish the diagnosis as hyster<ical> affliction."[64] The talking *itself* provoked an improvement in speech and an overall increase of psychical activity, *before* she had talked herself out or finished her narration. That this happened during autohypnosis has generally overshadowed this key facet: This was the talk that Pappenheim undertook with "great vivacity," as she wrote in her later report on her

61 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29 (translation modified). {"Die Geschichten, immer traurig, waren teilweise sehr hübsch. . . . Meist war Ausgangs- oder Mittelpunkt die Situation eines bei einem Kranken in Angst sitzenden Mädchens; doch kamen auch ganz andere Motive zur Verarbeitung."}

62 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29. For how important these stories were, Breuer gave very few details about them. In this same description here, he contrasted them explicitly with her later reports on hallucinations (about which more in a moment). In the Bellevue case history, he mentioned fairy tales (*Märchen*) in addition to Andersen (a genre to which Andersen certainly belonged) and gave the full "stereotypical" opening clause (in English), which he later used to prompt Pappenheim and which was only referred to passing in the published version: "And there was a boy." Breuer, Pappenheim case history (D 23), p. 10, 18. Finally, in neither version did Breuer fully clarify the relation between Pappenheim's stories and her "private theater" (her waking dreams). The waking dreams of her "private theater" characterized her mental state even before the onset of her illness. Nevertheless, the implication seems to be that the stories and the "private theater" were related. Breuer, "Anna O," in *GW* suppl.:222, 239 / *SE* 2:22, 41–42.

63 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29 (translation modified). {"Je weiter, desto fließender, bis sie zuletzt ganz korrektes Deutsch sprach."} Despite its placement in *Studien* just before the introduction of the "talking cure," this phenomenon of increasingly fluent speech in fact took place early in encounter, as Pappenheim was still speaking German (Breuer himself noted this in a parenthetical). Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29.

64 Breuer, Pappenheim case history (D 23), p. 11 (editor's interpolations). {"Die Thatsache, daß bei der Steigerung ihrer psych<ischen> Thätigkeit in dieser Absence die Aphasie vorübergehend schwand, und das ganze Factum bewogen mich, die Diagnose auf hyster<ische> Affection festzuhalten."}

own illness. And it was precisely the *opposite* of the conversation she found unengaging: "When during this phase two other persons are talking in German, I must take trouble to fix my attention to the conversation, which is quite indifferent me. I feel sorry not to understand; but ame not interested in it. I have bin told that after some hours I get my German language through speaking it very badly."[65] Her conversations with Breuer not only held her interest but stimulated it, giving room for her poetic creations and accelerating her faculty of speech. Just as with the very first mention of talking, here *talk* had its own valence and currency in their relationship.

Breuer gave two capsule summaries of this rhythm of conversation before introducing Pappenheim's coinage, the "talking cure." And indeed, when these conversations reached their end—when Pappenheim had finished telling a story—they did have a particular effect: "If, after this, she had talked herself out (I shall have to explain what is meant by this later) she was clear in mind, calm and cheerful."[66] But, as I've tried to show, the *talking out* (*aussprechen*, *Aussprache*) to which he referred in these summaries developed before their conversations became curative.[67] It was only later, when Pappenheim moved to

65 Pappenheim, self-report (D 28), Deu. 370 / Eng. 297.

66 Breuer, "Anna O," in *GW* suppl.:226 / *SE* 2:27. {"Hatte sie sich dann ausgesprochen (ich werde später genauer hierauf eingehen müssen), so war sie klar, ruhig, heiter."} The second, slightly longer summary was as follows: "The essential features of this phenomenon—the mounting up and intensification of her *absences* into her auto-hypnosis in the evening, the effect of the products of her imagination as psychical stimuli and the easing and removal of her state of stimulation via talking out [*durch die Aussprache*] in hypnosis—remained constant throughout the whole eighteen months during which she was under observation" (translation modified). Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29. {"Das Wesentliche der beschriebenen Erscheinung, die Häufung und Verdichtung ihrer Absencen zur abendlichen Autohypnose, die Wirksamkeit der phantastischen Produkte als psychischer Reiz und die Erleichterung und Behebung des Reizzustandes durch die Aussprache in der Hypnose, blieben durch die ganzen anderthalb Jahre der Beobachtung konstant."} Despite Breuer's claim that this was a constant for the entire treatment, my point here is that it in fact slowly developed and changed, only taking on particular aspects, notably the talking away of specific symptoms, much after the daily duo-talk had been established.

67 The use of *talking out* in the two summaries was as follows: "If, after this, she had talked herself out." "The easing and removal of her state of stimulation via talking out in hypnosis" (translation modified). Breuer, "Anna O," in *GW* suppl.:226, 228 / *SE* 2:27, 29. {"Hatte sie sich dann ausgesprochen." "Die Erleichterung und Behebung des Reizzustandes durch die Aussprache in der Hypnose."} Breuer continued to use this term even once Pappenheim's "talking cure" was introduced and when they had further developed the therapeutic method. But again my aim is to show that *talking out* can be understood via Pappenheim and

the countryside in June 1881 and Breuer could only visit once daily in the evenings, that talking out received its name, the "talking cure."[68] It was again only later that summer, after Breuer's vacation, that "what she reported was more and more concerned with her hallucinations and, for instance, the things that had annoyed her during the past days" rather than her poetic creations;[69] then that he linked their conversations to her past experiences, in the famous example of Pappenheim's fear of water and the dog drinking from the glass;[70] and then that he referred to Pappenheim's side of the conversation as a *report* (*Referat*) and introduced the term *talk away* (*absprechen*) in addition to *talking out*.[71] And it was finally only in December 1881, when Pappenheim began to relive the year before, that he began to fully work out the temporal aspect of her maladies—the relation between symptoms and the original sometimes long-ago events;[72] then that they arrived at the original underlying events from the latent "incubation" period of Pappenheim's

---

Breuer's broader conversation not just as part of a therapeutic method. It's important to note that Breuer did not revisit these early pre–"talking cure" conversations in his closing analysis of the case, limiting his remarks there about talk to talking away symptoms. Ibid., 238–43 / 41–47, esp. 240–42 / 43–45. Of course, Breuer and Freud also used the term *talking out* in the preliminary communication to refer specifically to the therapeutic method. I don't think this troubles my account as it is focused on the case history itself, which has its own authorship and history. Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in ibid., 85 / 6.

68 Breuer, "Anna O," in *GW* suppl.:229 / *SE* 2:30.

69 Breuer, "Anna O," in *GW* suppl.:230 / *SE* 2:31. {"Es wurden immer mehr und mehr Referate über ihre Halluzinationen und über das, was sie etwa in den verflossenen Tagen geärgert."} The relation between Pappenheim's talk about her hallucinations and her telling stories is somewhat obscure for two reasons: Breuer's nonlinear and recursive form in *Studien*; and the blurred lines between absences, autohypnosis, "clouds," and hypnosis, and the attendant fact that hallucinations happened both in and out of these states. But Breuer drew a clear line between the "freely-created poetical compositions" and "frightful and terrifying hallucinations" as Pappenheim discussed them. Ibid., 228 / 29. Though she had intense hallucinations following the death of her father, a new sort entered after she moved to the countryside. These new hallucinations occurred without absences; he furthermore marked out the talk about these hallucinations by referring to them as *reports* (*Referate*). Ibid., 227, 228, 229, 230, 235 / 28, 29, 31, 37.

70 Breuer, "Anna O," in *GW* suppl.:232–33 / *SE* 2:34–35.

71 For *report* (*Referat*), Breuer, "Anna O," in *GW* suppl.:228, 229, 230, 235 / *SE* 2:29, 31, 37; and for *talk away* (*absprechen*), ibid., 231, 232, 235 / 33, 34, 35. While Breuer used the former regularly in the Bellevue case history, the latter was new as of *Studien*. Yet *talking out* was also new for the published version, which gives more credence to my reading of a specific and thought-out distinction made by Breuer between the two.

72 Breuer, "Anna O," in *GW* suppl.:231–32 / *SE* 2:32–34.

illness;[73] and only then that Breuer began to purposefully hypnotize Pappenheim during morning sessions in order to make the evening process of talking away symptoms more direct and regular.[74] The specific valence and currency of Pappenheim and Breuer's duo-talk was a necessary condition for the development of the "talking cure"; but it emerged prior to and separate from the cure, a distinct outgrowth of the broader Viennese culture of conversation.

Of course, due to the limited nature of the case history, it's difficult to say more about this specific growth of duo-talk from the conversational culture. But we do have evidence stemming from Breuer's house doctoring in general and from the specific encounter between Pappenheim and Breuer that show just how embedded this talk was in this dominant culture. The home visits at the center of Breuer's practice were all framed according to the dominant bürgerlich customs of daily visiting.[75] In 1910, he wrote to Marie von Ebner-Eschenbach, who was both his longtime patient and close friend, about visiting for her seventieth birthday before the rush of other visitors: "The physician is entitled to the prerogative of being allowed to come at an earlier hour than other visitors. May I most kindly arrogate to myself this right even when I come not on the job"?[76]

73 Breuer, "Anna O," in *GW* suppl.:232 / *SE* 2:34. Breuer distinguished between three groups of elements that Pappenheim had to talk away starting in this final period: "her phantasms of fresh production," "the experiences and 'vexations' of 1881" (the preceding year that she was currently reliving in 1882), and "the psychical *events from the incubation of the illness* between July and December 1880." Ibid. (translations modified; "vexations" in English and quotes in original; emphasis in original but not in the *Standard Edition*). {"Die Phantasmen frischer Produktion"; "die Erlebnisse und die 'vexations' von 1881"; "die psychischen *Ereignisse der Krankheitsinkubation* von Juli bis Dezember 1880."} See my discussion about the somewhat unclear distinctions between these three groups and the overall chronology in the introduction to these chapters.

74 Breuer, "Anna O," in *GW* suppl.:234 / *SE* 2:35–36.

75 On the daily visit as part of conversation culture, see Linke, *Sprachkultur und Bürgertum*, chap. 9.3.

76 JB to MEE, 7 September 1910, in *Bw*, 106. {"Dem Arzte wird das Vorrecht zugestanden, zu früherer Stunde kommen zu dürfen, als andere Besucher. Gestatten Sie gütigst, daß ich mir dies Recht auch diesmal arrogiere, wo ich nicht im Berufe komme."} Several years later, in a letter announcing an upcoming stay in Vienna, Ebner asked that he no longer claim this right of early visit: "Permit me only one request, dear, dear, best friend. Each hour that you want to bestow upon me between 11 o'clock in the morning and 11 o'clock in the evening is for me a festive and celebratory hour; apart from—don't you be angry—only one hour, mealtimes, because then I have really less of you." MEE to JB, 5 November 1913, in *Bw*, 139–40. {"Nur eine

Another letter from the following year to an unknown woman touched similarly on the (lack of) propriety of a recent visit:

> I am sincerely sorry that your mother, against my request, informed you of the small mishap; yet even more so that you let it bother you so much and expressly write! It was nothing more than my having to walk up a. down a. ring to no avail. The servant was simply busy in the dining room. This happens to me everyday on my rounds.
>
> Nevertheless—for this question, I ask to be excused—why isn't there an obviously marked button on the house door with which one could ring, without time and again having to go to the garden door?
>
> So—please—excuse me for having caused this trouble for you; it really wasn't worth it![77]

In both instances, Breuer staked out his doctoring with regard to broader, highly regimented social norms, specifically of the visit. This was the case even with extremely different relations between Breuer and the recipient, the former a longtime close patient-friend and the latter an anonymous patient (or daughter of a patient). Such explicit framing of his professional work against social life was related to Breuer's particularly emotional approach to doctoring (further explored in the next chapter) but is not reducible to nor understandable via it.

Bitte erlaube ich mir, lieber, lieber, bester Freund. Jede Stunde, die Sie mir zwischen 11 Uhr morgens und 11 Uhr abends schenken wollen, ist mir eine Fest- und Feierstunde, die einzige, seien Sie ja nicht bös, der Mahlzeit ausgenommen, denn da habe ich wirklich wenig von Ihnen."}

77 Breuer to unknown, 21 November 1911, 1434/4-1, ÖNB Autogr. While it's possible that Breuer was making a social rather than professional house call, the reference to his rounds and lack of a specific address make it almost certain that this was a professional call; the precipitating letter does not seem to be preserved. The orphaned letter, not part of any larger collection, is a slight but fascinating window into the everyday elements of house doctoring, which otherwise is not well represented in archival collections including Breuer's. As Breuer's temperament was famously even-keeled and warm, this letter must have truly irked him to write such a response.

{"Es tut mir herzlich leid, dass Ihre Mutter, gegen meine Bitte, Ihnen das kleine Malheur mitgeteilt hat; noch mehr aber, dass Sie sich daraus so viel machen und eigens schreiben! Es war doch weiter nichts, als dass ich ein paar mal hin u. hergehen u. vergebens läuten musste. Der Diener war eben im Speisesaal beschäftigt. Das geschieht mir alle Tage auf meinem Rundgang. // Allerdings—für die Frage bitte ich um Entschuldigung—warum ist nicht an der Thüre des Hauses ein Knopf ersichtlich gemacht, mittels dessen man läuten könnte, ohne immer wieder zur Gartenthür zu gehen. // Also—bitte—entschuldigen Sie, dass ich Ihnen diesen Arger bereitet habe; die Sache war ihn wirklich nicht wert!"}

In terms of Breuer's particular treatment of Pappenheim, the link between her many maladies and everyday social life was made repeatedly in the documents pertaining to her stay at the Bellevue Sanatorium in 1882. In 1881, Breuer's first letter to the psychiatrist Robert Binswanger, director of the sanatorium, mentioned the need for a companion who spoke English or French.[78] Once she was there, Pappenheim herself wanted this companion to be her cousin Anna Ettlinger, but Binswanger thought she should be isolated from her past. She nevertheless noted how pleased she was with the socializing on offer, though with some hesitation: "I stay with company until 10 o'clock in the evening, associate with that part of the company that pleases me, retire when it suits me, and live, in a word, completely a mon aise. I hope, however, not to have to continue this life, which could become most intolerable over a longer period, any longer than I set out to."[79] As Albrecht Hirschmüller shows, such socializing was a in fact major part of the sanatorium's very modern approach to care.[80] During that same time, her cousin Fritz Homburger

78 Breuer to Binswanger, 4 November, 1881, D 24, Hirschmüller Documents, Deu. 365 / Eng. 292.

79 Quoted by Fritz Homburger to Binswanger, 23 July 1882, D 29, Hirschmüller Documents, Deu. 372 / Eng. 299. {"Ich bleibe in der Gesellschaft bis 10 Uhr Abend, verkehre mit jenem Theil der Gesellschaft, der mir behagt, ziehe mich zurück, wenn es mir paßt und lebe mit einem Wort vollkommen a mon aise. Ich hoffe aber, dieses Leben, das mir auf eine längere Dauer höchst unausstehlich werden könnte, nicht länger als ich mir vorgesetzt fortführen zu müssen."} It seems that this daily socializing ultimately made a happy impression on Pappenheim and yielded some lasting ties. After leaving Bellevue, she wrote an update on her condition to Binswanger, closing with the following note: "Since it would be immodest to ask you, Herr Doktor, for news of all those about whom my interest is keen, I'll wait till Frl. Kreuser or Frl. Hedwig sends such to me. Of you I only request to give my warm wishes and regards to Frau Dr. senior and junior, Frl. Luise, Annchen, Frl. Kreuser, Frl. Hedwig, 'our Jettchen,' Frl. v. R. and all those who have kept good memories of me." Pappenheim to Binswanger, 8 November 1882, D 34, Hirschmüller Documents, Deu. 380 / Eng. 306. {"Da es unbescheiden wäre, von Ihnen, Herr Doktor, Nachricht von All Jenen zu verlangen, für die mein Interesse rege ist, so will ich warten, bis Frl. Kreuser oder Frl. Hedwig mir solche zukommen läßt; Sie bitte ich nur, meine herzlichen Grüße und Empfehlungen zu bestellen an Frau Dr. sen. und jun., Frl. Luise, Annchen, Frl. Kreuser, Frl. Hedwig, 'unser Jettchen,' Frl. v. R . . . und Alle, die mir ein gutes Andenken bewahrt haben."}

80 As Hirschmüller quotes from a manuscript by Binswanger from 1890, "It is, however, an essential feature of the system that throughout the day the patients enjoy the company of the largest possible number of people of sound mind, people who are alike in their qualities of compassion, understanding and affect. In short, the patients must be part of a larger family circle." Quoted in Hirschmüller, *Josef Breuer* [English], 113.

noted that "she writes, both to her mother and to other relatives, always totally clear and enjoyable letters, which indicate not even the smallest trace of a disorder."[81]

In 1898, looking back from her new perch as a writer and social worker in Frankfurt, Pappenheim condemned this sociality, at least some aspects of it: "Also, no mother should allow her daughter to have every day of the week 'occupied,' to moan about the many tea parties 'that must be attended' and then to amusingly make pilgrimage there all the same. There's so much untrue in this sort of sociability."[82] But was Pappenheim in fact critiquing the social world of her own upbringing? Or critiquing herself for having enjoyed it? Or did this have more to do with her later experiences in Frankfurt? Without other contemporaneous evidence, it's no possible to say.[83] We can say for sure that Pappenheim was enmeshed in and highly attuned to this world sociability. This was the world of conversation she overheard while in her English moments and the world that provided the backdrop for her daily visits with Breuer.

This is roughly the end of what can be said specifically about Pappenheim and Breuer's particular mode of conversing. But there is still much to be said about duo-talk—what it was and how each of them employed it—beyond the bounds of their encounter. To do so, we need to consider sources that emerge out of this same conversational culture but of course reach past the limits of talk itself: the children's stories that Pappenheim wrote and

81 Homburger to Binswanger, 23 July 1882, D 29, Hirschmüller Documents, Deu. 371 / Eng. 298. {"Bertha schreibt sowohl an Ihre Mutter als an die übrigen Verwandten stets völlig klare und vergnügte Briefe, die auch nicht die mindeste Spur einer Störung erkennen lassen."}

82 Pappenheim, "Erziehung der weiblichen Jugend," 61. {"Auch sollte keine Mutter ihrer Tochter erlauben, alle Tage der Woche 'besetzt' zu haben, über die vielen Theegesellschaften, 'in die man gehen muß,' zu jammern und dann doch vergnüglich hinzupilgern. Es liegt so viel Unwahres in dieser Art der Geselligkeit."}

83 Pappenheim's essay criticized the present education and upbringing of upper-class girls for not preparing them for life, instead dulling them. But her critique didn't merely demand more intellectual stimulation (though it did see the primary activities of handwork and sociability as empty) but rather an appreciation, understanding, and preparation for *work*, even when a family's money didn't demand it. This aspect seems crucially to complicate attempts to read this essay back into her own youth and frustrations with her own education, as they related to her illness. Of course she drew from her own experience, but how and to what end?

published during the period after her illness but before the publication of *Studien*, and the longterm correspondence between Ebner-Eschenbach and Breuer.[84]

"ach ja, erzähle": pappenheim's stories

On 4 January 1883, Fritz Homburger responded to a New Year's greeting from Robert Binswanger with thanks and an update on Bertha Pappenheim's condition. She had been with family, first in Karlsruhe with Homburger and then in Frankfurt and Mainz with others, for just over the past two months, and her condition was roughly the same as when she left the sanatorium (English at night, recurring neuralgic pains). Nevertheless, she was attending a nursing course daily and happily socializing, going to the theater and concerts. Though Pappenheim herself disputed it, Homburger noticed a recent improvement in her health. He closed by describing her last days in Karlsruhe: "She socialized more frequently with my cousin Anna Ettlinger (whom you no doubt know), to whom she read aloud a few fairy tales of her own composition aloud and who liked them very much. AE[ttlinger] advised her to leave this nursing business [*die Pflegerei*], to occupy herself with literary work. I believe that she [Pappenheim] will sooner o. later follow this advice, in very short order come here again to keep up contact with AE."[85] Pappenheim did eventually come again to Karlsruhe, though on the later side in 1889.[86] By then she had taken Ettlinger's

84 On the role of various sorts of writing in the culture of conversation, see Rossbacher, *Literatur und Bürgertum*, chap. N.

85 Homburger to Binswanger, 4 January 1883, D 35, Hirschmüller Documents, Deu. 381 / Eng. 307 (my interpolations; removed editor's interpolations). {"In den letzen Tagen ihres Hierseins verkehrte sie häufiger mit meiner Cousine Anna Ettlinger (Sie kennen dieselbe ohne Zweifel), welcher sie einige selbstverfasste Mährchen vorlas, die sehr gefielen. A<nna> E<ttlinger> rieth ihr zu, die Pflegerei zu unterlassen <und> sich mit litterarischen Arbeiten zu befassen; ich glaube, daß sie diesem Rath früher od<er> später auch Folge gehen wird <und> daß sie in ganz kurzer Zeit wieder hierherkömmt, um den Verkehr mit A<nna> E<ttlinger> zu pflegen." (Editor's interpolations.)}

86 This visit was attested in Ettlinger's memoirs, published in 1920 and identified by Hirschmüller. Ettlinger was a well-known member of Karlsruhe's cultural elite and held regular literary lectures at her home in addition to other cultural events. Prompted by some of these lectures, she hosted an evening of theatrical scenes on 3 January 1889, in which Pappenheim, listed in the reproduced playbill as a guest from Vienna, played a

advice and published the first of two collections of stories, *Kleine Geschichten für Kinder* (ca. 1888; *Little Stories for Children*), soon followed by *In der Trödelbude* (1890; *In the Junk Shop*).[87] What can we learn from these stories? How might they relate to those stories that Josef Breuer listened to in 1881 and 1882? And what do they have to do with conversation more broadly and duo-talk specifically?

Like nearly everything in Pappenheim's life before 1895, when she started her institutional and organizational engagement with both social work and the women's movement, the history of these books remains obscure. The first was published anonymously and the second under her pseudonym, P. Berthold, with each surviving in only one copy at the Wienbibliothek in Vienna's city hall.[88] Save the scant records

---

couple of roles. Ettlinger, *Lebenserinnerung*, 269–70. Pappenheim was, however, otherwise not mentioned in Ettlinger's text.

87 Each survives only in one copy at the Wienbibliothek in the Vienna city hall; both are available online. Pappenheim, *Kleine Geschichten für Kinder*, catalogue record: https://permalink.obvsg.at/wbr/AC15691386; online copy: https://www.digital.wienbibliothek.at/id/2765612; and Pappenheim, *In der Trödelbude*, catalogue record: https://permalink.obvsg.at/wbr/AC16118430; https://www.digital.wienbibliothek.at/id/3046265. The Leo Baeck Institute in New York owns a photographed reproduction of *In der Trödelbude*, which was also microfilmed, scanned, and made available online. Together, the books have recently been published in English translation. Pappenheim, *In the Junk Shop*. See below on the dating of the books and the provenance of each copy.

88 In terms of the attribution and dating of these books: Hirschmüller was the first to identify *Kleine Geschichten* as by Pappenheim, which happened by chance at the Wienbibliothek, since it had been filed under her later pseudonym, P. Berthold, when he looked in the 1970s. He suggests that the book must have been published before 1890, when Pappenheim had chosen the pseudonym for her second book, and gives 1888 as a guess, which is now the generally used date. This guess was probably informed by the fact that 1888 was when Pappenheim left Vienna for Frankfurt, not far from Karlsruhe where the book was ultimately published. He further suggests that her cousin Anna Ettlinger may have helped with publication, probably based on Ettlinger's cultural and literary contacts and Pappenheim's visit to Karlsruhe in 1889. Hirschmüller, *Josef Breuer* [English], 115, 371n205, 372n216. By contrast, *In der Trödelbude* was already included among Pappenheim's publications in the memorial issue of *Blätter des Jüdischen Frauenbundes* (without the pseudonym attached), a list that was later republished with Dora Edinger's collection of Pappenheim's works, with the date 1890. "Bertha Pappenheim: Zum Gedächtnis," 3; and Pappenheim and Edinger, *Leben und Schriften*, 28. Like its predecessor, *In der Trödelbude* has no date in its pages, but Edinger's date of 1890 is confirmed by a contemporary reference work. *Verzeichniß der . . . Bücher [1890]*, s.v. "Berthold, P.," 2:49. A second edition with a different publisher came out in 1894 and has long been known, though no copies seemingly survive. Schmuck and Gorzny, *Gesamtverzeichnis des deutschsprachigen Schrifttums*, s.v. "Berthold, P.," 14:38. The Leo Baeck Institute catalogue gives another guess with a question mark (1896?) for its reproduction of the Wienbibliothek copy. These later dates occasionally pop up as the original edition of *In der Trödelbude* (so even the extremely careful and critical Elizabeth Loentz gives 1896, based probably on the Leo Baeck catalogue. Loentz, *Speak the Truth*, 180). The attribution of both works to Pappenheim

from her illness, they are the earliest materials we have from Pappenheim and, of her extensive literary works, they are prima facie closest in form to the storytelling that led to the "talking cure." Looking back at this period from later in life, Pappenheim classed everything up to 1890, including her illness and the writing of these tales, as part of her having led "the usual life of a 'daughter of high standing' ['*höheren Tochter*'] from a strictly Jewish, orthodox bürgerlich family."[89]

What's more, they were composed and published *before* Breuer and Freud's first publication of 1893 and *Studien* of 1895, thus remaining free from any looped influence that the presentation of her case there might have had on her own thinking and writing.[90] Despite the mountain of literature on Pappenheim and Anna O., these stories have

---

is attested by another contemporary reference work, which included both books, pen name, and given name. Pataky, *Lexicon deutscher Frauen der Feder*, s.v. "Pappenheim, Frl. Bertha," 115. (To give important credit where it's due, Hirschmüller first identified both of the contemporary reference works listing these books.)

In terms of the provenance of the sole-surviving Wienbibliothek copies: Both came to the library from the same bequest by the Viennese independent scholar and collector Max von Portheim in 1937. Portheim is almost certainly the unnamed member of Pappenheim's family mentioned by Hirschmüller in his account of finding *Kleine Geschichten*. *Josef Breuer* [English], 372n216. Portheim and Pappenheim were second cousins via their mothers, Bertha and Recha Goldschmidt, members of the Frankfurt Goldschmidt banking family. Czeike, *Historisches Lexikon Wien*, s.v. "Portheim, Max v.," 4:579; and Goldschmidt family tree ("Mütterliche Abstammung"), "Bertha Pappenheim: Ein Buch des Gedenkens," by Dora Edinger, MS 406, Manuscript Collections, Leo Baeck Institute Archives, New York, http://digital.cjh.org:1801/webclient/DeliveryManager?pid=624347. Portheim had an immense private library (nearly twenty-thousand books ended up in the Wienbibliothek) and a card catalogue of hundreds of thousands of relevant figures. His collecting focused on the eighteenth century and the era of Joseph II, so Pappenheim's story books were almost certainly acquired because of their family connection. The Wienbibliothek has no information about the provenance of the books before entering their collection and Portheim's remaining person and book catalogues center on his primary area of interest, the world of Joseph II, with no information under Pappenheim, her pseudonym, or the book titles. Reinhard Buchberger, Wienbibliothek, email to the author, 13 January 2021. While Hirschmüller was the first to find and describe *Kleine Geschichten* in 1978, *In der Trödelbude* was first located by psychoanalytic researchers in 1958 (though Edinger had thought it lost). Karpe, "Anna O's Final Identity," 1103. Since the books only survived because Pappenheim's cousin was a notable and successful collector, we can surmise that they had relatively minimal distribution, visibility, and reception during Pappenheim's life. The Portheim bequest had only one other of her books, her translation of the Yiddish memoirs of Glückel von Hameln, an important early modern Jewish writer from Hamburg and forebear of the Goldschmidt family; it included no works by Breuer or Freud.

89 Pappenheim, "Gedanken über Sozialarbeit," in "Bertha Pappenheim: Zum Gedächtnis," 11. {"Ich habe als Kind oder junger Mensch nie etwas organisiert, habe keine Organisation gekannt und bis etwa 1890 das übliche Leben einer 'höheren Tochter' aus streng jüdischer, orthodox bürgerlicher Familie geführt."}

90 This is why I spent so much time establishing the attribution, dating, and provenance of the two books.

received relatively little critical attention. This is in part for good reason, stemming from both the lack of other primary material from this period and the stories' highly particular form (the children's tale). The critical attention they have received tends to the psychobiographical, identifying either particular elements or themes in the stories that echo those of Pappenheim's own life.[91]

But it is precisely those limiting factors—the lack of other primary material, the particular form—that render such a strongly psychobiographical approach inadequate. Instead, based on the evidence we do have about Pappenheim's earlier storytelling in her encounter with Breuer and a close reading of the two books in the context of the genre of the children's tale itself, I argue that Pappenheim's stories (especially *In der*

91 The first description of *In der Trödelbude* by Richard Karpe set this psychobiographical pattern: "Bertha Pappenheim probably identified herself with both the rescued girl—in the manner of a family romance—and with the rescuer." Karpe, "Anna O's Final Identity," 10. Following this pattern, most of the literature suggests that the stories at once looked forward to Pappenheim's work in orphanages and with children (i.e., the rescuer) and faced backward toward her illness and treatment (i.e., the rescued), in thematic as well as in specific content. The former seems to me accurate if anodyne: motherhood, orphans, child rearing, and their attendant challenges were not only recurring motifs across Pappenheim's stories but major elements of her life. But the latter seems entirely unsubstantiated and highly misleading. In this vein, for instance, Hirschmüller analyzes "The Pond Nymph" from *Kleine Geschichten*—in which a nymph follows her forbidden desire to leave her pond and dances with a man at a nearby party, before being frozen out of her watery home turned into a snowdrop—as calling back to the dance music that set off her nervous cough; he even suggests that the dancing man, described merely as tall and handsome with a long beard and blue eyes, resembles Breuer and Pappenheim's father. While Pappenheim's nervous cough and its relation to dance music were immortalized for us by Breuer and Freud's publication, there is no evidence that Pappenheim herself held on to these events as memories, especially half a decade later, let alone that she overtly decided to dramatize them (and this is to say nothing of the fanciful idea that a generically handsome man can be identified with any particular historical person!). Hirschmüller closes his analysis by asking, "Is it going too far to regard this story [of the nymph] as Bertha's attempt through literature to come to terms with her separation from Breuer (and from her father)?" Hirschmüller, *Josef Breuer* [English], 123. He in fact goes a step further, arguing that Pappenheim's writing replaced talking away as a way to release built-up affect, which he then connects to her persona and professional work as part of a lifelong construction of mental defenses. Ibid., 125. Yes, this is all going too far! This is all yet another example of attempting a psychoanalytic reading (here really more pseudo-psychoanalytic) of the urcase of Anna O., which both distracts from reading the material on its own terms and does a disservice to Pappenheim's stories. Similar psychobiographical readings (all basically following Hirschmüller) are found in Schweighofer, *Das Privattheater der Anna O.*, 154–57; Guttmann, *The Enigma of Anna O.*, 97–98, 118; Brentzel, *Anna O.—Bertha Pappenheim*, 72–76; and Loentz, *Speak the Truth*, 180, 184, 200–1. Most of this literature spends more time on the earlier *Kleine Geschichte*, probably because of the supposedly apparent connections to Pappenheim's life, than the much richer *In der Trödelbude*, and part of my work here is to remedy this imbalance.

Trödelbude) were driven by a will to self-expression. But rather than aiming at the expression of a particular self, the stories were concerned with *expression itself*, what it in fact means to take something of one's own—from inner life, from experience, from memory, from fantasy—and express it outwardly. Particularly via the object narrators of *In der Trödelbude*, Pappenheim dramatized this will to expression via a play of multiple perspectives and the struggle between desire and reticence to share one's story. This perhaps seems simple or even superficial. But expression is incontrovertibly a key element in Pappenheim's illness and encounter with Breuer, as portrayed by Pappenheim in her own report on her illness and by Breuer in both the Bellevue and published case histories, all of which I detailed in the previous section. Here I attempt to extend this analysis via a relatively *surface* reading of Pappenheim's stories, in contrast with the deeper psychobiographical readings.

Directly connecting Pappenheim's published stories with those she told daily to Breuer is difficult, as the descriptions of her storytelling during the illness were highly circumscribed.[92] This was everything Breuer said about them: The stories were linked via a phrase to her daytime scenarios (her "private theater") and "always sad and some of them very pretty."[93] They were seemingly modeled on Hans Christian Andersen's *A Picture*

92 Hirschmüller points out that the *Studien* case history already mentioned Pappenheim's writing and suggests that it is "likely" these were her stories. Hirschmüller, *Josef Breuer* [English], 372n15. While possible, it seems important to stress that Breuer actually strongly distinguished between the oral storytelling and the writing; the latter could only happen if the former had successfully taken place: "If during this she was able to narrate the hallucinations she had had in the course of the day, she would wake up clear in mind, calm and cheerful. She would sit down to work and write or draw far into the night quite rationally. At about four she would go to bed. Next day the whole series of events would be repeated. It was a truly remarkable contrast: in the day-time the patient of unsound mind, pursued by hallucinations, and at night the girl with her mind completely clear." Breuer, "Anna O," in *GW* suppl.:226–27 / *SE* 2:27–28 (translation modified). {"Konnte sie dann die Halluzinationen des Tages erzählen, so erwachte sie klar, ruhig, heiter, setzte sich zur Arbeit, zeichnete oder schrieb die Nacht durch, völlig vernünftig; ging gegen vier Uhr zu Bett, und am Morgen begann dieselbe Szene wieder, wie tags zuvor. Der Gegensatz zwischen der unzurechnungsfähigen, von Halluzinationen gehetzten Kranken am Tage und dem geistig völlig klaren Mädchen bei Nacht war höchst merkwürdig."}

93 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29 (translation modified).

Book without Pictures (1844), and many but not all centered on a girl sitting anxiously by a patient.[94] Breuer ultimately employed "the stereotypical introductory formula"—"and there was a boy" (in English)—to prompt Pappenheim to start.[95] And they became sadder after her father died, and then morphed further, leaving behind their "freely-created poetical" character for darker reports on her recent hallucinations and annoyances.[96] Even based on this threadbare description, it's still obvious that Pappenheim's storytelling evolved before she published anything. The poetic fragments of Andersen's *A Picture Book without Pictures*, each glimpsed and then narrated by the moon on a successive evening, were clearly no longer a model.[97] None of her published stories centered on a girl sitting with a sick patient, and none employed stereotypical first lines, whether Breuer's English one, the German version of that, the standard fairy-tale opening *es war einmal* (once upon a time), or otherwise. They were certainly sad, many extremely so, though it's difficult to say if any would match Breuer's description as "pretty" (*hübsch*). Only three stories from Pappenheim's first collection dealt with truly fantastical or magical situations, and even there in quite a realist manner (i.e., the human world, human emotions and

94 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29.

95 Breuer, Pappenheim case history (D 23), p. 18 (the introductory formula itself originally in English). Breuer mentioned this tactic in *Studien* but did not specify the actual first line. Breuer, "Anna O," in *GW* suppl.:229 / *SE* 2:30.

96 Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29. Cf. the slightly more detailed description in the Bellevue case history: "During her evening tales, it turned out that her fantastical-poetical streak was obviously dried up. They became ever more and more reports about her hallucinations and what had annoyed her in the few passed-by days, fantastically dressed, but expressed more through fixed fantast<ical> symbols as built out into poems." Breuer, Pappenheim case history (D 23), p. 18–19 (editor's interpolation). {"Bei ihren Abenderzählungen stellte sich heraus, daß ihre phantastisch-poetische Ader offenbar im eintrocknen war. Es wurden immer mehr und mehr Referate über ihre Hallucinationen und was sie etwa in den verflossenen Tagen geärgert, phantastisch angekleidet, aber mehr nur durch feststehende phantast<ische> Symbole ausgedrückt, als zu Poesien ausgebaut. Ihre Absencen nahmen auch ab und die Abenderzählung hatte längeren Erfolg."}

97 The only story that bears any resemblance to the fragments of *A Picture Book without Pictures* was the first tale in *Kleine Geschichten*, but even that shares much more in common with traditional Aesopian fables than Andersen's modern fragments. *In der Trödelbude* was similarly a shifting story cycle with a specific narrative conceit but lacked the basic simplicity and shared narrator of *A Picture Book without Pictures*. On Andersen's fragmentary approach to the great variation of life and stories on earth, which he called "the poetry of chance," see Mortensen, "The Poetry of Chance."

events, were paramount), limiting any connection to hallucinations. And while all the stories were certainly quite artful and purposefully constructed, it is again difficult to say if they are "poetical" in Breuer's sense. There was, nevertheless, one significant and obvious continuity: the general parallel with Hans Christian Andersen (beyond *A Picture Book without Pictures*), to which I return after briefly summarizing each book.

Kleine Geschichten für Kinder is made up of five quite short stories.[98] While the first is a very short moral fable about a boy who refused to stop making faces, the other four engage in well-known types of tales: a school story, a true fairy tale (with fairies), a stork-and-baby story, and a nymph tale. Due to their length and generic form and content, these stories are too easy to overinterpret, especially in a psychobiographical manner; but this very generic quality is itself important, and I return to it in conclusion.

By contrast, *In der Trödelbude* is a finely wrought cycle of nine tales set within a framing story. Franz owns the titular junk shop, and the frame opens with the chance arrival of his old school friend, Wilhelm. Franz tells Wilhelm how he came to own the shop: a broken love story with his childhood sweetheart, Eva, whose father owned a lavish book shop that Franz took over. But Eva ultimately became bored with Franz and left for another man. Franz himself became sick, the business went south, and he had to move to this little junk shop. Wilhelm despairs at the story and his friend's situation, surrounded by dead junk, when Franz had had such an eye for beauty. "The stuff is not as dead as you think," Franz responds. "At night, when all life sleeps, the store is shut and the door to my room is open, there often runs through the shelves a murmuring and whispering, and some of the objects that look insignificant and worthless tell of their lessons and experiences [*Erfahrungen und Erlebnisse*]. I listen in, and when I hear how much misery

98 Hirschmüller suggests that the five stories were not written at the same time and that the first two stand out for their "very harsh features." Hirschmüller, *Josef Breuer* [English], 117. Although this suggestion of varied time of composition seems plausible, only the first moral tale ("The Story of Grimacing Hans") really stands apart.

there is all over the world and how little cheer, I then think that my misfortune is only a small part of the great misery."[99] Of course, he comforts himself by collecting these tales, and what follows are nine of them: from the old lace, the little doll, the coffee grinder, the birdcage, the good-luck pig, the pince-nez, the thimble, the streetlamp, and the music box. Each tells a tale of true woe, how the teller was physically damaged (as they all were) and came to live in a junk shop. Yet each story also features a human element, mostly of families (both biological and otherwise) and their tribulations, which intersect with those of the narrator objects but don't necessarily center on them. After hearing their tales, we return to Franz, who receives some closure on his life story. A distraught orphaned girl shows up with the medallion Franz had given Eva years before; Eva, now deceased, was her mother, and they had returned to Eva's hometown searching for the now-gone book store. Though he is unsure at first, Franz decides he would have forgiven Eva and adopts the young girl. The frame closes again with Franz in conversation with Wilhelm, now via a letter, asking him to come visit again and see their new life.

The form and content of *In der Trödelbude*—a frame story enclosing a multiple-perspective story cycle, with objects come to life as the rotating narrator—stand clearly within the bounds of literary children's and fairy tales.[100] Yet Pappenheim had left behind

99 Pappenheim, *In der Trödelbude*, 19. {"Der Kram ist nicht so tot, wie du meinst. Nachts, wenn alles Leben ringsum schläft, der Laden geschlossen und die Thüre zu meinem Zimmer offen ist, da geht oft ein Wispern und Flüstern durch die Regale, und mancher der Gegenstände, die unbedeutend und wertlos aussehen, erzählen von ihren Erfahrungen und Erlebnisse. Ich lausche, und wenn ich höre, wie viel Elend allenthalben in der Welt ist, wie wenig Heiteres es giebt, dann denke ich, daß meine Unglück nur ein kleiner Teil des großen Elends ist."}

100 The distinctions between various genres under which Pappenheim's stories might be classed—children's stories, tales in general, fairy tales, and so on—have been the subject of years of scholarly debate. While I do at points go into some of this literature, as it particularly pertains to certain aspects of her stories, I mainly use the various terms generically and interchangeably, regardless of whether magic or fairies are actually involved and whether children were the main audience. The most important simple point in the classification of Pappenheim's tales is that she wrote them herself rather than repurposing or reshaping oral folktales (whether in fact or merely supposedly). See, most broadly, Zipes, *Oxford Companion to Fairy Tales*, s.v. "introduction"; on Germanophone tales, ibid., s.v., "Germany"; on late nineteenth-century tales, on Brunken et al., *Handbuch zur Kinder- und Jugendliteratur*, vol. 5, s.v. "Literarische Märchen für Kinder," 351–71; and on the relationship between *fairy tales* and *Märchen* specifically, Zipes, *Grimm Legacies*,

the shorter moral tales of *Kleine Geschichten* for something more intricate and less clear-cut: nearly all of the things' tales feature greatly unhappy events befalling their human actors and most end tragically for those humans, some violently and others downright bleakly (several children die, a man dies of cold and hunger, one mother kills herself). The objects, of course, are usually scarred in the process; they end up in the junk shop due either to these scars or to their humans' unfortunate events. In narration and commentary, they are mostly plaintive and at times sharp or philosophical. Most notably, within each tale, the things are mere observers, never interacting with the humans nor even being overhead by them (in contrast with the frame story, where Franz did of course listen in, though we never really see this happen).[101] There are basically no obvious moral lessons. One traditional fairy-tale moral, in proverb form—"Undank ist der Welt Lohn" (ingratitude is the world's reward)—is mooted several times, with different objects' questioning its validity and yielding the broad conclusion that such morals are inchoate if not silly.[102] Each tale has multiple perspectives: the detached general third-person narrator

---

introduction, chap. 1. Marina Warner offers the most exciting and compelling approach to fairy tales as a whole, going much beyond historical contextualization and narratological and thematic classification to truly engage with the *wonder* these tales both encompass and provoke. Warner, *From the Beast to the Blonde*.

101 It's rare that the things interact with other things within the tales. "The Tale of the Coffee Grinder" is the only story where such interaction is significant, in which the coffee grinder tells of her former love for a mortar.

102 The proverb "Undank ist der Welt Lohn" is first used by the coffee grinder as a sort of truism in the introduction to her tale. It's used again in another preamble by the music box but now with suspicion as an "often misused proposition" to which the music box herself doesn't subscribe; yet the coffee grinder can't help herself and repeats it at the close of the music box's tale, prompting the box to laugh and the curmudgeonly statute book (from whom we hear only scattered criticism and no full tale) to mutter, "Women's logic" (*Weiberlogik*), criticizing both grinder and box and brining the tale to a puzzling end. Pappenheim, *In der Trödelbude*, 36, 89, 97. "Undank ist der Welt Lohn," also "Undank ist der Welten Lohn," is often associated with the tale of the ungrateful snake: A man rescues a snake, which the snake wants to repay by killing the man, yielding the proverb. But the man is helped by another "judge" animal (e.g., a fox) to return the snake to captivity or kill it. In the end the man ultimately kills the helpful judge animal, thus ultimately proving the proverb. Christine Goldberg notes the relation of this proverb and tale and lays out the many different ways this tale ultimately frames its sharp moral. Christine Goldberg, "The Ungrateful Serpent (AaTh 155)." "The Tale of the Music Box" is one of only three stories in *In der Trödelbude* with a happy or bittersweet ending and the only one that might have a moral of sorts (something like the value of keeping faith in family); it's also the final story in the cycle before the closing frame. Yet Pappenheim's use of the derogatory and puzzling phrase "women's logic" in response to the grinder and the

(presumably Franz), that tale's narrating object (given in quotes), the various humans quoted in the object's tale (in doubled quotes), and then off and on interruptions by other things. The language is less challenging than the structure and seems to have had a pedagogical aim, studded with a baroque vocabulary and composed with a straightforward but layered sentence structure.

Ultimately, the driving force in these object tales seems to me simple: a will to self-expression. This will is articulated perfectly in the first lines of the very first story, "The Tale of the Old Lace":[103]

> One evening, as the junk shop lay there, well locked away, deserted by people, and still, there was all of a sudden a rustling in the stiff pink paper upon which a piece of lace was rolled up. A stripe, blackish-brown and a finger's width, ran in a zigzag across her pattern. Yet the lace seemed to not regard this as a disfiguration. When a nearby small piece of appliqué shyly asked her whether she perhaps had something to tell, she responded in fact with some pride: "I certainly do have something to tell, for I am a genuine old lace. Not like those products of modern industry that, dyed in coffee, give themselves the appearance of grand old age and have experienced no more than a cotton stocking scarcely off the knitting machine, packed into a box, awaiting the customer. If you like, I will share with you those of my experiences that relate to the stain or stripe you see on me."
>
> "Oh yes, do tell," they called out from the circle.[104]

---

music box, who just declared opposite understandings of the story in terms of its support for the proverb, throws the whole thing into question: the happy ending, the moral of the story (both the contested proverb and any other a reader might draw), and the tidy conclusion to the story cycle.

103 Two brief notes about translation: For simplicity, I give just the English titles of the individual stories. In the original, they are all clauses following the same pattern: for example, "Was die alte Spitze erzählt," literally, "What the old lace tells." This is less idiomatic in English, so I've followed the translator of the English edition, Renate Latimer, in using the more idiomatic noun phrase: "The Tale of the Old Lace." But the emphasis in Pappenheim's titles is not on a static tale but on the active telling, which is important for my reading. In terms of pronouns for the objects, I use gendered human pronouns (e.g., *he*, *she*, *they*) for them (with *they* for the neuter pronoun *es*), except when they quote humans' referring to them, for which I use the inanimate *it*. This is in keeping with the book's personification of objects, which is unnoticed by the human world.

104 Pappenheim, *In der Trödelbude*, 20. {"Eines Abends, als der Trödelbude wohlverschlossen, menschenverlassen und stille dalag, da knisterte es mit einemmale in dem steifen rosa Papier, auf das ein Stück Spitze aufgerollt war. Ein fingerbreiter, schwarzbrauner Streif lief im Zickzack quer über deren Muster. Doch die Spitze schien dies nicht als eine Verunzierung zu betrachten. Als eine kleine Applikationsstickerei

Every story opens with a similar preamble about the narrator's desire or reticence to tell their story. Some need encouragement (the little doll, the good-luck pig), while some are confrontational (the coffee grinder, the thimble), reflective (the birdcage, the streetlamp), or excusatory (the pince-nez, the music box). In each preamble, we hear from a number of voices, including from objects who don't get a full story, egging each other on or mocking each other's presumptuousness. Whose experiences are worth hearing, and who should remain silent? The debate comes to the fore in "The Tale of the Thimble." A bag of old clothes has been just deposited at the shop, and its smell prompts unhappy comment. A thimble, arrived with the clothes, jumps to their defense: If only you knew what they had lived! Immediately, the chorus bites back:

> "Well, well, here only just so briefly and already allowing himself a rebuke."
>
> "By what right?" came the call out of every corner.
>
> "By the right that an insignificant appearance does not under all circumstances have to be synonymous with a lack of life experience," retorted the thimble with calm.
>
> "The little squirt speaks as if he were wiser and more experienced than the likes of us," muttered the hot-water bottle.
>
> "Tell us what you've experienced and how you've come here, then we'll see if you have a right to act bigger than you are."[105]

This back-and-forth about the right, ability, and desire to speak is furthermore woven throughout the entire collection in its intricate layering of multiple perspectives. While

---

in ihrer Nähe sie schüchtern fragte, ob sie vielleicht etwas zu erzählen wisse, da sagte sie sogar mit einigem Stolz: 'Wohl weiß ich manches zu erzählen, denn ich bin eine echte alte Spitze. Nicht wie jene Erzeugnisse moderner Industrie, die, in Kaffeesud gefärbt, sich das Ansehen ehrwürdigen Alters geben und nicht mehr erlebt haben als ein baumwollener Strumpf, der kaum die Strickmaschine verlassen, in eine Schachtel verpackt, des Käufers harrt. Ich aber will euch, wenn ihr wollt, diejenigen von meinen Erlebnissen mitteilen, die sich auf den Flecken oder Streifen, den ihr an mir seht, beziehen.' // 'Ach ja, erzähle,' rief es im Kreis."}

105 Pappenheim, *In der Trödelbude*, 71–72. {" 'Ei, ei, so kurz erst hier und erlaubt sich schon eine Zurechtweisung.' // 'Mit welchem Recht?' so rief's aus allen Ecken. // 'Mit dem Recht, daß eine unbedeutende Erscheinung durchaus nicht gleichbedeutend sein muß mit mangelnder Lebenserfahrung,' versetzte der Fingerhut mit Ruhe. // 'Der Knirps spricht, als wenn er weiser und erfahrener wäre, als unsereiner,' brummte die Bettflasche. // 'Erzähl uns, was du erlebt, und wie du hierher gekommen bist, dann wollen wir sehen, ob du ein Recht hast, größer zu thun, als du bist.' "}

Franz, the main third-person narrator, is mute, detached, and observant, yielding these snapshots from the store in addition to the main tales, the object narrators are different: On the one hand, their close attention to their former human companions allows them deep (but still not omniscient) insight, reporting direct quotations as well as intimate feelings of their subjects. On the other, they are highly limited as observers: they are cut off from their own stories when accidentally dropped, placed in a bag, or merely left at home, while at the same time they cannot communicate with their human companions, unable to proffer sympathy, comfort, or understanding about their shared tribulations. This paradox comes to the fore in the penultimate story, "The Tale of the Streetlamp."

A gust of wind makes the streetlamp outside the junk shop flicker, prompting the discarded streetlamp inside to laugh and reflect, "There goes yet another one, thinking she has to do her duty as long as there remains enough breath of life, defying wind and rain. I also once set my pride by duty and today—"[106] She had aged out of her duty and ended up in the store after being stolen and sold by a hungry worker. She isn't jealous of her compatriot outside, for she had learned the way of the world: "Some things, both necessary and lawful, will seem unjust. Nature often destroys its best creations and humans imitate their teacher."[107] She then tells her story, explaining how she came by such a worldview. The holidays had arrived and the city was bedecked with many extra lights; the lamplighter was so hurried that he knocked a hole in the streetlamp's glass. So many lights were strung up that there was less gas for everyone, and so she shined meagerly and was melancholy. A nearby window that was usually covered was open, and the streetlamp observed two young girls, Käte and Dora, just as Käte was leaving to see the

106 Pappenheim, *In der Trödelbude*, 82. {"Da meint auch wieder eine, sie müsse ihre Pflicht thun, solange der Lebensodem reicht, dem Sturm und Wetter trotzen. Hab' auch einmal meinen Stolz darein gesetzt und heute—"}

107 Pappenheim, *In der Trödelbude*, 83. {"Ungerecht will manches erscheinen, was notwendig und Gesetz. Die Natur zerstört oft selbst ihre besten Schöpfungen und der Mensch ahmt seiner Lehrmeisterin nach."}

holiday decorations. Something about the now-solo Dora called to the lamp, who shined her light a bit more at the girl; when the light hit Dora's head, she didn't shy away like others would, and the streetlamp realized Dora was blind. The lamp wanted to make some impression on Dora, to caress her like the air or perhaps talk to her—but lamps don't talk! A group walked by on the street, boisterously praising the wonders of the holiday lights. In response, Dora angrily asked God what she had done to deserve such a punishment. "Suddenly, there rose up a draft," so the streetlamp concludes its tale, "and the thick smoke from the lamps standing in front of the window was blown into the face of the girl. Startled, she shrank back. I saw but two large tears roll out from her lackluster eyes, when a second gust of wind came through the hole that had been knocked in me and extinguished my light. I was contented; streetlamps, after all, cannot cry."[108]

In der Trödelbude is a cycle of tales concerned first and foremost with the telling of those tales. With each story, we see anew how such telling is neither simple nor straightforward and has neither obvious morals nor tidy happy endings.[109] This is why I speak of a will to self-expression: not because the various selves of these objects are

108 Pappenheim, *In der Trödelbude*, 87. {"Da erhob sich plötzlich ein Luftzug und blies dem Mädchen den dicken Rauch der vor dem Fenster stehenden Lämpchen ins Gesicht. Erschrocken wich sie zurück; ich sah nur noch zwei große Thränen den glanzlosen Augen entrollen, als ein zweiter Windstoß durch das Loch, das mir geschlagen war, mein Licht verlöschte. Ich war es zufrieden; Straßenlaternen können doch nicht weinen."}

109 Just as the final story in the cycle, "The Tale of the Music Box," proposes and rejects a simple moral, the first story, "The Tale of the Old Lace," does something similar for happy endings. After what seems to be a straight-ahead happy ending, in which the old lace is reunited with a young woman and man, whom she had known when they underwent tragedies as children, at their wedding, Pappenheim adds an uncertain if not ironic concluding exchange, playing on the standard final line of fairy tales, "und wenn sie nicht gestorben sind, so leben sie heute noch" (lit., and if they haven't died, then they are still living today, but often matching the standard English ending, and they all lived happily ever after): "The lace's voice, which had sounded a bit dry and cold, now sounded choked by emotion. As she stayed silent, an old Sandau tin, for whom the lace's gentility was a thorn in the eye, said, with a derisive tone: 'And they all lived happily ever after, like a prince and princess in a fairy tale.' // 'I hope so,' replied the lace softly, 'for they were good people.' " Pappenheim, *In der Trödelbude*, 27–28. {"Die Stimme der Spitze, die anfangs etwas trocken, kalt geklungen hatte, klang nun wie von Rührung verschleiert. Als sie schwieg, sagte eine alte Sandauer Dose, der die Vornehmheit der Spitze ein Dorn im Auge war, in hämischem Ton: 'Und wenn sie nicht gestorben sind, so leben sie heute noch, wie Prinz und Prinzessin im Märchen.' // 'Ich will es hoffen,' versetzte die Spitze leise, 'denn es sind gute Menschen.' "}

yearning to get out, but because the self emerges in their repeated struggles to express themselves, to tell their tales. In this sense, Pappenheim built directly on the immortal work of Hans Christian Andersen, who had established the "thing tale" (*tingseventyr*), centered on things come to life, earlier in the century.[110] In critical readings of his thing tales, both Brigid Gaffikin and Thomas Seiler show that Andersen brought together a number of emerging historical elements in his things come to life—mass industrial commodities, new late and post-Romantic historical consciousness, and a connection between memory and materiality—and constructed with their tales a particular and new relationship between individual experience, materiality, and time or memory.[111] Not all of these aspects of Andersen's many thing tales are applicable to Pappenheim's single collection.[112] Yet the basic attention-calling and self-reflective work that the object narrators perform, and my critical focus thereupon, is very much the same. In both complicating

110 Of his many significant contributions to the history of the fairy tale and children's literature, Andersen's use of objects brought to life is probably most distinctively and lastingly his. Zipes, *Oxford Companion to Fairy Tales*, s.v. "Andersen, Hans Christian." I have seen some uses of the term *Dingmärchen* (*thing tale*), probably based on the original Danish *tingseventyr*, but this doesn't seem widespread in the Germanophone literature on fairy tales (and I have not seen *thing tale* anywhere). Cf. the brief entry in Brunken et al., *Handbuch zur Kinder- und Jugendliteratur*, vol. 5, s.v. "Dingmärchen," 360–61; unfortunately, Marina Warner does not consider such tales in her generative and exciting work (probably because they only emerge at the end of the extremely *longue durée* she considers). While the terms *ting*, *Ding*, and *thing* have great resonance in the history of Germanic languages, I have used both *thing* and *object* interchangeably, as Pappenheim did in her book. Jette Lundbo Levy is cited as having written the definitive works on the *tingseventyr*, but I am unable to read the Danish. For an interesting consideration of Andersen within the context of different "thing theories," see Müller-Wille, "Hans Christian Andersen und die Dinge."

111 Gaffikin, "Material Witnesses"; and Seiler, "Gjemt [er ikke] glemt." Gaffikin in particular argues that taking the objects' materiality seriously means forgoing readings in which elements of the story (things, people, places, events) stand in for or represent particular ideas, themes, or messages, which is relevant to my critique of psychobiographical readings of Pappenheim's work. Gaffikin, "Material Witnesses," 188–89.

112 Only one of Pappenheim's thing narrators was shared with Andersen: the streetlamp. Andersen's other notable object narrators included the bottle, the teapot, and the silent book, though it's important to note that Andersen employed an omniscient narrator for these stories, dipping in to and out of the objects' own direct narration. Others of his thing tales featured things come to life but primarily as characters not as narrators themselves (e.g., the tin soldier, the fir tree, and the darning needle.) It's furthermore curious, at least for this dissertation, that another of Pappenheim's forebears in the genre of the thing tale was none other than Clara Fechner in *Die schwarze Tante* (1848; *The Black Aunt*). It may also be worth noting that Pappenheim's most famous successor in the genre, the Austrian-born aristocrat-turned-socialist Hernia Zur Mühlen, used the same titling formula for her cycle of thing tales *Was Peterchens Freunde erzählen* (1921; *What Little Peter's Friends Told Him*): *was der Dingerzähler erzählt* (lit., *what the thing narrator tells*).

the tale's perspectives and challenging straightforward narration, object narrators bring attention to the question of narration itself; in the interwoven frame and story cycle of *In der Trödelbude*, this question is elevated to the motivating purpose itself. Ultimately, I have tried to show, this question and purpose of narration reveals itself to be a question of self-expression.

But Pappenheim's engagement with Andersen went beyond her use of similar narrative strategies: By writing in his well-established genre, she put herself in an overt literary conversation. The self formed in and by her own words was that of a writer; this was a self she would preserve for the rest of her life.[113] Along these lines, we can see *Kleine Geschichten* as her first step in this direction. Though more straightforward than the junk-shop tales, these early stories were all within highly defined children's and fairy tale genres. Where "The Story of Grimacing Hans" had the simplicity, economy, and seemingly obvious moral clearly reminiscent of Aesop, "The Sparrow Lady" was a school story, a popular genre in the 1880s and after, in which children of different classes meet in newly accessible or required schools.[114] The final three tales, "Summer Snow," "In Storkland," and "The Pond Nymph," trafficked in three of the most famous genres: forbidden love, a parental challenge, and helpful fairies; storks, mothers, and the origin of all children; and the desired-but-impossible interaction of the spirit world and the human world for a water-bound creature.[115] With *In der Trödelbude*, Pappenheim had refined and extended

113 On this count, I am in agreement with the secondary literature on Pappenheim, where her thoroughgoing self-determination and self-expression via her *vocations*, as a writer, social worker, leader in the women's movement, and German-Jewish thinker, can be seen as starting with her early books of tales. Elizabeth Loentz portrays this as a negotiated identity, in which differing perspectives (German and Jewish, personal and social, traditional and feminist) were worked out in her vocations. Loentz, *Speak the Truth*, 12–13. The importance of *writing* in this negotiated identity can be seen in the line from one of Pappenheim's late prayers that Loentz takes as her title: "Let me continue to speak and to say the truth." Quoted in ibid., 194.

114 On the school tale, see Brunken et al., *Handbuch zur Kinder- und Jugendliteratur*, vol. 5, s.v. "Schul- und Feriengeschichten," 327–29.

115 Regarding "Summer Snow": fairies have of course been a canonical part of fairy tales since at latest the famed early modern academician and storyteller Charles Perrault and his tale "The Fairies," while Vladimir Propp's morphological account of the tale centers on a challenge or interdiction. Zipes, *Oxford Companion*

her participation in this world, taking a much newer genre and making it her own via an intricate framing story, story cycle, and narrative technique. There, she stepped away from Andersen's shadow to stand next to him in conversation.

Of course, Breuer had already compared Pappenheim's stories to Andersen's work during the illness itself and then publicly in *Studien über Hysterie*.[116] And Pappenheim herself utilized it in "The Tale of the Good-Luck Pig" to show the joy and possibility of stories and storytelling in conversation: "Anna read parts herself, and the older gentleman read parts aloud to her; it was hours of the most pure happiness that the child had ever experienced. . . . They talked together and told stories and laughed—it was a great joy."[117] Regardless of the development in Pappenheim's stories that clearly took place between her encounter with Breuer and *In der Trödelbude*, this talking, these moments of connection, were the thread connecting the two.

---

to Fairy Tales, s.vv. "introduction," " 'Fairies, The.' " Regarding "In Storkland": Marina Warner explores the multifaceted and freighted relation between birds, primarily storks, and women's knowledge and lives throughout the history of the fairy tale. Warner, *From the Beast to the Blonde*, chap. 4. Regarding "The Pond Nymph," see Warner on the many different little mermaids. Ibid., chap. 23.

116 Breuer, Pappenheim case history (D 23), p. 10; and Breuer, "Anna O," in *GW* suppl.:228 / *SE* 2:29. On the connection between Pappenheim and Andersen, another point is worth mentioning: Pappenheim gave an alternate "humorous" name to the "talking cure"—"chimney sweeping" (also in English). Ibid., 229 / 30 (translation modified). Perhaps coincidentally, one of Andersen's thing tales (though not one with a thing narrator) told of forbidden love between two porcelain figurines, the shepherdess and the chimney sweep. They were threatened by General Headquarters-Hindquarters-Gives-Orders-Front-and-Rear-Sergeant-Billygoat-Legs, who was carved into a nearby wooden chest and wanted to marry the shepherdess, and the tale recounted their escape via the chimney and then accidentally triumphant return. Andersen, "The Shepherdess and the Chimney Sweep," in *The Complete Andersen*. Such a connection might have delighted the early psychoanalyst Max Eitingon, whose lecture on the case of Anna O. in 1909 seems to have been highly influential on Freud's own later reading. In Eitingon's sexual-symbolic interpretation, Pappenheim's unconscious repeatedly prepared the "chimney" for Breuer, who played the chimney sweep (though Eitingon shied from spelling out the sexual symbol expressly). Eitingon, "Anna O. (Breuer) in psychoanalytischer Betrachtung," 24. Nevertheless, *chimney sweeping* seems just as easily a more-transparent metaphor for the airing of her stories as a sexual one. Of course, neither interpretation deals expressly accounts for what is might be most significant clue: that Pappenheim said "chimney sweeping" in English.

117 Pappenheim, *In der Trödelbude*, 52. {"Anna las teils selbst, teils las der alter Herr ihr vor, und es waren Stunden reinsten Glückes, die das Kind so erlebte. . . . Sie sprachen zusammen und erzählten und lachten, daß es eine Freude war."} "The Tale of the Good-Luck Pig" is one of the collection's saddest stories: The little girl is an orphan who unhappily lives with and performs in a circus. She meets the old man by chance; they become friends via the joyful tales of Andersen; and he promises to help her pursue a new life. Finally, he comes to the circus, only to see her fall from the tightrope to her death.

BREUER AND EBNER-ESCHENBACH IN CORRESPONDENCE: BETWEEN SELF TALK AND NOT THINKING

At the outset of 1883, the writer Marie von Ebner-Eschenbach dedicated a poem to her friend and primary physician, Josef Breuer, ringing in the new year:

> A silent rebuke friend?
> No, no, a painf'lly loud one
> On my diary's basis
> Quite carefully constructed
>
> The long, entire year
> Mere seven times he takes
> A doctor's look 'round me
> My doctor and trusted friend!
>
> Hero of broth'rly-love
> Yet toward me, he slackens off
> His compassion's current
> 'Fore Raven House—it staunches
>
> And yet! I waver not
> In the belief still and pure
> Of his loy'lty as friend
> Beheld and—unquestioning![118]

Ebner had indeed recorded only seven numbered visits with Breuer in her meticulous diary over 1882—though several of his visits to the Raven House, as her home in Vienna was known, went unenumerated.[119] The reproachful attitude of this occasional poem

118 Ebner-Eschenbach, 4 January 1883, in *Bw*, 17. The poem was probably given directly to Breuer by Ebner-Eschenbach when he visited the following morning. Ebner-Eschenbach, *Tagebücher* 3:290. It was not published in Ebner-Eschenbach's collected poems. Ebner-Eschenbach, *Gesammelte Schriften*, vol. 1.
{"Ein stummer Vorwurf Freund? / Ach nein, ein schmerzlich lauter, / Auf meines Merkbuchs Grund / Mit Sorgfalt auferbauter. // Im ganzen langen Jahr / Nur sieben Male schaut er / Sich ärztlich nach mir um, / Mein Doktor und Vertrauter! // Der Nächstenliebe Held, / Mir gegenüber flaut er, / Und seines Mitleids Strom / Vor'm Rabenhaus—da staut er. // Und doch! ich wanke nicht / Im Glauben still und lauter / An seine Freundestreu, / Geschaut und—ungeschauter!"}

119 Ebner-Eschenbach, *Tagebücher* 3:189–90, 192, 196–98, 211, 212–13, 219, 230, 257, 259. Though his unnumbered visits were also often clearly related to matters of health, Ebner most likely numbered his doctoring visits to ease her yearly housekeeping, as Breuer was usually paid in January. For example, see payments in January of 1873, 1876, 1882, 1883, and 1884, Ebner-Eschenbach, *Tagebücher* 2:230, 463; 3:267, 368, 448.

nevertheless betrayed the growing intimacy of Ebner and Breuer's friendship beyond the appointment and housekeeping aims of such records. It hinted at the complex and at times difficult interrelation between the duties of a house physician and those of a friend. In what is almost certainly the only critical treatment of the poem, Helmuth Nürnberger attempts briefly to understand the role of the occasional poem, now obviously out of favor, in such a relation between patient and physician. He notes Ebner's tendency toward direct expression and "uninhibited warmth" and perceptively concludes: "Occasional poems, when they are good, are intimate and playful at once. It is of course not necessary to trouble the muses when the question concerns whether seven or fifteen drops should be taken; but all literature begins with lust for the word."[120] Such a "lust for the word" might also be taken as the starting point for thinking through Ebner and Breuer's correspondence as evidence in the history of the talking cure. How did this correspondence, these words, mediate the emotionally fraught relations between house physician and a patient-friend?

Ebner and Breuer had met at least a decade earlier, via the Fleischls, a soon-to-be ennobled Jewish family (von Marxow) of great means from wholesale trade and the railroad industry: Ida Fleischl was Ebner's dearest friend over the second half of her life (the two often complemented in a tarot-playing trio by the writer Betty Paoli), while Breuer was a colleague and close friend of Ernst Fleischl's, Ida's son.[121] Ebner first

120 Nürnberger, "Einladung an den Hausarzt." The brief treatment was in the Frankfurter Anthologie, a long-running contemporary series of poetry and criticism in the *Frankfurter Allgemeine Zeitung* edited by the critic Marcel Reich-Ranicki. Nürnberger primarily puts the poem in the context of Ebner's life and the Ebner-Breuer relationship as it played out in the correspondence. {"Gelegenheitsgedichte, wenn sie gut sind, sind intim und verspielt zugleich. Es ist natürlich nicht nötig, die Musen zu bemühen, wenn es sich um die Frage handelt, ob sieben oder fünfzehn Tropfen eines Medikaments eingenommen werden sollen, aber mit der Lust am Wort beginnt alle Literatur."}

121 On Ebner and Ida Fleischl's friendship, including how significantly Fleischl contributed to Ebner's writing, see Strigl, *Berühmt sein ist nichts*, 151–53, 294–96. Breuer met Ernst Fleischl during their early research careers, and together they were members of the long-lasting Physiologisches Club, which brought together the bright young men of Viennese medicine, including Rudolf Chrobak, Sigmund Exner, Anton von Frisch, and Heinrich Obersteiner. Erna Lesky calls Fleischl the "inspirational center" of the group. Lesky, *Vienna Medical School*, 488–91, quote on 489.

mentioned Breuer in passing as as another guest at the Fleischl's one evening in April 1872; a month later, she called him over to her house after a bad night of sleep from coughing, so beginning their physician-patient relationship.[122] Their meeting at the Fleischls was indicative of many of the elements that would ultimately structure and animate their friendship and correspondence. It was an encounter of two distinct classes, confessions, generations, and genders, mediated by the particular social and intellectual milieu of the Fleischls, elite assimilated Jews at the nexus of Vienna's Groß- and Bildungsbürgertum, literary and scientific as well as rich and connected: Ebner was a forty-two-year-old Catholic scion of various Austro-Bohemian-Moravian aristocratic families, already long married but without children and still struggling with her preferred form of writing; Breuer was a thirty-year-old Jewish son of a religious teacher, relatively recently married and only beginning his career as a practicing physician and scientific researcher. Over the next decade, as both Ebner and Breuer built out their professional lives with various levels of public success, Breuer popped up occasionally in Ebner's diaries, one of several physicians who advised her and her family. By 1881 their relationship had taken on a notably more intense cast, prompted or at least evidenced by a series of encounters over February and March.[123] Within a decade, they were exchanging letters regularly and Ebner

122 Ebner-Eschenbach, *Tagebücher* 2:100, 106. Until 1883, most mentions of Breuer in the diary were curt like these, with his name recorded in the dateline indicating a planned appointment. The brevity was nevertheless a hallmark of Ebner's diary overall, which remained remarkably consistent in its form over more than half a century. The editor's introduction explains the journal's history and basic structure, including her efforts beginning around 1900 to edit selections for publication (which ultimately occurred via her first biographer, Anton Bettelheim). Norbert Gabriel shows how to read such a formally constrained and consistent document, so much so that each of Ebner's entries can appear to the reader (including Ebner herself retrospectively in 1913) as contentless. Polheim, introduction to Ebner-Eschenbach, *Tagebücher*, vol. 1; and Gabriel, "Tagebücher der Marie von Ebner-Eschenbach." Linda Kraus Worley has scraped the diary for Ebner's reading, noted mostly in an abbreviated form of record-keeping, not only placing Ebner within a wider world of European letters (including Turgenev, Nietzsche, George Sand) but also showing how her reading was a *social* practice. Worley, "Reading European Literature."

123 These encounters centered around one of Ebner's regular spells of sickness but were intensified by Breuer's finding of a (possibly related) wound in her inner nose, which he then treated over a series of visits by cauterizing lapis (calamine powder). Ebner-Eschenbach, *Tagebücher* 3:97–102. Their growing friendship was

declared Breuer's letter to her for her sixtieth birthday the most beautiful of over two-hundred birthday letters, one that had her crying "the most pleasant tears";[124] this was the intimate and complicated friendship Ebner responded to in her occasional poem to Breuer in 1883.

In Ebner and Breuer's correspondence, we can listen in on an ongoing series of conversations that illuminate what resources Breuer saw in *talking* as the medium of the talking cure. Just as Pappenheim and Breuer's first conversations took place firmly in the realm of duo-talk rather than specific treatment, Ebner and Breuer's letters draw on this particular culture of conversation, at once intimate and searching yet straining against prescribed limits. Not only did the correspondents routinely compare their letters to in-person conversations, the letters themselves extended the realm of conversation. In both cases, in-person and postal encounters, health talk was the premise and springboard from which the entire extended conversation was launched. While one could pursue a number of avenues in analyzing the correspondence from the starting point of such health talk, I focus on two that have particular resonances with the talk of the talking cure: first, the relation between talking and the self, via Ebner's sick talk and Breuer's artist talk; and second, the relation between talking and thinking, via Ebner's "journeyings-around-the-head" and Breuer's consideration of scientific thinking versus religious feeling. In their conversations, a end-all cure for Ebner's various ailments was never really at issue (though they did discuss particular treatments). Instead, they worked conjointly to explore questions of the self and of thinking, showing how duo-talk worked for Breuer beyond the encounter with Pappenheim and its development there into the "talking cure" itself.

First, a brief biographical sketch of Marie von Ebner-Eschenbach and basic description

---

also marked by the fact that Breuer was among those to whom Ebner sent copies of her work (*Aphorismen* and *Erzählungen*) in 1880 and 1881. Ebner-Eschenbach, *Tagebücher* 3:76, 184.

124 MEE to JB, 15 September 1990, in *Bw*, 21.

of her and Breuer's correspondence: With the same life span as Emperor Franz Joseph, 1830 to 1916, Ebner lived through the enormous socio-political changes throughout the Habsburg empire, from the revolutions of 1848 through the First World War.[125] Born on and forever tied to her mother's estate in Zdislawitz/Zdislavice, Moravia, she married her first cousin Moriz Ebner von Eschenbach, fifteen years her elder and the only family member who encouraged her early writerly inclinations; this encouragement did not last, however, and despite its outwardly placid and harmonious appearance, their marriage remained childless and was somewhat troubled—both major elements in driving Ebner's writing.[126] The first quarter century of her writing, devoted mostly to drama, found no significant audience among the public or critics; she was, at the same time, plagued with a variety of physical and mental pain and suffering, including chronic headaches, neck and back pain, face aches, and regular sleeplessness, all of which impinged upon her writing while also spurring her further toward her vocation.[127] She gained literary fame only in

125 My brief account draws from mostly from Daniela Strigl's recent biography, *Berühmt sein ist nichts*, which is surely now the critical standard, with breadth and depth of evidence as well as perspicacious readings of Ebner's work. Doris Klostermaier's English biography, *Marie von Ebner-Eschenbach*, was published before the edition of Ebner's diaries was complete, but Klostermaier nevertheless offers similarly sharp readings of Ebner's work in light of her life.

126 See, on the Ebners' remaining childless, Strigl, *Berühmt sein ist nichts*, 108–11; and on "a powerful convulsion" Marie Ebner experienced regarding her marriage and an encounter with another man, ibid., 126–31.

127 Ebner's long-running symptoms, her overt struggles with them in her diaries and letters, and her less-than-overt writing about similar symptoms in her literature, have attracted a number of interpretations, most comprehensively by Strigl. Strigl interprets Ebner's symptoms along with "many a dark corner in inner life" via the lens of the doctor Georg Groddeck's psychosomatic medicine. Strigl, *Berühmt sein ist nichts*, 19. While I admire Strigl's particular readings using Groddeck, arguing that Ebner's bodily struggles were sublimated effects of her inner life and how these struggles were then themselves sublimated into her writing, I think using a theorist and concept from the same era as Ebner herself only confuses the matter. Ibid., 92–94, 231–33. As Strigl herself notes, "the theme of psychosomatic illness was in the air around 1880," which only makes it more difficult to tell whether it enlightens or obscures Ebner's health issues, Breuer's treatment thereof, and their attendant relationship; as far as I know, Breuer did not explicitly employ the term *psychosomatic*, in his correspondence with Ebner, in *Studies on Hysteria*, or elsewhere, and I would contest Strigl's further point that "Breuer belongs to the first who dealt with it therapeutically." Ibid., 312. {"Das Thema des psychosomatischen Leidens liegt um 1880 in der Luft, Josef Breuer gehört zu den Ersten, die sich damit therapeutisch befassen."} The term *psychosomatic* was coined by the English poet and critic Samuel Taylor Coleridge in 1834 and had entered German by 1878 but only gained broader use and currency after 1900. *OED*, s.v. "psychosomatic, *adj.*," accessed 8 September 2020, https://www.oed.com/view/Entry/

her fiftieth year with her first collection of aphorisms and the publication of the novel *Lotti, die Uhrmacherin* (Lotti, the clockmaker) in a leading literary journal, *Deutsche Rundschau*, in 1880; this was later solidified via another novel, *Das Gemeindekind* (1887; The parish child). Around the turn of the century, she was broadly recognized by both peers and the public as the greatest living female Germanophone writer and was the first woman to receive an honorary doctorate from the Universität Wien and the Austrian Ehrenzeichen für Kunst und Wissenschaft.[128]

As her fame grew, the public persona Ebner developed was highly manicured and sanitized, one furthered by her first biographer, Anton Bettelheim, and the highly modified excerpts from her diaries he published; this image persisted throughout the twentieth century: an old lady embodying the soft and matronly values of the Moravian countryside, such as compassion, warmth, and overall kindness, expressed via a morally upright sentimental realism. But this image was fiction, one she deployed at least partly to preserve her privacy.[129] Via her extensive unmodified diaries and correspondence, recent scholarship has overturned this self-steered matronly iconography. Emphasized instead is the turmoil beneath the peaceable surface, primarily in the tension between

153938; and Schüle, *Handbuch der Geisteskrankheiten*, 596, 620. Since the mid-twentieth century, the early history of the concept has become associated with the Viennese poet and doctor Ernst von Feuchtersleben and his widely popular book *Zur Diätetik der Seele* (1838; On the dietetics of the soul), though he did not use the term nor, what's more, is it clear what the reception of Feuchtersleben was during Ebner and Breuer's time (though Ebner did cite a passage from one of his poems in a letter to Breuer!). Lesky, *Vienna Medical School*, 152–57; Creutz, "Feuchtersleben und die psychosomatische Medizin"; and MEE to JB, 2 November 1889, in *Bw*, 21. Furthermore, using Groddeck, from whom Freud took the term *the id*, as an interpretative guide only perpetuates the misleading practice of reading the "prehistory" and origins of psychoanalysis via its later developments and outcomes that were unknown and only one of many possible pathways in three decade after 1880. See, for other interpretations of Ebner via psychosomatics, Tanzer, "Ew. Gnaden," 186; and Woodford, "Realism and Sentimentalism," 151; and, on Groddeck and psychosomatic medicine, Harrington, *The Cure Within*, 80–88.

128 For a summary of Ebner's accomplishments, awards, and acclaims around 1900, see Rossbacher, *Literatur und Liberalismus*, 366.

129 See, on Bettelheim's role in the creation of the Ebner myth, Klostermaier, "Anton Bettelheim"; and on how this myth influenced and was influenced by her (prominent) readers both during and after her lifetime, Worley, "Reading European Literature."

her long strivings toward self-expression in writing and her early struggles and that of her competing roles and obligations as a woman in a marriage, a large aristocratic family, and the liberalizing world of the wider Habsburg public. The writer Lou Andreas-Salomé identified this tension as between "secret and revelation [*Geheimnis und Offenbarung*]" in Ebner's person itself, which Daniela Strigl emphasizes in her recent biography.[130] What's more, this literature offers new and compelling readings of Ebner's work, both via a socio-historical lens and close literary interpretations.[131]

While Ebner and Breuer started corresponding at latest in 1881 (per her journal), her letters are only preserved from 1889 onward and his from 1898 (though only regularly from 1902), with the bulk of the preserved correspondence (around two hundred letters overall) from this final decade plus of Ebner's life, 1902 to 1915.[132] The rhythm of the exchange

130 Strigl, *Berühmt sein ist nichts*, 18. Klostermaier highlights the contrast between Ebner's "pugnacious, outspoken, and uncompromising nature" and the image she promoted of herself, as well that between her longing for "something indefinite" and her self-critical streak. Klostermaier, *Marie von Ebner-Eschenbach*, xii.

131 Both Strigl and Klostermaier read a great number Ebner's works in the context of her life, emphasizing the resonance between her inner life and its emotional, sexual, and physical turbulence and her works. Ebner serves as major figure in Karlheinz Rossbacher's monumental *Literatur und Liberalismus*, where he reads a number of her works within the context of liberalism, her background in and critique of the aristocracy, and her relation to literary realism. Finally, Peter Pfeiffer gives close readings of a smaller number of her works emphasizing her varying approaches to power (*Gewalt*).

132 Strigl notes that Ebner probably purposefully destroyed many of her personal papers, including her early diaries and letters and correspondence with her husband and Ida Fleischl. Strigl, *Berühmt sein ist nichts*, 16. The published edition of the Ebner-Breuer correspondence, was edited by the historian Robert Kann (who was himself married to Breuer's granddaughter Marie Kann) and counts 189 total letters, 106 from Ebner (three of which were to Mathilde Breuer, Breuer's wife) and 83 from Breuer; it also includes two from Breuer to Otto Fleischl (the other of Ida Fleischl's physician sons) and one from Ebner's niece Marie von Kinsky-Dubsky to Breuer, all in the wake of Ebner's death. But of the core Ebner-Breuer correspondence, Kann excluded twenty-one "mostly shorter letters" (fourteen by Ebner and seven by Breuer, by my count) and removed a number of excerpts (at least one hundred) that he deemed private or of a solely medical nature. Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 13. There is something wonky, however, about Kann's count (and the letters themselves in the book are not enumerated, which makes accounting and correlating published and archival versions harder still). A paginated transcript of 180 letters, including full unexcerpted versions of nearly all the published letters and some of the entirely excluded letters, is in a microfilm in the Breuer Papers (BP MF1); this transcript is somewhat confusing on its own, as a number of published letters are missing entirely, some are out of order or misdated, and at least two ellipses corresponding to ellipses in the published edition are also present there (JB to MEE, 21 February 1905, JB to Otto Fleischl, 22 February 1916, in *Bw*, 72, 167 / BP MF1, pp. 78, 228). All surviving original letters by Ebner (122 in total; 8 to Mathilde and 114 to Josef) are currently in ÖNB Autogr. (1056/1–14). I have not

is revelatory: short series of letters (often between four and eight) strung around one continuing topic, theme, occurrence, or question occurring over a period of weeks (usually no more than a few, though sometimes stretching longer) followed by silence; these short series composed for all intents and purposes written conversations.[133] They took place almost always when one of the two (mostly Ebner) was gone from Vienna and in-person visiting and conversation was thus impossible; this yearly rhythm yielded many letters during Ebner's fall and winter sojourns to Italy and Moravia and her summer trips to the mountains (when Breuer was not in fact in the same mountain retreat, which he often was), with each period of correspondence sustaining sometimes more than one of these written conversations. The records of their in-person visits in Ebner's diaries complement these periods of written conversation, together revealing the conversational lineaments of their longterm friendship. Ebner and Breuer recognized the link between written and in-person conversation themselves, at times expressing desire for the live version in writing

---

been able to locate the originals of Breuer's letters; according to Kann, these were copied by the Breuer family in 1925 before they went back to the Dubsky family. Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 14. The Moravský zemský archiv v Brně (Moravian regional archive in Brno), however, does not today have the originals in either the Dubsky family or the Ebner-Eschenbach personal archive. Jana Fasorová, email to the author, 14 September 2020. One additional letter from Breuer to Ebner-Eschenbach is in the Handschriftensammlung at the Wienbibliothek. I quote from the published edition where possible; otherwise I quote from the Breuer Papers microfilm or the ÖNB archives. Kann changed minor elements of orthography in the published but not transcribed versions (e.g., "Carlsbader" to "Karlsbader"; MEE to JB, 2 January 1901, in *Bw*, 43 / BP MF1, pp. 35–36); he also sometimes made other small changes that he claimed in the introduction that he didn't make (e.g., abbreviations, such as "Jän. 01" to "Jänner 1901"; ibid.; cf. Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 14). At the same time, the transcription lacked the *ß* character, hence other possible discrepancies in my quotations. Finally, the transcription has a number of seeming typos; I silently correct typos with punctuation and spacing, which make reading difficult, but otherwise leave the transcript as is (including spelling errors).

133 In terms of speed of delivery and thus of conversation, letters were usually delivered within three days at most and at times faster (many immediate and direct responses were dated two days after the precipitating letter, indicating one- to two-day delivery); even between Vienna and Rome, one of the longer distances any of their letters covered and one that crossed state and postal boundaries, one of Breuer's letters arrived within two days. JB to MEE, 21 February 1905, in *Bw*, 71; and MEE to JB, 23, 26 February 1905, 1056/7-2, 8-1, ÖNB Autogr. (n.b., Ebner's letter of 26 February [1056/8-1] was dated by her 1906 and is cataloged as such in the ÖNB, but the postmark was 1905 and the context clearly fits the postmark). After the outbreak of the war in 1914, the post definitely slowed down within the Habsburg lands and was disrupted by state borders, about which both correspondents made remarks. JB to MEE, 10 September 1914, 1 June 1915; MEE to JB, 8 June 1915, in *Bw*, 157, 161–62, 162–63.

while at others recognizing the letters as an worthy replacement: "I thank you heartily for your dear letter. I should have written a long time ago; for I miss walking into Spiegelgasse [Ebner's later Viennese residence], and a letter would have been a surrogate."[134] The letters were of varying length, depending on both content and context, ranging from brief notes regarding travel plans to more than a thousand words on a particular topic, though most were around four to eight handwritten pages (several hundred words); Ebner's later letters were nearly always shorter than Breuer's, a difference that grew as her age and ailments increased. Outside of letters in the midst of specific conversations, openings and closings were relatively prescribed, dealing with standard social niceties, asking after and sending best wishes to friends and family, and addressing both the writer's and receiver's current states of health; to these, Breuer added routine exhortations for Ebner to *not* write him back, as he saw correspondence as contributing to her unwell condition, though Ebner almost always wrote back (I address this tension in detail below).

The topics ranged from Ebner's literary works in progress and other aesthetic matters, through their inner lives of dreams and imagination, to Karl Lueger, the new Viennese political anti-Semitism, and broader political goings on. Though divided by generation, gender, confession, and class, they broadly shared a high-minded liberalism forged in the post-1848 era, open to the workers' movements (the *Arbeiter-Zeitung* was Breuer's preferred paper while both Ebner and Breuer were critical and even contemptuous of the leading bürgerlich-liberal paper, *Neue Freie Presse*) but greatly tempered by a commitment to the elite facets of bildungsbürgerlich culture as well as by a curiosity about and even inclination toward the power of religious feeling. Of course health issues were paramount, but not only Ebner's: health and sickness orchestrated much of their

134 JB to MEE, 3 June 1907, in *Bw*, 91 (my interpolation). {"Ich danke Ihnen von Herzen für Ihren lieben Brief. Ich hätte längst geschrieben; denn mir fehlt der Gang in die Spiegelgasse [die Wiener Wohnung Ebners], und ein Brief wäre ein Surrogat gewesen."} See also MEE to JB, 17 October 1899, in BP MF1, p. 27; MEE to JB, 18 February 1899, 19 January 1901, 28 December 1904, in *Bw*, 34, 46, 57.

talk about their shared social world, from each other's immediate families to their close friends and even professional acquaintances, mediating the mood with which such talk took place.[135] They discussed specific treatments not only for Ebner's maladies but also Breuer's; both suffered from headaches and took phenacetin as a treatment, discussing its dosing and effect.[136] I emphasize this two-way conversation about health and sickness not

135 The most significant evidence of this pervasive social health talk and the role it played mediating Ebner and Breuer's correspondence was the difficult saga of Ernst Fleischl. In January 1871, Ernst was poisoned from a putrefying corpse (for at least the second time) in Carl Rokitansky's autopsy laboratory. Ebner-Eschenbach, *Tagebücher* 2:14. By April 1872, he had developed a significantly infected pustule on his right thumb, which caused him debilitating pains and fevers and was ultimately amputated, though to no avail. The pain persisted throughout his life, resulting in various addictions and an extremely difficult though inventive work life (notably documented by Freud in his letters to his fiancée), and led finally to Fleischl's early death in 1891. It was Ernst's infected thumb that brought both Ebner and Breuer to the Fleischls' regularly that April and his death that occupied the beginning of their preserved correspondence. On Monday, 15 April, Ebner recorded the beginning of the ordeal: "Ida writes a short note that alarmed me. Since yesterday, Ernst has fallen gravely sick. . . . Poor Ida! Poor dear woman!—Aftern: sent Gusti to inquire, she spoke to her herself—it's happening right now—the physicians have not yet made a proper declaration. Ida is said to look miserable." The next day, she already marked Breuer's manner of doctoring out from that of the other physicians: "Dr Breuer gives comforting assurances while [Doctors] Pitha a. Kopak take the danger for not yet extinguished. Ida calm and admirable." Ibid., 101–2, 102 (my interpolation). {"Ida schreibt ein kurzes Zettelchen das mich in Angst versetzt. Ernst ist seit gestern schwer erkrankt. . . . Arme Ida! Arme liebe Frau!—Nachm: schickte Gusti um Erkundigungen, sie sprach sie selbst—es geht im Gleichen—die Ärzte haben sich noch nicht recht ausgesprochen. Ida soll elend aussehen." "Dr Breuer giebt die tröstlichen Versicherungen indess [die Ärzte] Pitha u. Kopak die Gefahr für noch nicht erloschen halten. Ida ruhig und bewunderungswürdig." (My interpolation.)} On the day of Ernst's death, Ebner wrote to Breuer: "Thanks for your recent dear letter—you have, since I've known you, done only good, and have now also magnanimously forgiven me a wrong. I say, just like the poor folk: because you have already given so much, give me still something: Tell me, best friend, two words on a postcard, even though you are not worried about Ida—what a blessing these can be for someone!" MEE to JB, 23 October 1891, in *Bw*, 23. {"Ich danke für Ihren letzten teuren Brief—Sie haben, seit dem ich Sie kenne, nur Gutes getan, und mir nun auch ein Unrecht großherzig verziehen. Ich sage, wie die armen Leute: weil Sie mir schon so viel gegeben haben, geben Sie mir noch etwas: Sagen Sie mir, bester Freund, ob Sie nicht in Sorgen um Ida sind, zwei Worte auf einer Korrespondenzkarte, welche Wohltat können die einem sein!"} Like so many others in Ebner and Breuer's orbit, Ernst's true saga of woe drew their conjoint attention and emotional investment and gave shape to their ongoing conversation. After Ernst's and then Ida's deaths in the 1890s, the position of their health vicissitudes in mediating the Ebner-Breuer correspondence was overtaken by those of Ida's other son, Otto, and his wife, Minna, whom Ebner and Breuer affectionately called Minotto. For example, JB to MEE, 16 May 1913, BP MF1, pp. 172–73. For the obscure details of Ernst Fleischl's poisoning and the complexities of his subsequent recurring pains and addiction, see Medwed, "Ernst Fleischl von Marxow," 29–34, part 2. More broadly and with great reward, Medwed goes into significant detail about the fascinating work and life of Ernst Fleischl, notably within the context of addiction, cocaine and morphine research, Freud's early years as a clinician-researcher, and the particular constellation of late-nineteenth-century bildungsbürgerlich scientific life in Vienna, which has otherwise remained largely unexplored.

136 In 1910, Ebner wrote to Breuer: "In the last few days, it has been going a bit better for my head, dear adored friend, a. what I have to praise—my sleeping, my sleeping. I wish that everyone whom I love (a. in the name

because Breuer did not treat Ebner and act as her physician in their letters; rather that this doctoring was only a minor and non-constraining element of the ongoing conversation. Breuer himself recognized this, marking off the explicitly medical from the rest in a letter to Ebner after she had left Vienna in 1914, "To my shame, I now still have matters of doctoring to add, seeing that you have departed."[137] While neither ever offered the other the familiar *du* address, Ebner routinely called Breuer her "best friend" and referred to herself in closings as "friend and patient," an address Breuer echoed in counting her among his "patient-friends."[138] While it is difficult to make certain pronouncements about

---

of God even those whom I don't like) would sleep as well as I. So I'll get the sixth of a gram of phenacetin because you order it; that *you* have to take an entire gram—that hurts me. So the headaches have then followed you even after Berchtesgaden.—Damn this fidelity." MEE to JB, 4 August 1910, 1056/9-3, ÖNB Autogr. {"Mit meinem Kopfe ist es in den letzten Tagen etwas besser gegangen, lieber verehrter Freund, u. was ich loben muß, ist meine Schlaferei. Ich wollte, alle Menschen die ich lieb habe (u. in Gottesnamen auch die die ich nicht mag) schliefen so gut wie ich. Das sechstel Gramm Phenacetin werde ich mir also kommen lassen, weil Sie es befehlen, daß *Sie* ein ganzes Gramm nehmen müssen, das tut mir weh. So sind Ihnen denn die Kopfschmerzen auch nach Berchtesgaden nachgefolgt.—Diese Treue soll der Kukuk holen."} Breuer had specifically discussed Ebner's dose as a fraction of his in the precipitating letter; of his dosage, Breuer wrote, "I'm already in homeopathic doses." JB to MEE, 30 July 1910, BP MF1, p. 129. {"Ich bin schon in homöopathischen Dosen."}

137 JB to MEE, 11 April 1914, in *Bw*, 141. {"Zu meiner Beschämung habe ich jetzt, wo Sie abgereist sind, noch Ärztliches nachzutragen."} Earlier, Breuer had described such marked-off explicit doctoring as just "a matter of technique" in scare quotes, while he again emphasized this distinction in his letter to Otto Fleischl following Ebner's death: "You surely already know all the essentials about the end of our dear friend. But I would like nonetheless to fill out the purely medical." JB to MEE, 24 May 1906, BP MF1, p. 97; and Breuer to Fleischl, 15 March 1916, in *Bw*, 167. {"Du weißt ja gewiß alles Wesentliche über das Ende unserer lieben Freundin. Aber ich möchte doch das rein Medizinische ergänzen."}

138 For example, MEE to JB, 23 October, 2 November 1889; JB to MEE, 11 April 1914, in *Bw*, 20, 141. Payment, obviously a significant aspect of the professional physician-patient relationship, was a regular trouble spot for them. On more than one occasion, Breuer refused Ebner's payments, both for his services for her and for services he provided Ebner's friends and family on her suggestion. In 1891, Ebner sent Breuer "a trivial fee" for treating her friend Frau Stöckl, imploring him, "My most adored friend, don't put me even further to shame, and don't sling it back around to me. You do not know what that would do it me." MEE to JB, 1 October 1891, in *Bw*, 22. {"Mein höchstverehrter Freund, beschämen Sie mich nicht noch tiefer, und schleudern Sie es mir nicht zurück. Sie wissen nicht, wie mir das täte."} Breuer nevertheless returned 7 of the 10 guldens she had sent. Ebner-Eschenbach, *Tagebücher* 4:156. In May 1899, Ebner recorded the following in her diary: "Breuer gave me back the fee for the 17 visits that he made to me. He's accepting only 3 a. even these only extremely unhappily. A real—Jew!" Ebner-Eschenbach, *Tagebücher* 5:148. {"Breuer hat mir das Honorar für die 17 Besuche die er mir machte, zurückgegeben. Er lässt nur 3 gelten u. auch die nur höchst ungern. Ein echter—Jude!"} Here the difference in Breuer's and Ebner's characters, specifically as informed by their class and religious backgrounds, came to the fore and showed the work that went into maintaining their patient-friendship relation. A counterpart to the emotional work the payment required of their relation took place on Tuesday, 8 December 1891: "Breuer came to pick me up and we went to Fräulein

the emotional tenor of their friendship, with such expressions shaped by nineteenth-century bürgerlich standards that were at once exuberant and circumspect, it is without question that the friendship allowed for a correspondence that gives particular insight into the talk of Pappenheim's and Breuer's talking cure.[139] As Ebner wrote in another occasional poem:

> To Herr Doktor Joesph Breuer,
> To the friend, dear to me,
> To the physician, whom I commend,
> The body, the mind, the soul[140]

Břibram (I believe that's her name) a sick lady who probably has the most beautiful collection of Renaissance objects, maybe the most beautiful that is in private ownership at all. I was by her bed for two minutes; she looks like suffering embodied and has very kind, loving brown eyes. For the past year she has been bedridden and no longer sees the marvels of beauty with which she is surrounded." Ebner-Eschenbach, *Tagebücher* 4:171. {"Breuer kam mich abholen und wir fuhren zu Fräulein Břibram (ich glaube sie heißt so) eine kranke Dame die wohl die schönste Sammlung von Renaissance-Gegenständen hat, die sich vielleicht überhaupt in Privatbesitz befindet. Zwei Minuten war ich an ihrem Bette, sie sieht aus wie das verkörperte Leiden, hat sehr gütige liebreiche braune Augen. Seit einem Jahre ist sie bettlägerig, und hat die Schönheitswunder, von denen umgeben ist, nicht mehr gesehen."}

139 Ebner's relationship with Breuer and their correspondence has not drawn a significant amount of scholarly attention. This is due partly to the wealth of other primary material available from Ebner, partly to the timing of the remaining letters (relatively late in both of their lives, the bulk from 1902 to 1915), and partly to the peculiar balance the letters maintain: highly intimate in terms of health and mental and emotional life and yet still deeply shaped by their very particular original professional relationship (patient-physician). In their biographies of Ebner, Strigl mentions Breuer mostly passing and cites the correspondence on a few topics, while Klostermaier devotes a few pages to considering the relationship itself, primarily in terms of how significantly Breuer knew and cared for her work as well as her wellbeing. Strigl, *Berühmt sein ist nichts*, 256–57, 300, 322, 324, 329, 339, 365, 372, 401, 404; and Klostermaier, *Marie von Ebner-Eschenbach*, 296–99, 304, 309. A short essay on the correspondence itself emphasizes their areas of agreement in terms of aesthetics, ethics, and other intellectual matters, despite their differing backgrounds. Helmut Gröger, "Ebner-Eschenbach im Spiegel." In the introduction to the published edition similarly, Robert Kann emphasizes their shared views in light of these differences, reading them as two examples of a "cultural late liberalism"; this culture, nevertheless, prized independent thinking, thus promoting divergent views on politics. Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 10. Only two authors have given any attention to their relationship qua relationship, especially in light of this peculiar balance. Both Klostermaier and Kann ultimately approach it, however, via Breuer's role as adviser beyond matters of health (e.g., literary questions); each emphasizes that Breuer only played such a didactic and guiding role because Ebner wanted it so. Klostermaier, *Marie von Ebner-Eschenbach*, 296–99; and Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 12–13.

140 Ebner-Eschenbach, 6 December 1891, in *Bw*, 23. {"Herrn Doktor Joseph Breuer, / Dem Freunde, der mir teuer, / Dem Arzt, dem ich befehle / Den Leib, den Geist, die Seele."} This poem is not in the ÖNB collection and might have been given directly to Breuer when they met two days later. Ebner-Eschenbach, *Tagebücher* 4:171.

The most consistent topic throughout Ebner and Breuer's correspondence was of course Ebner's health. Most often, this took the form of simple accounting: Sometimes she complained of her state of health in general; sometimes she mentioned following a treatment prescribed to her (including specific drugs and more general treatments); and sometimes she listed recent symptoms, including heart palpitations, persistent headaches, and a cough.[141] In two letters from fall 1893, following a palate operation that left her particularly unwell, Ebner extended her discussion of health beyond such abbreviated accounting, opening a window into the deep question of emotional connection and health talk.[142] The first opened as an apology and supplement for that which Ebner was unable to say to Breuer on the day she left Vienna for the countryside: "So now I will make up for it all at once and say that old saw: God bless the poor folk. Namely, I feel myself as a poor folk. 'Tis all still in the same old condition."[143] She then detailed the old conditions with a dab of writerly verve: "My beautiful nose swollen and really painful, the half of my head as if filled up with lead; I only know of taste and smell because I am an informed

141 Such basic health accounting often took place either at the outset of a letter or at its close. For example, see, for the outset, MEE to JB, 8 May 1914, in *Bw*, 146; and for the close, MEE to JB, 16 October 1898, 1056/4-4, ÖNB Autogr. It is somewhat unclear why Kann edited out some mentions of Ebner's health and her treatment but left many others in; those left in were deemed compelling for the reader to understand both Ebner's "composure" and Breuer's treatment and supposedly had to meet a strict standard. Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 13–14. Yet in brief consideration of a few excerpts left out, there does not seem to be a significant divergence in the sensitive private nature of what was left in and what was left out. See, for example, the perfunctory excised mention of "bromine" (probably [sodium] bromide) in MEE to JB, 5 November 1912, BP MF1, p. 168 (removed from *Bw*, 129); cf. "bromine" (alone, as sodium bromide, and as theobromine) was mentioned five times in the published correspondence, in *Bw*, 24, 43, 151, 153, 166.

142 The second letter is only presumably dated by the editor to to 1893, but based on the content and specific context from Ebner's diaries, including parallel language about the operation removing a "veil" from some hidden pain, it is likely the latter was sent on 3 October, when she noted sending Breuer "a lamentation." Ebner-Eschenbach, *Tagebücher* 4:248–49; and MEE to JB, n.d. [3 Oktober 1893], in *Bw*, 24–25. The interim response from Breuer received on 25 September is not preserved. Ebner-Eschenbach, *Tagebücher* 4:247.

143 MEE to JB, 21 September 1893, in *Bw*, 23–24. {"So hole ich denn jetzt alles auf einmal nach und sage das alte: Vergelt's Gott der armen Leut'. Als ein armes Leut' fühle ich mich nämlich selbst. 's ist alles noch im alten Zustand."}

person in general."[144] In response, Breuer sent or prescribed her some cocaine for the pain, but this only helped momentarily before it returned with force. "I'm not doing well," she lamented. "Since the operation, it is as if a veil had been removed from an as-yet enshrouded malady. My head, palate, and neck—it is all affected. Best friend, I won't let myself be carved up and about any longer."[145]

Such a complaint—concerning her overall and entire condition and with a wearied temperament and murky outlook—was not out of the ordinary for Ebner in her diary. Yet three elements of her expression to Breuer stand out, which together sketch the overall terrain of her sick talk: First was her relation to herself. Her pains were constitutive of who she was, one of "the poor folk"; and an operation intended to improve her health in fact revealed this deeper truth about her, removing a veil and showing her true self.[146] Second, in telling Breuer of her troubles, Ebner wasn't merely seeking treatment, advice, or even comfort (though she did take bromide as well as the cocaine). Her injunction that no further operations will take place was made directly to him, "best friend," and functioned

144 MEE to JB, 21 September 1893, in *Bw*, 24. {"Meine schöne Nase geschwollen und recht schmerzhaft, die Hälfte des Kopfes wie mit Blei eingegossen, von Geschmack und Geruch weiß ich nur, weil ich überhaupt eine unterrichtete Person bin."} Peter Pfeiffer insightfully shows how the construction of Ebner's public image, specifically of her face, via a specific set of widely distributed matronly images from her old age has long constrained the literary reception of her work (a construction that Ebner herself participated in); he argues that Ebner thematized this particular condition of women's lives in her work, such that aging led both to the end of life itself and to the end of one's life as a woman as stereotypically valued by society solely for youth and beauty. Pfeiffer, *Marie von Ebner-Eschenbach*, chap. 2. Ebner's nose was a significant feature of the widespread defeminized image of her in old age, and the reference here to "my beautiful nose" may have been playing off her knowing and self-minimizing promotion of that image.

145 MEE to JB, [3 October] 1893, in *Bw*, 24. {"Es geht mir nicht gut. Es ist, als ob seit der Operation ein Schleier weggenommen worden wäre von einem bisher verhüllten Übel. Der Kopf, der Gaumen, der Hals, alles ist in Mitleidenschaft gezogen. Bester Freund, ich lasse nicht mehr an mir herum schnitzeln."} Over the next two months, Ebner didn't write extensively or often about the pains unleashed by the operation (only twice in passing, soon after her letter to Breuer), so presumably she slowly improved. Ebner-Eschenbach, *Tagebücher* 3:248–61.

146 The exact purpose of the operation is unclear. Ebner mentioned planning it a week ahead of time, in order to correspond with a brief stay in Vienna (between summer in the Salzkammergut and fall in Moravia), with the consulting surgeon, Robert Gersuny, and his wife. Ebner-Eschenbach, *Tagebücher* 4:242. But she did not note discussing it with Breuer or Gersuny in the preceding four months of 1893 nor were her recorded pains that summer out of the ordinary (the usual headaches, sleep problems, and heart palpitations). Ibid., 213–42 passim.

as much to bind him to her in the revealed condition of pain as to in-fact prohibit further operations. Third, this particular relation was immediately contrasted to those that Ebner had with others in her life. In the first letter, she bid him to keep her condition from Ida Fleischl, to whom she had written "that I'm doing tolerably," and asked Breuer to say the same.[147] She had a similar request in the following letter, immediately after her injunction against future operations: "Do *not* tell this to my esteemed and very beloved chief physician. He is an angel of goodness and sympathy; I know that it would be a matter of the heart for him, making me healthy, and that he would do whatever at all lies within his power; he does not need to know that he plagued himself with me for naught."[148] By "chief physician," Ebner referred to Robert Gersuny, the *Primarius* (chief physician) at Theodor Billroth's Rudolfinerhaus hospital and an accomplished and well-known surgeon, especially in plastic surgery, who advised on her palate surgery.[149]

Ebner wanted to give voice to her condition and specifically to Breuer. She introduced the expression via a standard social nicety—a farewell and thank you—and a generic plea, "God bless the poor folk"; yet the expression itself was anything but a bland nicety. Her specific instruction to not share her pains with Fleischl or Gersuny further removed them from the realm of social talk while also emphasizing her and Breuer's connection. She specifically marked out what she wrote to Breuer from broader social chatter, after she requested that he not tell Fleischl: "Once I am back in Vienna, then I won't put on any

147 MEE to JB, 21 September 1893, in *Bw*, 24. {"Daß es mir sehr leidlich geht."}

148 MEE to JB, [3 October] 1893, in *Bw*, 24. {"Sagen Sie das meinem hochverehrten und sehr geliebten Primarius *nicht*. Er ist ein Engel an Güte und Mitgefühl, ich weiß, daß es ihm Herzenssache wäre, mich gesund zu machen, daß er für mich täte, was nur irgend in seiner Macht liegt, er braucht nicht wissen, daß er sich umsonst mit mir geplagt hat."}

149 "Robert Gersuny." Breuer himself was in turn Gersuny's house physician. Hirschmüller, *Josef Breuer* [English], 32. It's not entirely clear from Ebner's diary whether Gersuny himself performed the surgery; it took place at a dentist's office, one Dr. Witzinger, but the operating surgeon was not specified. Ebner-Eschenbach, *Tagebücher* 4:243–44.

playact; but from a distance one must resort to glossing over."[150] But at the same time, what she wanted from Breuer was clearly of another order than any narrowly conceived doctoring. Breuer surely wanted to help Ebner as much as Gersuny did and similarly exercised his full range of options as a physician; yet Ebner had no qualms sharing the ongoing futility of the treatments with Breuer in direct contrast with her reasons for not informing Gersuny. The expression of her pains to Breuer was clearly an end in itself.[151] But what did she in fact want and then receive in response?

That Breuer's responses to these letters are not preserved hinders us in answering this question; but it also allows us to focus on Ebner herself and what she wanted with the expression. Many of Ebner's ailments were chronic and lifelong; but her self-understanding as a chronically ailing person only developed over time. In 1852, battling the beginnings of her to-be lifelong headaches and bemoaning their interruption of her writing, Ebner expressed a particular fear about their possible meaning to her being in a letter to her oldest friend and fellow writer Josephine von Knorr: "An acute sickness, which suddenly comes and leaves no further trace behind when it's over—that can be put up with happily; but never becoming healthy without literally being sick, that is a very abhorrent thing."[152] By 1889, having been diagnosed with Basedow's (Graves's)

150 MEE to JB, 21 September 1893, in *Bw*, 24. {"Wenn ich einmal in Wien sein werde, dann mache ich ihr gar keine Komödie vor, aber aus der Entfernung muß man sich auf die Schönfärberei verlegen."}

151 This direct expression as an end in itself was made especially clear in the opening to a letter from 1901 (the mentioned preceding letter does not survive): "My letter had scarcely gone when I regretted having lamented to you. Since then I have discovered that my unending issues with falling asleep [*die Einschlaferei*] can be successfully combated with wet compresses a. some massage. The pains I spoke of stop as soon as I tie a cloth tightly around my lower abdomen. I can then march forward as well as before. O why did I first lament a. then experiment!" MEE to JB, 28 September 1901, 1056/5-5, ÖNB Autogr. {"Mein Brief war kaum fort als ich schon bereute Ihnen wehgeklagt zu haben. Seitdem habe ich entdeckt, daß die Einschlaferei durch feuchte Umschläge u. einige Massage erfolgreich bekämpft werden kann. Die Schmerzen, von denen ich sprach, hören auf sobald ich mir ein Tuch fest um den Unterleib binde. Dann kann ich so gut marschiren wie früher. O warum habe ich zuerst lamentirt u. dann experimentirt!"} Not only had Ebner sent her first lamentations to Breuer, but she felt the express need to quickly follow up with her newfound solution to her pains and consequent issues with sleeping. The lamentation *was* the point.

152 Ebner-Eschenbach to Knorr, 13 [July 1852], in *Briefwechsel 1851–1908* 1:23 (no. 18). {"Eine Akute Krankheit,

disease, she declared to her diary, "Now I shall genuinely resolve to lead the life of a sick person, and vow to do so as soon as my work is done."[153] Though this was probably meant in the restricted sense of undergoing a particular course of treatment over the next weeks or months, she embraced "the life of a sick person" more broadly going forward.[154] This embrace can be seen in "a stupid saying" she invoked to Breuer in 1894: "Everything that you endure, whether with or without patience, is endurable; from the unendurable, you die."[155] Just over a decade later, in the context of various prescriptions during a spa cure, she affirmed this "stupid saying" in a strong sense: "I prefer getting along with my maladies rather than combating them. I am of a peaceable nature."[156] Ebner's ongoing pains and furthermore her self-understanding as a sick person certainly affected her writing, in hindering her from it as well as spurring it on when possible.[157] But her expression of this self-understanding to Breuer specifically was an outlet, a way to both affirm this sick self and to keep it from overrunning the rest of her life. As she

---

die plötzlich kommt, und wenn sie vorbei ist keine Spur mehr zurück läßt, die laßt man sich gerne gefallen, aber nie gesund zu werden ohne im Sinne des Worts, krank zu sein, das ist eine gar abscheuliche Sache."}

153 Ebner-Eschenbach, *Tagebücher* 3:739. {"Nun soll ich mich erns[t]lich entschließen das Leben einer Kranken zu führen, und gelobe es zu thun, sobald meine Arbeit fertig ist." (Editor's interpolation.)} Ebner was referring to one specific work, the novel *Unsühnbar* (1889; *Beyond Atonement*). Strigl cites this quotation from Ebner's diaries in her interpretation of *Unsühnbar*, emphasizing the role of emotional and psychosomatic illness in the novel. Strigl, *Berühmt sein ist nichts*, 312.

154 Ebner had already in 1887 received a diagnosis of Basedow's and made a similar declaration ("Now it will mean living the life of a patient") before she underwent a course of treatment (including electrification) that lasted at least a month and a half (the diary from 1888 doesn't for the most part survive). Ebner-Eschenbach, *Tagebücher* 3:695, 696–706 passim. {"Jetzt wird es heißen das Leben einer Patientin führen."}

155 MEE to JB, 26 November 1894, BP MF1, p. 20. {"Ein dummes Wort übrigens, Alles was man erträgt, ob in, ob ohne Geduld ist erträglich, am Unerträglichen stirbt man."}

156 MEE to JB, 18 May 1906, in *Bw*, 84. {"Daß ich mich mit meinen Übeln lieber vertragen, als sie bekämpfen mag. Ich bin eine friedfertige Natur."} See also Ebner's humorous passing remark to Breuer about what she would do for her headaches and heart palpitations after his prescribed mixture had gone bad, playing on the gendered expectations of enduring pain: "In fourteen days, best friend, I'm coming to Vienna and until then I'll bear my small sufferings in a *masculine* way, i.e. actually *not* masculine but patiently." MEE to JB, 23 October 1889, BP MF1, p. 4. {"In vierzehn Tagen, bester Freund, komme ich nach Wien und ertrage bis dahin meine kleinen Leiden *männlich*, d.h. eigentlich *nicht* männlich sondern geduldig."}

157 On the relation between Ebner's health, her writing, and her thinking, see the following section; on her specific symptoms, her self-understanding as a sick person, and her published work, see the introduction to this section on Ebner and Breuer. A fuller examination of this latter relation would require a deeper engagement with her diaries, her other correspondence, and her published work than is possible here.

wrote in 1894, immediately following her "stupid saying": "Best friend, thank you for answering me so quickly; when I am permitted to wail out to you, my heart is immediately lighter."[158] In an exchange during the last year of Ebner's life, when her symptoms had taken on a new intensity, Breuer expressly endorsed and encouraged such sick talk: "Esteemed Frau Countess! Head and eye pains, arm and leg pains are for me simply *the* stuff of conversation, when they concern your person!"[159] Beyond this specific instance, Breuer asked after, responded to, and offered relief for her specific symptoms. But more important, he provided a warm and unworried home for Ebner's sick self, one that could respond with care but also his broader thoughts beyond the realm of the sick.

Breuer wasn't merely a receptacle for Ebner's wailing expressions of her sick self. Beyond his narrow medical responses, which were usually quite brief, he also offered his own in-kind affirmations and expressions of self (both his and hers), though in a different register than Ebner's. The exchange of letters in May and June 1906, when Ebner undertook a spa cure in Reichenhall, Bavaria, for her cough, is instructive on this point. Ebner set off the exchange, filling Breuer in on the conditions (rainy, windy, and with poor heating in their rooms) and her intention to avoid the spa doctor's prescriptions (as quoted above, on her "peaceable nature"); in response Breuer implored her to seek out a warm room. Over the next month, they exchanged another three letters each (at least); each of Ebner's was a brief update on her condition and the cure, while Breuer's three were among the longest letters of his to Ebner that have been preserved.[160] And while he did

158 MEE to JB, 26 November 1894, BP MF1, p. 20. {"Bester Freund, ich danke Ihnen, dass Sie mir so rasch geantwortet haben, wenn ich mich ausjammern darf bei Ihnen, ist mir gleich leichter ums Herz."}

159 JB to MEE, 10 July 1915, in *Bw*, 165. {"Hochverehrte Frau Gräfin! Kopf- und Augen-, Arm- und Beinschmerzen sind für mich eben *der* Konversationsstoff, wenn sie Ihre Person betreffen!"} The context for this statement is a little unclear, as there is no immediately precipitating letter from Ebner to Breuer that survives. During the previous month, Ebner had apologized for the effect her symptoms were having on her correspondence, but Breuer's rebuke affirming her sick talk seems to stem from a different expression of self-criticism. MEE to JB, 8, 16 June 1915, in *Bw*, 163.

160 All four of Breuer's letters are included in the published edition (though only one without excerpting), while only two of Ebner's are. MEE and JB, May, June 1906, in *Bw*, 84–90 / BP MF1, pp. 95–105

not ignore her progressing cure or the standard niceties, he had one primary subject: the relation between artist and artwork.[161] The subject was occasioned by the death of Henrik Ibsen, about whom Breuer opined: "He is a great artist and an evil chap; for me he was just always extremely repugnant."[162] This declaration launched a critique of the opinion that great artists must be shown to be great humans. "Nothing is falser," Breuer stated, employing Wagner, Goethe, and Friedrich II as his main examples.[163]

Breuer continued this line of thinking his next letter, arguing for the independence of the complete oeuvres of Ibsen, Goethe, and Schiller from their personal characters. He admitted that particular characteristics of an author mattered in the construction and understanding of a work (noting Ibsen's irony) but stood fast on the broader question separating art from artist: "The artist, I hold, must be capable of appreciating and acquiring for themselves the sensations that the noble-minded has; they must sound off discernibly in the artist as in the actor. But the artist's 'will' can be directed entirely otherwise so that none of these sensations and strivings would have sprung from the artist's own character."[164] His final letter in the trio, the longest, expanded on the question of will and how it made the problem of "talent-character," as he put it, all the more difficult; he suggested they (or at least he) had simplified the matter too much, assuming "the human core" to be like a peach pit and the "talent" and "intellect" like the fruit flesh,

161 In terms of Breuer's medical response, he recognized how narrow and perhaps even beside-the-point it was for such correspondence: he summed up a medical question he himself posed (whether to use a warm towel and a hot-water bottle as a hot compress on Ebner's liver area or just a towel) as merely "a matter of technique" in scare quotes. JB to MEE, 24 May 1906, BP MF1, p. 97.

162 JB to MEE, 24 May 1906, in *Bw*, 85. {"Er ist ein großer Künstler und ein böser Kerl; mir aber war er immer höchst zuwider."}

163 JB to MEE, 24 May 1906, in *Bw*, 85. {"Nichts ist falscher."} Not that Breuer thought Goethe was an "evil chap," but rather than he was always made into a "good-natured person [*Gemütsmenschen*]" by the public. Ibid.

164 JB to MEE, 29 May 1906, in *Bw*, 87. {"Der Künstler, meine ich, muß imstande sein, die Empfindungen, welche der Edle hat, sich anzuempfinden; sie müssen in ihm anklingen, wie im Schauspieler. Aber sein 'Wille' kann ganz anders gerichtet sein, so daß keine dieser Empfindungen und Strebungen seinem eigenen Charakter entsprungen wäre."}

while in fact the core and its relation to talent and intellect was complex, contradictory, and varied (playing on the word *Kern* for both core and fruit stone).[165] He wrote of Schopenhauer and whether contradictions between his character and his work amounted to hypocrisy; he then emphasized the artist's "duty toward his work" and whether they have the will to carry it out.[166] "And yet—" he concluded, still convinced of his position, "what's decisive for the whole great work seems not to be human good or evil but rather only the character as related to the work."[167]

None of Ebner's preserved letters from this exchange touched on this problem of "talent-character," but Breuer nevertheless framed his position as diverging from hers, opening his second letter by proclaiming, "I don't know whether I can completely agree with your theorem of the artist's character."[168] Whether he was responding to a since-lost letter or rather Ebner's more broadly known views on the relation of artist and artwork is unclear but also, for my purposes, mostly beside the point.[169] Instead, Breuer's musings

165 JB to MEE, 17 June 1906, in *Bw*, 88.

166 JB to MEE, 17 June 1906, in *Bw*, 89.

167 JB to MEE, 17 June 1906, in *Bw*, 90. {"Und doch—für das ganze große Werk entscheidend scheint nicht der menschlich gute oder böse, sondern nur der aufs Werk bezogene Charakter."}

168 JB to MEE, 29 May 1906, in *Bw*, 86. {"Ich weiß nicht, ob ich Ihrem Satz vom Charakter des Künstlers vollständig beistimmen kann."} What exactly constituted Ebner's theorem, beyond Breuer's not fully according with it, is not clear from the preserved letters nor was it a simple matter. The editor of the correspondence, Robert Kann, refers to "the personality of the writer" and its relation to the work of art as "a question that obviously troubled the writer [Ebner]" but doesn't specify where this question arose as it did not appear otherwise in her letters to Breuer. Kann, introduction to Ebner-Eschenbach and Breuer, *Bw*, 11. {"Die Persönlichkeit des Schriftstellers"; "eine Frage, die der Dichterin offensichtlich zu schaffen machte."} Klostermaier cites this exchange in her assertion that Ebner "never wavered from the firm conviction that only a perfect human being could create a flawless work of art." Klostermaier, *Marie von Ebner-Eschenbach*, 299. Klostermaier refers further to an early biography of Ebner by Mechtild Alkemade, who assembles a large amount of evidence from Ebner's published and unpublished to this end, connecting the self-development of the artist, the moral purpose of the artwork, and the duty of the artist to the artwork. Alkemade, *Marie von Ebner-Eschenbach*, 105–26. Strigl has complicated this picture, not only highlighting Ebner's views on the autonomy of artwork from social and biographical factors (specifically regarding critics) but also showing how Ebner's own struggles with creation afford and even demand less morally simplistic readings of her work, specifically her portrayal of the artist-artwork relation in her artist novels. Strigl's analysis of *Lotti, die Uhrmacherin* as an artist novel flipped to center on a female craft worker (a clockmaker) is revelatory in this regard. Strigl, *Berühmt sein ist nichts*, 20, 246–53.

169 Based on the dates of the letters and the other covered material, it does not seem as if there are lost letters

on this topic can be read as his response to Ebner's sick talk while she was undergoing a specific spa cure. Just as the sick talk worked to delimit her sick self, Breuer's response on questions of aesthetics and character emphasized Ebner's fundamental character as an artist, which had of course troubled her since youth. Ebner herself was a particularly sharp example of an artist whose will to create and duty to her work overcame troublesome character elements, which she also associated with her sick self. What's more, during this letter exchanged, she further explicitly reserved such sick talk for herself and made clear that she wanted more of Breuer's aesthetic musings in response. When Ebner discovered that Breuer and her niece Marianne Kinsky had exchanged telegrams on her health, she mocked their concern, quoting a saying of their now-deceased friend Ida Fleischl: "How's that for going overboard!"[170] She wanted instead to hear more from Breuer; only two weeks after his second letter on the art-artist question, Ebner entreated him for more: "Have heard nothing more from you for a very long time—how are you all doing?"[171]

At the same time, Breuer's affirmation of Ebner as an artist may have also served a parallel function for him: it was his own foray into an intellectual realm beyond his professional expertise. In his letters to the philosopher Franz Brentano from 1903, Breuer repeatedly emphasized his amateur status in matters of philosophy (specifically questions of scientific reasoning and teleology).[172] Breuer expressed a similar sentiment to Ebner when she sent him a "Manuskriptlein" of stories she was considering sending to the

(Breuer responded to each of Ebner's first two letters the following day, and Ebner's final letter mentioned the two-week gap between it and the earlier ones).

170 MEE to JB, 25 May 1906, in *Bw*, 86. {"Was sind das für Übertriebse!"}).

171 MEE to JB, 16 June 1906, BP MF1, p. 101. {"Habe sehr lange nichts mehr von Ihnen gehört, wie geht es Ihnen allen?"}

172 Breuer to Brentano, March, April 1903, D 11, 12, Hirschmüller Documents, Deu. 303–4, 314–15 / Eng. 237–38, 247–48. Breuer summed up his modest amateur status concisely: "As I am aware that my knowledge of philosophy is of an extremely fragmentary sort, there results with full clarity just how much reason I have to be modest, and I know myself to have." Breuer to Brentano, April 1903, D 12, Hirschmüller Documents, Deu. 315 / Eng. 247. {"Da ich mir bewußt bin, daß meine Kenntnisse in Philosophie höchst fragmentärer Art sind, ergibt sich daraus mit voller Klarheit, wie viel Grund zur Bescheidenheit ich habe, und ich zu haben weiß."} B]euer did continue on to extol the virtues of such amateur philosophizing.

Neue Freie Presse. After providing specific comments on each story, stylistically and substantively, and judging overall which were the "pearls," Breuer admitted his difficulties taking on this editorial persona: "Truthfully, I feel stupid in my role as schoolmaster toward you; stupid and a little impertinent. But friendship and devotion demand such sacrifices."[173] Of course, Breuer did not shy from sharing his aesthetic thoughts with Ebner, which she often expressly sought out.[174] But in offering them in response to Ebner's sick talk, he massaged his own feeling of impertinence, both giving himself leeway to ruminate on aesthetics and affirming her in the same realm.

This dual purpose was crystallized in the framing anecdote of Breuer's final letter in the series: a viewing of a marble bust of Ebner, planned for the following day as the letter opened and then described in a concluding postscript.[175] This shifted the terrain of the aesthetics debate to something simpler, almost a social requirement of adoration and compliment, but also more concretely affirming Ebner's artistic self. And indeed, despite the unfavorable viewing conditions (in the box, poor lighting), Breuer found it "excellent" and only mentioned a tasteless element to be among the "inessentials," which he then chalked up to the poor conditions; above all, he emphasized the eyes, which became, when shaded just right, "really and truly your eyes!"[176] The eyes were in fact his

173 JB to MEE, 9 September 1902, in *Bw*, 54. {"Wahrhaftig, ich komme mir in meiner Schulmeisterrolle Ihnen gegenüber blöde vor; blöde und etwas unverschämt. Aber die Freundschaft und Ergebenheit verlangt auch solche Opfer."} In naming certain of the stories "pearls," Breuer said he acted as a jeweler whose task was to put together a pearl necklace with only first-class peals. Ibid., 52.

174 Ebner captured a taste of Breuer's literary advice in her diary while composing *Glaubenslos* (1893, later *Glaubenslos?*; Without belief[?]), about a priest who loses faith: "Early, again to Ida's due to the new scruples that came to me. On the staircase I met Dr. Breuer. 'Finished?'—'Yes, but I have a miserable feeling: It is a tempest in a teapot.'—'But why shouldn't it be so? Is a curate more than a teapot, is Jul[ius] Caeser more?' " Ebner-Eschenbach, *Tagebücher* 4:211 (editor's interpolation). {"Früh noch zu Ida wegen neuer Skrupel die mir gekommen sind. Auf der Stiege traf ich Dr Breuer. 'Fertig?'—'Ja, aber ich habe ein miserables Gefühl: Es ist ein Sturm in einem Glas Wasser.'—'Warum soll's nicht so sein? Ist ein Cooperator mehr als ins Glas Wasser, ist Jul[ius] Cäsar mehr?' "}

175 The bust was probably the one made in 1905 by Roberto Zaccagnini in Rome. Ebner-Eschenbach, *Tagebücher* 5:415–20; for an image of the bust, see ibid. 6:216. It is now in Hoštice, Moravia, at one of her family's former residences. Strigl, *Berühmt sein ist nichts*, 414.

176 JB to MEE, 17 June 1906, in *Bw*, 90.

main worry before viewing the bust, writing the day before, "For forgoing the eyes in capturing the soul—that's surely always the creator's great difficulty and all the more so with you. *Vederemo*."[177] While the statue suggested Ebner-Eschenbach had joined, or at least might join, the ranks of Goethe and Schiller, immortalized in busts and statues across the German-speaking world, its success in capturing her eyes—both the site of some of her longest lasting bodily pains and directly connected to her ability to write everyday—was what confirmed her artistic soul.[178] As Lou-Andreas Salomé noted of their one meeting:

> The hours with her remain unforgettable for me—the stillness and, how shall I find the right term for it, the *essentiality* [*Wesenhaftigkeit*] that emanated from her. Consequently her outer appearance nearly had the effect—as if she intentionally huddled up so small into herself, as if her gray eyes, the infinitely knowing eyes, looked out and up so deep from below—of making it conspicuous to no one what all sat there before them: as if it remained better unbetrayed. *That* which nevertheless betrayed itself so profoundly-incessantly in tone, word, look, and gesture. One took from her, as it were, secret and revelation [*Geheimnis und Offenbarung*]—and it preserved itself in this held-together warmth of secret presence.[179]

177 JB to MEE, 17 June 1906, in *Bw*, 88. {"Denn bei Verzicht auf die Augen, die Seele einzufangen, das ist ja immer die große Schwierigkeit des Bildners und erst recht bei Ihnen. *Vederemo*."}

178 It's unclear who commissioned and paid for Ebner's bust, let alone where it was meant for, which makes it difficult to say what its purpose was (in contrast with Goethe and Schiller memorials). Ebner was friendly with the artist, Zaccagnini, whom she otherwise socialized with in Rome and who had earlier that year made a statue of Ebner's niece Sophie Waldburg. Ebner-Eschenbach, *Tagebücher* 5:405.

179 Andreas-Salomé, *Lebensrückblick*, 133–34. Enrica von Handel-Mazzetti, a younger writer and later friend of Ebner's, also remembered on Ebner's eyes in the context of Ebner's marble bust: "They were gray, actually more opalescent, and their expression was the most perfect goodness paired with feminine-graceful intelligence and a grain of roguishness. She once showed me a bust in multicolored marble, which had been modeled *ad vivum*. 'Is it me?' she asked me. 'No, it's not you. It's beautiful, but I like you better.'—'Aha,' she said, 'along famous lines, just as Mozart said to Emperor Joseph: The sonata is good; but the one who made it is better.' " Handel-Mazzetti, "Meine Beziehungen zu Marie Ebner," 35–36. {"Sie waren grau, eigentlich mehr opalisierend, und ihr Ausdruck war die vollendetste Güte, mit weiblich- anmutiger Klugheit und einem Gran Schalkerei gepaart. Sie zeigte mir einst eine Büste, die *ad vivum* modelliert worden war, in verschiedenfarbigem Marmor. 'Bin ich es?' fragte sie mich. 'Nein, du bist es nicht. Es schön, aber du gefällst mir besser.'—'Aha,' sagte sie, 'nach berühmten Mustern, wie Mozart zu Kaiser Joseph sagte: Die Sonate ist gut; aber der, der sie gemacht hat, ist besser.' "} Lest one think this appreciation of Ebner's eyes was an aspect of her old age or by reputation, Ebner's longtime friend and fellow writer Ferdinand von Saar provided similar testimony (although in retrospect) from meeting her for the first time, in 1867: "The look of somewhat deep-set gray-blue eyes expressed infinite goodness, which also revealed itself in the melodious sound of her voice when the lady welcomed us." Saar, "Begegnungen mit Marie von Ebner-Eschenbach," 162.

In Ebner and Breuer's correspondence, this self talk was complemented by another conversational act: the working out of thinking (and not thinking) in writing. This was the case for Ebner's sick talk as well as Breuer's extended thoughtful musings on all manner of topics, from psychology to religion, including his artist talk. In Ebner's case, her ability to think and write were tightly coupled and routinely diverted by her pains, which either kept her awake all night and then confined to her bed the following day or directly troubled her head, with significant headaches, migraines, catarrhs, and generalized face pains.[180] Yet she was compelled to write, as she had since she was a youth; writing was a form of tangible thinking that gave her life meaning. As she wrote to Josephine von Knorr in 1853, after suffering a ten-day alternating fever while also caring for her as-always sick mother-in-law, "I need ['] *writing*' more essentially than the air that I breath, and if only I could just properly spend some time on it, I would soon get better."[181] Writing and thinking were nevertheless not merely the same act but in a much more freighted relation. Her will to write, for instance, came with its own health issues that then affected

{"Aus dem Blick der etwas tiefliegenden graublauen Augen sprach unendliche Güte, die sich auch in dem sanften Wohllaut der Stimme offenbarte, als uns die Dame jetzt uns willkommen hieß."}

{"Unvergeßlich bleiben mir die Stunden bei ihr—die Stille und, wie soll ich Bezeichnung dafür finden: die *Wesenhaftigkeit*, die von ihr ausging. Beinahe wirkte infolgedessen ihre äußere Erscheinung, als kaure sie sich absichtsvoll so klein in sich zusammen, als schauten ihre grauen Augen, die unendlich wissenden Augen, so tief von unten herauf, um niemandem auffällig zu machen, was da alles vor ihm saß: als bliebe das besser unverraten. *Das*, was sich doch so innig-unablässig in Ton, Wort, Blick und Gebärde verriet. Man nahm von ihr gleichsam Geheimnis und Offenbarung mit—und es bewahrte sich in dieser zusammengehaltenen Wärme heimlicher Gegenwart."}

180 See the introduction to this section for other examples of Ebner's particular symptoms. In terms of their direct effect on her writing, here is one report from November 1877, while writing the novella *Die Freiherren von Gemperlein* (1881; The Barons von Gemperlein): "An extremely execrable day, an extremely execrable head. . . . At $\frac{1}{4}$ to 4 home and now I was alone and, afflicted with a usable head and with usable eyes, would have been able to write an entire chapter." Ebner-Eschenbach, *Tagebücher* 2:536. {"Ein ganz abscheulicher Tag, ein ganz abscheulicher Kopf. . . . Um $\frac{3}{4}$ 4. nach Hause und nun war ich allein und hätte mit einem brauchbaren Kopfe und mit brauchbaren Augen behaftet ein ganzes Kapitel schreiben können."}

181 Ebner-Eschenbach to Knorr, 16 December [1853], in *Briefwechsel 1851–1908* 1:74 (no. 59; editor's interpolation). {"Ich brauche ['] *das Schreiben*' nothwendiger als die Luft die ich athme, und könnt ich mich nur recht damit abgeben ich würde bald gesund."}

her thinking. In 1898, she described the troubles of such overwork in detail to Breuer: "As far as concerns yours truly, I have somewhat overworked myself and had quite a peculiar condition. My head was no longer a head but rather a highly vaulted hall. Entirely empty. Each tone that penetrated in from outside lingered mightily and at length, and when I myself was stupid enough to speak, it was as if a whole procession would enter into the hall and make the rounds. Indeed, such maladies menace the bluestockings."[182]

One of Breuer's prescriptions in the face of such maladies was the cessation of work, which of course led to further issues with thinking. A series of letters from winter 1910–11 brought these issues to the fore. Ebner's nephew Victor Dubsky visited Breuer in Vienna, seeking a prescription for her continued headaches. Breuer declined, he told her in writing, "except for one measure, which is nevertheless of real importance: complete rest and abstention from work."[183] "I obey you in all matters," she responded. Though her head was a bit better she still needed to truly give up its use: "no thinking, merely dozing."[184] But this was all wrong, Breuer replied. Just because your head needed a period of rest did not entail such a commandment to remain free from thinking (which anyway was probably impossible). Instead, it meant a brief period of rest until the troubles with her head had lessened, which itself was already happening. He did, however, entirely prohibit one type of work: "Only such work as you have let yourself be saddled with from the birthday correspondence—to be sure, you must keep yourself away from this. At least

182 MEE to JB, 4 August 1898, in *Bw*, 30. {"Was meine Wenigkeit betrifft, habe ich mich etwas überarbeitet und einen ganz merkwürdigen Zustand gehabt. Mein Kopf war kein Kopf mehr, sondern eine hochgewölbte Halle. Ganz leer. Jeder Ton, der von außen hereindrang, klang langmächtig nach, und wenn ich selbst so dumm war zu reden, da war's, als ob in die Halle eine ganze Prozession eintreten und die Runde machen würde. Ja, solche Übel drohen den Blaustrümpfen."} In her diary from the time, Ebner described having a "horrifying ringing" in her head. Ebner-Eschenbach, *Tagebücher* 5:40.

183 JB to MEE, 14 January 1911, in *Bw*, 110–11. {"Bis auf eine Maßnahme, die allerdings von wirklicher Wichtigkeit ist: vollkommene Ruhe und Enthaltung von Arbeit."} Breuer had in fact mistaken Victor for his much younger brother, Franz (called Feri).

184 MEE to JB, 19 January 1911, in *Bw*, 111. {"In allem leiste ich Ihnen Gehorsam." "Nicht denken, bloß duseln."}

until 1920."[185] Ebner had celebrated her eightieth birthday in September 1910 (hence Breuer's joke about 1920), and she was literally weighted "with congratulations and, o heavens!, with requests"—over a kilogram of them.[186] For Ebner, enmeshed in both aristocratic and bürgerlich circles, the demands of society both via letter and in person were stressful and precisely of the sort of work that Breuer sought to forbid.[187] As she wrote to Breuer in December 1910 about coming to Vienna in January: "Seeing you and only some other loyal followers again makes me glad; but in all, my fear of returning to the city is enormous. I dread the feeling of uncertainty in which I always find myself there. I can scarcely even read a book that interests me without the thought: before you turn over the next page, you'll already be interrupted."[188]

But while Ebner and Breuer marked off the tedious polite work of sociality from allowable (and necessary) edifying thinking, the relation between health, thinking, conversing, and sociality was of course anything but simple. Since early in their correspondence, Breuer was concerned with the strain his correspondence added and

185 JB to MEE, 20 January 1911, in *Bw*, 112. {"Nur solche Arbeit, wie Sie sich durch die Geburtstags-Korrespondenz haben aufladen lassen—, die müssen Sie sich allerdings fernhalten. Mindestens bis 1920."}

186 MEE to JB, 27 December 1910, in *Bw*, 108.

187 Strigl emphasizes that Ebner's double social associations with both aristocratic and bürgerlich circles resulted in double the social obligations, noting that while Ebner felt burdened by this, she also considered it a duty. Strigl, *Berühmt sein ist nichts*, 137–38. Strigl quotes two delightful and illustrative passages from Ebner on the matter. First, from her aphorisms: "Upon the arrival of some people, nothing consoles us other than—the hope of their leaving"; second, from her diary: "Visits Infinite Time-Squandering. But it must be, otherwise it means she sacrifices her friends to her writing." Quoted in ibid., 138. {"Über das Kommen mancher Leute tröstet uns nichts als—die Hoffnung auf ihr Gehen." "Besuche Unendliche Zeitvergeudung. Aber es muß sein, sonst heißt es Ihrer Schriftstellerei opfert sie ihre Freunde."}

188 MEE to JB, 27 December 1910, in *Bw*, 108. {"Sie und noch einige andere Getreue wiederzusehen, freue ich mich, im ganzen aber ist meine Furcht vor der Rückkehr in die Stadt sehr groß. Mir graut vor dem Gefühl der Unsicherheit, in dem ich mich dort stets befinde; ich kann ja kaum ein Buch, das mich interessiert, lesen, ohne den Gedanken: ehe du die nächste Seite umschlägst, wirst du schon unterbrochen werden."} Ebner's feeling of being socially overwhelmed was not limited to Vienna. Upon arriving back at her estate in Zdislawitz in 1908, she wrote to Mathilde Breuer, "The reunion with all the lively and not-lively friends that I have here always sets me in a silent state of joyous delirium; this makes me no less incapable of writing than the travel nerves." MEE to Mathilde Breuer, 15 May 1908, in *Bw*, 95. {"Das Wiedersehen mit allen lebendigen und nicht lebendigen Freunden, die ich hier habe, versetzt mich immer in einen stillen Freudenrausch, der mich nicht weniger schreibunfähig macht wie das Reisefieber."}

repeatedly admonished Ebner to not write him back, save a few lines from her secretary on her present condition.[189] Yet he of course continued to write her and was moved by her willingness to respond. In response to her letter on having her reading interrupted in Vienna, he wrote, "How shall and can I thank you for the letter that I received and at the same time say how sorry I am that you make such an effort! Eight pages dictated! I never dare myself to write to you, because I know that you will always answer and that each greeting makes your life more difficult";[190] the following month, he reiterated, "That you are still writing me yourself, moves me deeply; but it makes me really sorry."[191] This struggle about sociality and health extended beyond correspondence into live settings. Ebner and Breuer repeatedly negotiated about her spending time in certain settings with particular social atmospheres in terms of the implications for her health. These included summer locales in the lakes and mountains that Breuer favored for Ebner, sometimes over her resistance, and winters in Moravia at family estates and in different Italian cities, sought after by Ebner and reluctantly accepted by Breuer as good for the "heart and soul"

189 See, for Breuer's general concerns about adding to the strain of Ebner's correspondence, JB to MEE, 8 September 1900, 29 December 1902, 3 June 1907, 30 July 1910, 30 December 1910, in *Bw*, 38, 54–55, 91, 106, 109; and for his specific exhortations not to write back, JB to MEE, 27 July 1904, 19 October 1905, 14 January 1911, 17 May 1911, 18 June 1914, 20 June 1915, 23 September 1915, in *Bw*, 67, 82, 111, 115, 150, 164, 167. These exhortations all ran along the lines of this postscript from 1911: "Please! Do not reply to these lines! Yes, it would be a matter of course, but for safety's sake I have to yet again ask you to do so." JB to MEE, 17 May 1911, in *Bw*, 115. {"Bitte! Antworten Sie nicht auf diese Zeilen! Es wäre ja selbstverständlich, aber Sie muß ich der Sicherheit halber doch noch darum bitten."} At one point, Breuer inverted this relation of letter writing and health strain, which he imputed to Ebner, for his own health-writing relation: "In other cases, not writing is well excused by being unwell; for me, an execrable catarrh, which has already kept me home for three days, has created the peace and quiet for writing." JB to MEE, 21 February 1905, BP MF1, p. 76–77. {"Sonst entschuldigt man wol das Nichtschreiben mit Unwolsein, bei mir schafft ein abscheulicher Kartarrh, der mich schon drei Tage zu hause hält, die Ruhe zum Schreiben."}

190 JB to MEE, 30 December 1910, in *Bw*, 109. {"Wie soll und kann ich Ihnen für den Brief danken, den ich erhalten habe, und zugleich sagen, wie leid mir tut, daß Sie sich so bemühen! Acht Seiten diktiert! Ich traue mich ja nie, an Sie zu schreiben, weil ich weiß, daß Sie immer antworten und daß so jeder Gruß Ihr Leben erschwert."}

191 JB to MEE, 20 January 1911, in *Bw*, 112. {"Daß Sie mir nun doch selbst schreiben, rührt mich tief; tut mir aber wirklich leid."}

(*Gemüt*).[192] It was precisely in this question and realm of heart and soul that her struggle between thinking and not thinking took center stage.

This struggle was at the center of Breuer and Ebner's correspondence about her winter sojourns to Rome, which she undertook regularly following the death of her husband in 1898.[193] In fall 1904, Breuer wrote to Ebner on the prospect of another winter in Rome: "Is it more painful that we won't have you here this winter? is it more gratifying that you will again have the delight of enjoying the Roman winter? I don't know; but for my part, I'm glad that you will again have this joy. Not for medical reasons, because your last winter was actually not bad. But man doesn't live on health alone; he needs a bit of positive joy in order to thrive; a. there won't be much of that this winter."[194] Several years earlier, during her first visit to Rome, Ebner had told Breuer of this "positive joy" in detail. She opened with the standard elements of their ongoing conversation: a comparison of receiving two of his letters to "an hour of chatting in my writing room in Vienna," worry about Breuer's health and that of their friends and family, and apologies passed indirectly to her friends for her failures to write them. The failure to write was so explained: "Like a fairy-tale island, this sojourn in Rome stands out from the mole's life that I have led till now." She

192 See, on the benefit of spending winters with family in Moravia to Ebner's "heart and soul [*Gemüt*]," JB to MEE, 6 January 1902, 2 June 1913, in *Bw*, 44, 131; on Breuer's favoring of Berchtesgaden and Ebner's reluctance, see MEE and JB, 6, 19, 24 January 1902, in *Bw*, 43–48; and on Ebner's plans to go to Venice, Breuer's advice regarding her health and the variable weather of Venice, and her arrival there, MEE and JB, 5, 6 September, 2 November 1907, in *Bw*, 92–94.

193 Ebner made her first trip to Rome accompanied by Ida Fleischl, whose son Otto was the physician at the Austrian embassy there. Fleisch died the following spring, upon return to Vienna. Strigl dates Ebner's final phase of life to this year and illustrates how Ebner's first trip to Rome worked as a rejuvenating break for her. Strigl, *Berühmt sein ist nichts*, 335–39.

194 JB to MEE, 13 October 1904, H.I.N. 56373, Wienbibliothek. {"Ist es schmerzlicher, dass wir Sie diesen Winter nicht hier haben werden? ist es erfreulicher, dass Sie wieder die Freude haben, den römischen Winter zu geniessen? Ich weiß es nicht; aber für meine Person freue ich mich darüber, dass Sie diese Freude nochmals haben. Nicht aus medicinischen Gründen, denn eigentlich war Ihr letzter Winter nicht schlecht. Aber der Mensch lebt doch nicht von der Gesundheit allein; er braucht auch etwas positive Freude, um zu gedeihen; u. davon war diesen Winter wenig vorhanden."} From her diary and other letters, it seems that Ebner spent the winter of 1903–04 in Vienna, but it's not entirely clear (the diaries from 1904 are mostly missing). Ebner-Eschenbach, *Tagebücher* 5:352–52; and Ebner-Eschenbach to Josephine von Knorr, 20 November, 2, 7 December 1903, in *Briefwechsel 1851–1908* 1:581–83 (no. 905, 907, 909).

then animated this "fairy-tale island" for Breuer with the "astonishment" she felt seeing Rome with her own eyes: "Yes, you're quite right, the Colosseum makes a horrifying impression. When I stand there for five minutes and then close my eyes, I have an image in front of me, the 150,000 spectators filled by one single passion: lust for the sight of agony. You think you see Nero's torches burning and hear the tigers and lions roaring. I always step out of the Colosseum with an inner chill." The remainder of the letter listed her other favored sites, villas, and gardens, her impression of the Italian people, and the delightful company they had found. She concluded by wishing she could let Mathilde Breuer, Breuer's wife, have some of her "Roman sleep."[195]

While Ebner's fairy-tale days kept her from writing some of her friends, she still wrote to Breuer. The "mole's life," perhaps related to the "entirely empty" head she had had just six months before, was over, and she had much to share with him. The feeling persisted in the next year's letters from Italy, when she mused, "How often, dear best friend, have I already written to you in thought."[196] These thoughts ranged from broader musings to mundane observations, as then appeared in a letter concerning the Dreyfus affair and rising anti-Semitism in Vienna. In the face of "repugnant" news from Vienna, "[I] resort to prophesying: The reversion to wilderness and stultification of minds [*Verwilderung und Verdummung*], which now rule, are necessary. Humanity must be prepared for the world war that approaches. We are now sharpening our teeth for mutual devouring. This final word brings me to this: every other day, I have to run to Dr. Webb, the American

195 MEE to JB, 18 February 1899, in *Bw*, 34–35 (quotations on 34). {"Dieser Aufenthalt in Rom ragt wie eine Märcheninsel aus dem Maulwurfsleben, das ich bisher geführt habe, heraus." "Ja, Sie haben ganz recht, das Colosseum macht einen schauderhaften Eindruck. Wenn ich dort stehe fünf Minuten lang und dann die Augen zumache, habe ich das Bild vor mir, die 150.000 Zuschauer, die eine einzige Leidenschaft erfüllt: die Lust am Anblick der Qual. Man meint die Fackeln des Nero brennen zu sehen, die Tiger und Löwen brüllen zu hören. Mit einem inneren Frösteln trete ich immer aus dem Colosseum."}

196 MEE to JB, 14 February 1900, in *Bw*, 37. {"Wie oft, lieber, bester Freund, habe ich Ihnen in Gedanken schon geschrieben."} She expressed this same sentiment at the outset of a number of letters. MEE to JB, 14 January 1901, 17 August 1902, 8 June 1915, in *Bw*, 39, 48, 162.

dentist. He is, by the by, very skillful and a fine, agreeable man. We interact in sign language, since he speaks neither German nor French and I speak neither English nor Italian."[197]

In Ebner's evocation of the living Colosseum, in her conjoint prophesying and word-associated anecdote from the dentist, she showed not only how her thinking was tied to her surroundings but also how such thinking had to be worked on in writing to Breuer. She herself made this connection in a letter several years later. After describing her recent frustrations with writing, stemming from her re-reading and correcting the second edition of the collection *Aus Spätherbsttagen* (1902; From late fall days), she declared her intentions to Breuer: "Now, dear, dear friend, I have such an ardent desire to peel myself entirely free from this damn literature! Publish nothing else! Only write down what journeys through my head, communicate it to those who are interested (in these journeyings-around-the-head [*Durch-den-Kopf-Fahrereien*])."[198] Writing and thinking were intimately related, but not just any writing; as long as she had interested and engaged friends like Breuer to whom she could communicate these "journeyings-around-the-head,"

197 MEE to JB, 4 December 1899, in *Bw*, 36. {"[Ich] verlege mich auch aufs Prophezeien: Die Verwilderung und Verdummung, die jetzt herrschen, sind notwendig. Die Menschen müssen zu dem Weltkrieg, der bevorsteht, präpariert werden. Zu dem gegenseitigen Auffressen schärft man sich jetzt die Zähne. Dieses letzte Wort bringt mich darauf, daß ich jeden zweiten Tag zu Dr. Webb, dem amerikanischen Zahnarzt, rennen muß. Er ist übrigens sehr geschickt und ein feiner, angenehmer Mensch. Wir verkehren in der Zeichensprache, da er weder Deutsch noch Französisch spricht und da ich weder Englisch noch Italienisch spreche."} While it's overly generous to read Ebner's reference to a coming world war as prescient regarding the actual Great War of the coming century, she was ultimately a much sharper observer of Austrian and world politics in the run-up to and outbreak of the war than Breuer was. Kann makes this point in his introduction to Ebner-Eschenbach and Breuer, *Bw*, 10.

198 MEE to JB, 17 August 1902, in *Bw*, 49. {"Jetzt, lieber, lieber Freund, hätte ich einen so heißen Wunsch, mich gänzlich loszuschälen von dieser verdammten Literatur! Nichts mehr veröffentlichen! Nur noch aufschreiben, was mir durch den Kopf fährt, es denen mitteilen, die sich dafür interessieren (für diese Durch-den-Kopf-Fahrereien)."} Ebner then declared her opposition to posthumous publications, including of her letters (a sentiment left out by the editor of the published edition). Ibid., in BP MF1, p. 47. Notably, she vacillated about whether to ultimately send this letter to Breuer, even communicating her thinking-about-thinking; she explained in closing that her niece Marianne Kinsky "advised me to dispatch this scrap of paper, which I wanted to just throw into the wastepaper basket—so it's at her risk." Ibid., in *Bw*, 50. {"Marianne, die Sie und Ihre liebe Frau vielmals grüßt, rät mir, diesen Wisch, den ich eben in den Papierkorb werfen wollte, abzusenden, also auf ihre Gefahr."}

to whom she could shape and realize her thinking, she could dispense with writing for the public.

Of course, Breuer had to balance his interest in Ebner's "journeyings-around-the-head" against his concern with her being overburdened by correspondence (as discussed earlier); yet this same balance between necessary-thinking and thinking-too-much played out *for him* in his letters to Ebner. When Breuer wrote a particularly long letter to Ebner, he often criticized himself for going on too long or excused his particular choice of subject matter—whether politics, religion, family, or otherwise.[199] One letter exchange in 1902, ultimately centering on the relation between scientific thinking and religious feeling and belief, dramatized Breuer's struggles with thinking and not thinking, in both conversation and beyond. Breuer's last letter in the series reached over one-thousand words, which he closed with just such a self-critical apology: "I don't know, I am otherwise not a passionate letter writer; but if you knock onto some point, then the whole little song sets off, as if I were a musical clock gone mad. Excuse me!"[200] His "little song" moved from the rising piety of the propertied classes to the use of "warlike" weapons and psychology in the street during political uprisings; the point that set it all off was addressed by Breuer in the

199 JB to MEE, 1904 [February 1902], 18 July, 24 August 1905, 18 May 1912, 7 July 1914, in *Bw*, 61, 77–78, 81, 123, 152–53. The first of these letters is undated, with 1904 suggested by the editor. Ibid., 180n56. But it is more likely from February 1902 based on two elements of the letter: First, a reference to a letter of Ebner's on Greek and Latin was probably related to their discussion of the spelling of the word *ecstasy* in January 1902 (discussed below). MEE and JB, 19, 24 January 1902, in *Bw*, 45, 47. Second, the letter's second major topic was occasioned by political unrest and military repression in Triest, which had begun with a strike by stokers at Austrian Lloyd, the largest Habsburg shipping corporation, followed by a larger general strike that was met with martial law and the death of a number of workers in February 1902. It was was a major story in Viennese newspapers that month (including Breuer's favored *Arbeiter-Zeitung*). See Dornik, "Conrad von Hötzendorf and the 'Smoking Gun,' " 61–62.

200 JB to MEE, 1904 [February 1902], in *Bw*, 61. {"Ich weiß nicht, ich bin doch sonst kein leidenschaftlicher Briefschreiber; aber wenn Sie auf irgendeinen Punkt tupfen, geht gleich das ganze Liedl los, als wäre ich eine verrückt gewordene Spieluhr. Entschuldigen Sie!"} Breuer's choice of image—a musical clock—was no accident. Ebner was a devoted horologist, which she had taken up while writing *Lotti, die Uhrmacherin* but stemmed from a lifelong interest, and developed an extensive collection of mostly pocket watches (around 270 upon her death, which formed part of the founding collection of the Viennese Uhrenmuseum), including many "musical clocks with stylized sounds, with apple-tree sprigs or figurines amusing themselves." Strigl, *Berühmt sein ist nichts*, 247.

opening line of his song: "I hope everything that is said about Greek and Latin in your dear latest letter is a joke and you don't believe a word of it."[201] While Ebner's letter is now missing, the origin point of their discussion of Greek and Latin was a back-and-forth on a book of saint's lives by the theologian Karl von Hase, which began with a butter stain and a question of ecstasy.[202]

Upon lending Ebner Hase's book, Breuer had noticed a grease mark on the cover "with horror"; this horror stuck with him since, knowing how she abhorred such stains.[203] But something strange happened: the stain was gone when Ebner looked. "This might be due directly to the excellent air in Löschna, or does the miracle-working Catherine [of Siena] want to send me a sign?" she asked. "I'm reading her splendidly narrated life story with the greatest excitement, with the greatest admiration. Yet so far the saint does not appeal to me. Her ecstasies [*Ekstasen*] are only too morbid, and I'm embarrassed by her conceitedness. How is she allowed to consider herself so much above every human that she imagines the Savior of the World would descend by her specially, reveal himself to her in a visible form, and linger with her for hours. She even dares once to give him lessons."[204]

201 JB to MEE, 1904 [February 1902], in *Bw*, 58. {"Ich hoffe, alles, was in Ihrem lieben letzten Briefe über Griechisch und Latein steht, ist ein Scherz und Sie glauben kein Wort davon."}

202 Hase's book *Heiligenbilder* (1892; Pictures of saints) collected two earlier separate books he had written, one on Francis of Assisi and one on Catherine of Siena.

203 JB to MEE, 6 January 1902, in *Bw*, 44. Breuer's muted humor came through in his final note on the matter: "Please, forgive the fatty fingers; I don't know whose they were; but surely the buttered bread was good, which is to blame." {"Bitte, verzeihen Sie den fetten Fingern; ich weiß nicht, wessen sie waren; aber sicher war das Butterbrot gut, das Schuld trägt."} This was not Breuer's only mention of the sensual materiality of letter writing. In a postscript to a letter of 27 July 1905, Breuer wrote, "Forgive the faint smell of iodoform. I only came into the vicinity of this terrible perfume and perhaps you nevertheless still smell it. Sorry!" JB to MEE, 27 July 1905, BP MF1, p. 89. {"Vergeben Sie den leisen Jodoformgeruch. Ich bin mit diesem schrecklichen Parfum nur in die Nähe gekommen und vielleicht riechen Sie's doch noch. Verzeihung!"}

204 MEE to JB, 19 January 1902, in *Bw*, 45 (my interpolation). {"Das kann gerade nur von der ausgezeichneten Luft in Löschna kommen, oder will mir die wundertätige Katharina ein Zeichen geben? Ich lese ihre vortrefflich erzählte Lebensgeschichte mit höchster Spannung, höchster Bewunderung. Aber sympathisch ist mir bis jetzt die Heilige nicht. Ihre Ekstasen sind doch gar zu krankhaft und peinlich ist mir ihre Selbstüberhebung. Wie darf sie sich so hoch erhaben über alle Menschen halten, daß sie sich einbildet, der Welterlöser werde speziell zu ihr niedersteigen, sich ihr in sichtbarer Gestalt offenbaren und stundenlang bei ihr verweilen. Einmal erkühnt sie sich sogar, ihm Lehren zu geben."}

To the word *Ekstasen*, Ebner added a footnote, "Angela's orthography," calling out her secretary's chosen spelling.[205] "May I say that you are not entirely fair to two women?" Breuer responded, explaining how Ebner had unfairly slighted both her secretary and Saint Catherine. While the case of "Angela's orthography" was relatively simple—she had rightly chosen the Greek-derived form (*Ekstase*) rather than the "corrupt" one from Latin via French (*Extase*)—that of Catherine was more complicated.[206] Breuer's consideration of the matter is striking:

> And as regards Saint Catherine: a healthy person with a normal nervous system does not become a saint of the visionary type. What is she supposed to do, when she sees, touches the Redeemer for hours—speaks with him? Might she think: that must be an illusion, Christ cannot lower himself so graciously to my level. But if the idea were thinkable, that her vision might be an illusion, then so much else in her other than the vision would collapse! What she sees and hears *in abstractione*—that is. Doubting this is only possible for someone who is practiced in, so to say, scientific thinking, and how far is she from such thinking, how far is the entire century. She probably didn't believe she was monopolizing the Redeemer either. When Indra dances with the shepherd of the Himalayan valley, then everyone believes themselves to have danced with her, says the Indian legend. And that she [Catherine] gives Jesus lessons—true strong belief does not shy from such familiarity. When Luther struggles in prayer with God for hours till he has wrested Melanchthon's life from him—it's no different. And every Jew is on roughly such footing with Jehova. I think it's really something else that embarrasses you. With our Saint Catherine, it is crystal clear how strong the admixture of real, powerful eros is with this sort of piety. And you feel of religion like the angels in Faust: "This remainder of

205 MEE to JB, 19 January 1902, in *Bw*, 179n39. Though Angela Erbert, Ebner's devoted traveling secretary, only ranks a passing mention with just a first name in Klostermaier's and Strigl's biographies, Bettelheim described her along with Ebner's numerous sisters, aunts, and nieces in their support of the author during the later years: "The loyal Angela Erbert, who had in her many years of work matched her handwriting to the author's lettering to such an extent that only the oldest acquaintances could distinguish which letters and manuscripts originated from Marie Ebner herself." Bettelheim, *Ebner-Eschenbach's Wirken und Vermächtnis*, 262. {"Der getreuen Angela Erbert, die in ihrer langjährigen Tätigkeit ihre Handschrift den Schriftzügen der Dichterin derart angeglichen hatte, daß nur die ältesten Bekannten unterscheiden konnten, welche Briefe und Manuskripte von Marie Ebner selbst herrührten."} Breuer seems to have been able to tell their handwriting apart, opening one letter by noting the "the joy of seeing your lettering (even if in Angela's version)." JB to MEE, 11 May 1914, in *Bw*, 146.

206 JB to MEE, 24 January 1902, in *Bw*, 47. {"Darf ich sagen, daß Sie gegen zwei Frauen nicht ganz gerecht sind?"}

earth, it's distasteful to bear it; even cremated, it would still be impure." The likes of us, for whom it is precisely the psychological phenomenon in religious phenomena that is interesting and who scarcely still remember "awesome shivers deep in the chest" [*"heilige Schauer tief in der Brust"*] from our childhood—the likes of us regard religion not as something superhuman, something that is dragged down and degraded by humans, but rather as a product of the human spirit like language and poetry, science and art. It is but a matter of course that she, a blossom of the human tribe, would also contain the human and the all-too-human. That such a highly gifted woman like Catherine transforms her entire being into religion requires hearing *toute la Cyre* [the whole Agnus Dei?], and that takes eros. The medieval Italian lived her religion with the entire naivety of her time and her race. One needs only to compare this with some songs from German Pietism, with the terrible fussing and cooing with the baby lamb, to see the Italian towering high above.

For me, the most wonderful thing about her, like with Santa Teresa, is the intellect [*Verstand*], the practical sense, the energy of this great journalist.[207]

207 JB to MEE, 24 January 1902, in *Bw*, 47–48 (my interpolations). The translated quotation from *Faust*, spoken by the More-Perfect Angels (*Die vollendetern Engeln*) in part 2 and which Breuer quoted exactly, is from Goethe, *Faust I & II* [English], lines 11,954–97. I have not been able to determine if the quotation "awesome shivers deep in the chest" (*heilige Schauer tief in der Brust*) comes directly from somewhere but "heilige Schauer" recalls famous passages in Kant, Schleiermacher, and Marx. See, on the feeling of the sublime, Kant, *Kritik der Urtheilskraft* §§ 29, 49n (pp. 269, 316n); on loving the world spirit, Schleiermacher, *Über die Religion*, 81; and on the triumph of the bourgeoisie over such feeling, Marx and Engels, *Das kommunistische Manifest*, 12. Finally, the phrase "toute la Cyre," literally *the whole wax*, seems to refer to a wax-disc Agnus Dei and thus to be a synecdoche for the entire Mass itself. *Le Grand Robert*, s.vv. "cire" (I.1.b.), "agnus dei," accessed 20 August 2020, https://grandrobert.lerobert.com/robert.asp.

{"Und was die heilige Katharina angeht, so wird ein gesunder Mensch mit normalem Nervensystem eben keine Heilige vom visionären Typus. Was soll sie tun, wenn sie stundenlang den Heiland sieht, berührt—mit ihm spricht? Kann sie denken: das muß Täuschung sein, Christus kann sich nicht so gnädig zu mir herablassen. Aber wenn ihr die Idee denkbar wäre, daß ihre Vision Täuschung sei, dann würde viel anderes in ihr zusammenbrechen, als diese Vision! Was sie sieht und hört *in abstractione*, das ist. Daran zweifeln kann nur jemand, der im sozusagen wissenschaftlichen Denken geübt ist, und wie weit ist sie davon und das ganze Jahrhundert. Sie hat wohl auch nicht geglaubt, den Heiland zu monopolisieren. Wenn Indra mit der Schäferin des Himalajatales tanzt, so glaubt jede, er habe mit ihr getanzt, sagt die indische Legende. Und daß sie Jesus Lehren gibt—der wahre, starke Glaube scheut solche Familiarität nicht. Wenn Luther im Gebet stundenlang mit Gott kämpft, bis er ihm das Leben Melanchtons abgerungen hat, ist das nicht anders. Und jeder Jude steht mit Jehova ungefähr auf diesem Fuß. Ich meine, es ist eigentlich etwas anderes, was Ihnen peinlich ist. Bei unserer Heiligen Catherine ist es sonnenklar, wie stark bei dieser Art von Frömmigkeit die Beimischung des richtigen, gewaltigen Eros ist. Und Sie empfinden von der Religion wie die Engel im Faust: 'Uns bleibt ein Erdenrest zu tragen peinlich, und wär' er von Asbest, er ist nicht reinlich.' Unsereiner, den an den religiösen Phänomenen eben das psychologische Phänomen interessiert und der sich kaum noch aus seiner Kindheit an 'heilige Schauer tief in der Brust' erinnert—unsereiner sieht die Religion nicht als ein Übermenschliches an, das von den Menschen herabgezogen und entwürdigt wird, sondern als Produkt des Menschengeistes wie Sprache und Poesie, Wissenschaft und Kunst. Da ist es doch selbstverständlich, daß sie, eine Blüte des Menschenstammes, auch Menschliches und Allzumenschliches enthalte; daß ein

"Enough chatting," Breuer concluded, bringing his disquisition to a somewhat abrupt close, along the lines of his other self-deprecating closings.[208] It was presumably in Ebner's now-missing response that she expressed her thoughts on Greek and Latin, which Breuer called a joke and which set him off like mad musical clock; yet there is still much to say about Breuer's disquisition, which dramatized the same struggle of thinking and not thinking that bedeviled Ebner. Breuer was concerned not only with offering and convincing Ebner of his own reading of Saint Catherine's life but also with exploring and beginning to account for the broader tension between "so to say, scientific thinking" and "true strong" religious belief and experience. This exploration started with Catherine herself—how such pious belief and experience was common across religions—and the distance of her time from their own era of science.

But this reading, at once comparative and generally historist, wasn't enough to explain Ebner's embarrassment. Breuer then inverted the analysis, taking his and Ebner's formation, their scientific thinking and religious experience, as the starting point. Rather than interpreting Catherine against other eras and religious experiences, he sought to interpret his and Ebner's era and religious experience against Catherine's. For "the likes of" them, Catherine's mixture of eros and piety, her total transformation into religion, was unthinkable; their own childhood religious experiences of "awesome shivers deep in the chest" were too distant to appreciate Catherine's, which brought the superhuman, the human, and the all-too-human together. It was precisely this mixture that Breuer admired, as something total, true, and complex, in contrast with the Pietists as well as Ebner's

---

so hochbegabtes Weib wie Katharina ihr ganzes Wesen in Religion verwandelt, bedingt, daß man auch *toute la Cyre* [das ganze Agnus Dei?] hört und dazu gehört der Eros. Die mittelalterliche Italienerin lebt ihre Religion mit der ganzen Naivität ihrer Zeit und ihrer Rasse. Man braucht nur manche Lieder des deutschen Pietismus daneben zu halten, mit dem schrecklichen Getue und Gekose mit dem Lämmlein, um die Italienerin hoch emporragen zu sehen. // Das wunderbarste für mich ist bei ihr, wie bei Santa Theresa der Verstand, der praktische Sinn, die Energie dieser großen Journalistin."}

208 JB to MEE, 24 January 1902, in *Bw*, 48.

description of Catherine's experiences as morbid ecstasies; in further contrast with the Pietists and Ebner's appraisal, he specifically noted certain very human characteristics of Catherine's—her understanding, practical sense, and energy—as what he most admired.[209]

Yet it was also this very mixture that engaged and challenged Breuer himself. His childhood memory of "awesome shivers deep in the chest" was not cited in disavowal but as something left behind, even perhaps unwillingly. And while his example of each Jew's direct relationship with God was perhaps somewhat generic, it also drew most certainly on his direct experience, in contrast with his other two textual examples of "true strong" religious experiences (of Indra and Luther). Breuer was "a healthy person with a normal nervous system"; but this only meant that even with intense religious experiences he would

209 Hirschmüller reads this letter as considering "the relation between extreme piety, mental health and sexuality" and argues that Breuer balanced his argument about the role sex played in Catherine's religiosity with the broader value Breuer placed on religion. Hirschmüller, *Josef Breuer* [English], 47. This seems to me to miss Breuer's struggle with himself in the letter (as I argue in the main text here) and how he deployed the concept of *eros*. Breuer did say that it was Catherine's combination of eros and piety that embarrassed Ebner; but what was embarrassing was not eros or sex *itself* but how it guided and took over Catherine's life. This combination, not the mere presence of a sexual component, was what embarrassed "the likes of us." The one passage in *Studies on Hysteria* where Breuer mentioned *eros* bears this out, on the conversion of affective excitation into hysterical symptoms via sexual repression in young women: "The tendency toward defense against the sexual is further intensified by the fact that in young unmarried women sensual excitation has an admixture of anxiety, of fear of what is unknown and half-suspected, of what is coming, whereas in normal and healthy young men this excitation is an unmixed aggressive drive. The girl senses in eros the terrible power which governs and decides her destiny and she is frightened by it. All the greater, then, is her inclination to look away and to repress from her consciousness the thing that frightens her." Breuer, "Theoretisches," in *GW* suppl.:305 / *SE* 2:246 (translation modified). {"Die Neigung zur Abwehr des Sexualen wird noch verstärkt dadurch, daß die sinnliche Erregung bei der Jungfrau eine Beimischung von Angst hat, die Furcht vor dem Unbekannten, Geahnten, was kommen wird, während sie bei dem natürlichen, gesunden, jungen Manne ein unvermischt aggressiver Trieb ist. Das Mädchen ahnt im Eros die furchtbare Macht, die ihr Schicksal beherrscht und entscheidet, und wird durch sie geängstigt. Um so größer ist die Neigung, wegzublicken und das Ängstigende aus dem Bewußtsein zu verdrängen."} Eros and sexuality were facts of life; it was what you *did* with them that counted: repression in the case of hysteria, religious transformation in the case of Saint Catherine. This did not make Catherine a hysteric, nor did it mean that Breuer looked down upon or criticized religion on account of Catherine's channeling of eros into ecstatic piety; on the contrary, as I try to show above, he admired these aspects of religion and Catherine's life. Hirschmüller emphasizes a too-narrow idea of eros as sexuality, whereas Breuer's concept drew on broader philosophical and religious resonances of *eros* as a sensual urge, attraction, or love often aimed at knowledge. Freud's use of the concept was similarly broad, though his development of it took place mostly after this letter. On Freud's *eros*, with a note of Breuer's particular usage in *Studies on Hysteria*, see Laplanche and Pontalis, *The Language of Psycho-Analysis*, s.v. "Eros."

not become a literally visionary saint. His twisting argument was aimed not simply at Ebner but also at himself. In this letter and his others that go on long, Breuer struggled with his own recognition of the limits of "scientific thinking"—whether he exceeded it by spinning out of control regardless of the topic or in contrast with other forms of thinking and being, such as Catherine's.[210]

The struggle came to the fore in another letter on religion, prompted at least partly by a lecture series in 1912 by the philosopher Christian von Ehrenfels on the existence of God: "The state of mind in which one reads the Bible, said an Englishman, is that of rapt inattention; one doesn't notice, therefore, what is being read and draws no conclusions from it. So it goes for most people with everything they see around them when it doesn't exactly concern their very closest interests. And that's a good thing. 'A fallacy that delights is worth a truth that overloads us.' Man doesn't live from bread alone but rather from his illusions. These illusions are thus holy like bread."[211] Here again Breuer distanced himself from "truth"-oriented thinking, favoring instead the illusory manner in which life

210 Two other piquant examples of Breuer's criticizing himself for running on too long, like the mad musical clock, were as follows: In 1905, after a series of letters on Saint Paul, he closed with a self-rebuke on his change of topic: "Suddenly I'm now no longer writing about St. Paul but rather entirely about politics! That's too much! Enough!" In 1914, he interrupted his own musings on the use of caffeine-like substances across various cultures: "Esteemed Frau! What peculiar rubbish am I writing? Today I have a quivering jelly instead of a brain in my skull; that's probably why. You'll forgive me!" JB to MEE, 24 August 1905, 7 July 1914, in *Bw*, 81, 151. {"Jetzt schreibe ich unversehens schon nicht mehr über St. Paul, sondern schon gar über Politik! Das ist zu viel! Schluß!" "Hochverehrte Frau! Welch seltsamen Quatsch schreibe ich da? Ich habe heute statt Gehirnes eine zitternde Gallerte im Schädel; daher wird's wohl kommen. Sie werden es verzeihen!"}

211 JB to MEE, 18 May 1912, in *Bw*, 122. {"Der Seelenzustand, in dem man die Bibel lese, sagte ein Engländer, sei der einer andächtigen Unaufmerksamkeit; darum bemerke man nicht, was man lese und ziehe keinen Schluß daraus. So geht es offenbar den meisten Menschen auch mit allem, was sie um sich sehen, wenn es nicht eben ihre aller nächsten Interessen betrifft. Und das ist gut so. 'Ein Irrtum, der beglückt, ist eine Wahrheit wert, die uns zu Boden drückt.' Der Mensch lebt nicht allein vom Brote, sondern von seinen Illusionen. Drum sind diese heilig wie das Brot."} It's unclear who this Englishman was. The (nearly perfectly) cited maxim is from the Weimar Classicist Christoph Martin Wieland (Breuer substituted "Irrtum" [fallacy, mistake] for Wieland's "Wahn" [delusion, mania]). Wieland, *Idris und Zenide*, canto 3, stanza 10 (p. 230). "Rapt inattention" (*andächtige Unaufmerksamkeit*) may call to mind Freud's "evenly suspended attention" (*gleichschwebende Aufmerksamkeit*), the state in which the psychoanalyst was supposed to listen to the patient. Freud only published this term in 1912 in one of his "Papers on Technique," so Breuer was most likely not acquainted with it specifically. Laplanche and Pontalis, *The Language of Psycho-Analysis*, s.v. "Attention, (Evenly) Suspended or Poised."

happened, while still not giving himself over entirely to these illusions (as Saint Catherine had done).[212] And again his struggle with putting this tension into words went too far: "What have I now written myself into? How did I get here? Seems to me the cause lies with you! Since you spoke of Turgenev's lack of metaphysical need, such thoughts have again been running around in my head. So, forgive me!"[213]

Breuer favored the proverb "man doesn't live from bread alone." Elsewhere in the correspondence, he deployed it with an equation of bread and health, thus admitting Ebner's need for social company more than just generalized rest and convalescence.[214] But his relation to the second half of the proverb was less clear: "One does not live by bread alone, but by every word that comes from the mouth of the Lord."[215] Rather than the word of the Lord, Breuer posited illusions and social "positive joy." Yet God and true religious feeling dogged Breuer, pushing him beyond his familiar scientific thinking and making multiple appearances in his letters with Ebner.[216] On this count, Breuer and

212 Immediately after the line about bread, Breuer added some "qualifications and limitations" to these views via a late poem of Goethe's, "Im Vatican bedient man sich" (In the Vatican they make use of; sometimes called "Symbole" [Symbols]); the poem uses the differing plants available in differing settings for worship on Palm Sunday—true palms and olive branches in the Vatican, holly and willow branches in the mountains—to animate questions of high and low in worship and the worshipers' awareness thereof. "It is my favorite proverb and regulates my conduct in response to all religious, *peaceful* questions," Breuer declared, though what such regulation meant is difficult to say regarding Goethe's poem, which is equally platitudinous and gnomic (notably the final line, "These are *mythologems*"). Breuer's next and final line on the matter only further confuses the matter: "But when it's neither palms nor willows but thorn branches with which one torments oneself and others, and thorn apple and belladonna—what then?" JB to MEE, 18 May 1912, in *Bw*, 122–23. {"Es ist mein Lieblingsspruch und regelt mein Verhalten zu allen religiösen, *friedlichen* Fragen." "Das sind *Mythologeme*." "Aber wenn es weder Palmen noch Weiden sind, sondern Dornzweige, mit denen man sich und andere peinigt, und Stechapfel und Tollkirsche—was dann?"} Hirschmüller reads this final line as showing the limits of Breuer's belief in religious tolerance, "where it leads to suffering for the believer himself and for others," though I'm not sure that Goethe's proverb or Breuer's brief gloss in fact bears this out. Hirschmüller, *Josef Breuer* [English], 342n80. Goethe's original, from which Breuer's citation diverged in a few lines, was in Goethe, *Vollständige Ausgabe letzter Hand* 3:195.

213 JB to MEE, 18 May 1912, in *Bw*, 123. {"In was habe ich mich da hineingeschrieben? Wie kam ich dazu? Mir scheint, die Ursache liegt bei Ihnen! Seit Sie von Turgenjews Mangel an metaphysischem Bedürfnis gesprochen haben, gehen mir wieder solche Gedanken im Kopf herum. Also, vergeben Sie!"}

214 JB to MEE, 2 October 1901, in *Bw*, 43; and 13 October 1904, H.I.N. 56373, Wienbibliothek.

215 Deut. 8:3 (NSRV).

216 Another series of letters in 1905 dealt with the religious scholar Ernest Renan's work on the life of Saint Paul, which Breuer admired and had lent to Ebner. What concerned Breuer most were the sources of Paul's

Ebner were united. In her response to his letter on illusions, she cited thoughts from her own notebook: "Laplace's famous saying seems childish [on God: 'I had no need of that hypothesis']. It also seems childish to apply earthborn concepts such as mercy, justice, wisdom, etc. to something incomprehensible, something infinite to which we—flying shadows on a speck of dust in the universe—have given the name God."[217]

A TELEPATHIC TESTAMENT TO CONVERSATION

On 28 September 1911, still mourning the death of her brother Adolph Dubsky, Ebner-Eschenbach wrote to Breuer of the last day she saw Dubsky: "In Vienna, I'll tell you something very strange I experienced on the day that Adolph departed for Bern. It was all kept secret from me, until 2 August. Only after the operation had come off successfully (!) did I find out that Adolph was in Bern and not on the way to Nauheim."[218] Their discussion of this "very strange" experience, not mentioned further in their

---

theology beyond those accounted for by Renan, be they Buddhist, Jewish, or autochthonous, and he gave his own account of why Paul made the Resurrection into the "keystone" of his belief: a mixture of Paul's experience seeing Christ on the way to Damascus and the Jewish story of Elijah's journey to heaven on a fiery chariot. More broadly, he felt an "ethnic comradeship with Saul." JB to MEE, 18 July 1905, in *Bw*, 77, 78. In reading this letter, Hirschmüller emphasizes Breuer's "pride in all the achievements of his *race*," while I instead would emphasize instead the "achievements," that is, Breuer's particular association with Paul's worldly work in establishing the church while also leading such a spiritual life and the implied tension between the two. Hirschmüller, *Josef Breuer* [English], 47. Later in the exchange, Breuer praised Paul for having earned his bread by his own hand just like poor rabbis did (weaving, in Paul's case) in contrast with the other apostles and disciples who lived as "holy beggars" , again calling to mind the proverb about bread and the Breuer's struggle with spiritual life. JB to MEE, 27 July 1905, in *Bw*, 79.

217 MEE to JB, 25 May 1912, in *Bw*, 123 (my interpolation). {"Das berühmte Wort Laplaces kommt mir kindisch vor. Es scheint mir auch kindisch, erdgeborne Begriffe wie: Barmherzigkeit, Gerechtigkeit, Weisheit usw. auf ein Unfaßbares, Unendliches anzuwenden, dem wir, fliegende Schatten über ein Stäubchen im All, den Namen Gott gegeben haben."} The French savant Pierre-Simon Laplace had supposedly responded to Napoleon's observation that Laplace's book did not mention God with the dismissal "I had no need of that hypothesis."

218 MEE to JB, 28 September 1911, in *Bw*, 117. {"In Wien werde ich Ihnen etwas sehr Merkwürdiges erzählen, das ich hier erlebt habe an dem Tage, an dem Adolph nach Bern abreiste. Mir war alles verheimlicht worden, bis zum 2. August. Erst nachdem die Operation glücklich (!) überstanden war, erfuhr ich, daß Adolph in Bern sei und nicht auf dem Wege nach Nauheim."} As we will see, Ebner was in fact informed earlier than this that her brother had gone to Bern for surgery, and she communicated about it to Breuer; it's not clear then why here she saw he was kept in the dark until 2 August.

correspondence, must have stuck with Breuer, for after Ebner's death, he wrote to her niece Marie von Kinsky-Dubsky inquiring after the diary entries pertaining to the experience. Kinsky-Dubsky, who remembered hearing of the event herself at the time, sent the relevant passages along:[219]

> Saturday, 3 June 1911
>
> A glorious day.
>
> In the afternoon, I enter into my room and am going to the window, and there before me stands my brother Adolph in the way, in bright sunshine but as if behind a fully transparent veil. He looks over to me and greets me with his hand, as in parting. The vision lasts only a second. I have to keep thinking about it.
>
> Sunday, 11 June
>
> The dear children concealed from me that Adolph traveled to Bern to have an operation. Doctor Porges ascertained that a small goiter formed. The operation took place yesterday successfully. Night good, temperature 37.3. Few pains.—Gisi, Viktor (brother and nephew), Feri are in Bern. What does the vision that I had eight days ago mean? When Marie spoke to me of the operation, the memory flashed across me like lightning.[220]

Breuer filed these away, and just before his own death in 1925, published them in a popular illustrated magazine of new science and technology, *Die Umschau* (The survey), under the title "Ein telepathisches Dokument" (A telepathic document). He framed Ebner's diaries as the answer to a challenge laid out in the English review *The Nineteenth*

219 Kinsky-Dubsky to Breuer, 8 April 1916, in *Bw*, 169–70.

220 BP MF1, pp. 150–51. The published version of the correspondence includes one letter from Kinsky-Dubsky to Breuer and these entries but with two unmentioned removed excerpts (Ebner-Eschenbach and Breuer, *Bw*, 170.). The version in Ebner's now-published diaries matches the LOC version (save for some punctuation and orthography). Ebner-Eschenbach, *Tagebücher* 6:242, 243. {"Samstag, 3. Juni 1911. // Ein herrlicher Tag. // Am Nachmittag trete ich in mein Zimmer und ans Fenster, und da steht vor mir auf dem Wege im hellen Sonnenschein, aber wie hinter einem ganz durchsichtigen Schleier, mein Bruder Adolph. Er sieht herüber zu mir und grüsst mich mit der Hand, wie zum Abschied. Die Vision dauerte nur eine Sekunde. Ich muss immer daran denken. // Sonntag, 11. Juni. // Die teuren Kinder haben mir verschwiegen, dass Adolph nach Bern gefahren ist, um sich operieren zu lassen. Doktor Porges stellte fest, dass ein kleine Kropf sich gebildet habe. Operation hat gestern glücklich stattgefunden. Nacht gut, Temperatur 37.3 Wenig Schmerzen.—Gisi, Viktor, Bruder und Neffe, Feri sind in Bern. Was bedeutet die Vision, die ich vor acht Tagen hatte? Als Marie mir von der Operation sprach, durchzuckte die Erinnerung daran mich wie ein Blitz."}

Century, seeking evidence that attested an apparition when it happened before finding out that the appearing person had been in mortal danger or had died. If there were such a document, it belonged framed in the British Museum "as one of the most important documents of mankind"; but of course, the review insisted, no such document existed. To the contrary, Ebner responded, offering the entries recording her "not at all sensational experience" in retort.[221] Breuer then described the circumstances and presented the entries. Still he admitted to a gap in his reading of this experience as telepathic: there was no attendant evidence that brother Dubsky had been thinking "intensively" of sister Ebner. Breuer nevertheless saw such a trip for an operation as suggesting exactly this sort of intensive thought and found the document worthy of publication.[222]

The summer before this publication, Breuer had written to the Dutch otologist Adrianus de Kleijn, "At my age (82), one shouldn't put off that which is dearest."[223] Breuer's "dearest" yielded two items for publication in these final years:[224] Ebner's telepathic document and Breuer's long overdue curriculum vitae for the Akademie der Wissenschaften. An autobiographical sketch makes sense in such a situation, summing

221 Breuer, "Ein telepathisches Dokument", 215. Breuer only mentions the English review in passing, and I was unable to locate the original article (hence the back translation).

222 Breuer, "Ein telepathisches Dokument", 216. In a responding communication to Breuer's publication later that year, the German-Russian climatologist Wladimir Köppen (!) emphasized that Breuer was right to assert that the document was not "proof" of telepathy. But Köppen further queried the line between telepathy and eidetics, implying Breuer had worked based an unsupported connection. Using his own weak visions as evidence, he noted that the question lay in the relation between such visions and simultaneous events elsewhere. "I therefore understand the 'clairvoyants' very well and feel sorry for them," Köppen concluded. "But the linking of their visions with an unknown-to-them reality is based probably on nothing other than illusion and suggestion, however honest these people may be." Köppen, "Telepathie oder Eidetik?," 572–73. {"Ich verstehe daher die 'Speukenkieker' sehr wohl und bedaure sie. Aber die Verknüpfung ihrer Gesichte mit einer ihnen unbekannten Wirklichkeit beruht wahrscheinlich auf nichts als Täuschung und Suggestion, so ehrlich diese auch sein mögen."}

223 Breuer to De Kleijn, 8 July 1923, D 20, Hirschmüller Documents, Deu. 343 / Eng. 272. {"In meinem Alter (82) soll man nicht aufschieben, was einem am Herzen liegt."} Breuer and De Kleijn's correspondence was in fact relatively extensive but did not lead to any publications for Breuer. Of course, his lively participation shows how important his physiological research on the inner ear was, as shall concern us in the next chapter.

224 Later in his letter to De Kleijn, Breuer referred more explicitly to his own mortality, though to note that he didn't anticipate it or the results of the investigations with De Kleijn to come about any time soon. Breuer to De Kleijn, 8 July 1923, D 20, Hirschmüller Documents, Deu. 345 / Eng. 274.

up life and tying off obligations (all members of the academy were meant to write such sketches, and Breuer had been a member since 1894).[225] But why the telepathic document?

One could consider this question from a number of angles: Breuer's lifelong place in a scientific culture centered around experimentation and proof, his interest in the line between matters of science and matters of faith, the longstanding questions of occult phenomena both in and out of academic sciences, or even Freud's own publication on telepathy in 1922.[226] These are all surely pertinent, yet one factor seems paramount: his decades-long relationship with Ebner and the ongoing conversation they cultivated in their correspondence.

During the summer of 1911, Ebner had in fact written to Breuer once she heard of her brother's secret operation, knowing that Breuer must already be aware of it.[227] Breuer responded with his usual care, noting that while he didn't know specifics, one of his own in-laws had had a probably similar operation there. Yes, there were often side effects from the many ligatures, including inflammation and fever. "But this changes nothing about a good end result. That's how it will probably also be for Herr Graf Dubsky," Breuer concluded. "You however, esteemed Frau, may calm down."[228] But Breuer's comforting prediction did not bear out, and Dubsky soon died from related complications. "Adolf!—

225 The requirement is mentioned in the institutional preface to "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers.

226 The following chapter deals with Breuer's commitment to experimental practice, while the preceding section goes briefly into his interest in the relation between matters of science and matters of faith. On the history of occult phenomena and its place in both German culture broadly and Germanophone sciences specifically, see Treitel, *A Science for the Soul.* In 1921, Freud composed two papers on telepathy, the first for the Secret Committee and the second published the following year in *Imago*; he distinguished between a weaker form of thought-transfer and a stronger telepathy, and while he was generally open to psychoanalytic investigations of both, he was highly attuned to the attendant demarcation and legitimacy questions. Freud, "Psychoanalyse und Telepathie" and "Traum und Telepathie," in *GW* 17:27–46, 13:163–92 / *SE* 18:175–94, 195–220. On Freud and the occult, see Jones, *Sigmund Freud* 3: chap. 14.

227 MEE to JB, 29 June 1911, BP MF1, p. 145.

228 JB to MEE, 8 July 1911, BP MF1, pp. 146. {"Ändert aber nichts an dem guten Schlussresultat. So wird es wohl auch bei Herrn Grafen Dubsky sein. // Sie aber, verehrte Frau, können sich ganz beruhigen."} Breuer had correctly presumed, since the surgery was in Bern, that it concerned the thyroid, due to the fame of the Swiss surgeon Theodor Kocher who was located there and who was a path breaker in the area.

," wrote Ebner in her diary on 2 August 1911. "My well-beloved children came in the aftern. brought the news."[229]

Ebner and Breuer's relationship of course began as patient calling a physician. Yet, as this chapter has shown, the matters of heath and sickness they discussed extended beyond Ebner's own, to those of Breuer, Breuer's family, and others in their social circle. Health talk was the soil from which Ebner and Breuer's self-talk and thinking-talk grew, where their expressions grew intertwined with the lives of others in their emotional circles.

Their ongoing conversation was nevertheless, like all duo-talk, private. By publishing Ebner's documentation of her telepathic experience, Breuer moved the stuff of this conversation from the realm of private talk to the realm of public science, just as he did with the publication of the case of Anna O. in *Studien über Hysterie*. In both, the formation of self and other in talk turned from an ongoing and ever-shifting process into a set of evidence ready for analysis. Breuer's public testament to the work of duo-talk was thus also its end, and with it I turn from *talk* to *cure*, from the ongoing formation of self and other in conversation to the redemption of health that was the end of the original "talking cure."

229 Ebner-Eschenbach, *Tagebücher* 6:247. {"Adolf!—Meine vielgeliebten Kinder kamen am Nachm. brachten die Nachricht."} Strigl ties Dubsky's apparition and then death to Ebner's late turn to the supernatural, though Breuer and Ebner had spoken of Fechner and his ideas of life after death at least a decade earlier (if not more). Strigl, *Berühmt sein ist nichts*, 396–98; and MEE to JB, 28 September 1901, in *Bw*, 40; but cf., for distinctly Fechnerian ideas, MEE to JB, 25 June 1894, BP MF1, pp. 16–17.

5 BREUER ON BALANCE

In the case history of Anna O., Breuer brought his narrative account to close with Pappenheim's final efforts with the "talking cure":

> In this way, too, the whole hysteria came to close. The patient herself had formed a strong determination that she had to be done with everything by the anniversary of her transfer to the countryside [7 June]. At the beginning of June, she therefore undertook the "talking cure" with great exciting energy. On the last day—by the help of arranging the room as her father's sickroom had been—she reproduced the anxiety hallucination recounted above, which had been the root of her whole illness and during which she had only been able to think and pray in English. Immediately following she was able to speak German and was now free from all the innumerable individual disturbances that she had earlier exhibited. Then she left Vienna for a trip; but she nevertheless needed still quite a time until she had wholly found her psychical balance. Since then she has enjoyed complete health.[1]

This paragraph has long been the focal point of critiques and new readings of the case.[2] What does it mean for the *hysteria* rather than the illness at large to conclude? How did it conclude so rapidly? What does it mean that Pappenheim in fact left Vienna for the Bellevue Sanatorium to treat her new dependence on chloral and morphine but also some other lingering symptoms? And what about Freud's version?[3]

1 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:40–41 (editor's interpolation; translation modified). {"Auf diese Weise schloß auch die ganze Hysterie ab. Die Kranke hatte sich selbst den festen Vorsatz gebildet, am Jahrestag ihrer Transferierung auf das Land [7. Juni] müsse sie mit allem fertig sein. Sie betrieb darum anfangs Juni die 'talking cure' mit großer, aufregender Energie. Am letzten Tage reproduzierte sie mit der Nachhilfe, daß sie das Zimmer so arrangierte, wie das Krankenzimmer ihres Vaters gewesen war, die oben erzählte Angsthalluzination, welche die Wurzel der ganzen Erkrankung gewesen war und in der sie nur Englisch hatte denken und beten können; sprach unmittelbar darauf Deutsch und war nun frei von all den unzähligen einzelnen Störungen, die sie früher dargeboten hatte. Dann verließ sie Wien für eine Reise, brauchte aber doch noch längere Zeit, bis sie ganz ihr psychisches Gleichgewicht gefunden hatte. Seitdem erfreut sie sich vollständiger Gesundheit."}

2 Such attention started with a footnote from James Strachey, the editor of the *Standard Edition*, who claimed Freud had specified to him a "hiatus in the text" just before she left Vienna; Strachey then referred readers to the full version told in the Ernest Jones biography. Breuer, "Anna O," in *SE* 2:40n1.

3 Richard Skues considers these questions at length, with a similar conclusion as mine but from a different perspective. Skues, *History of Anna O.*, passim, esp. 42–53.

In this chapter, I bypass these questions and attempt to understand the case's rapid denouement through its final two sentences and one highly peculiar phrase at their center: "Then she left Vienna for a trip; but she nevertheless needed still quite a time until she had wholly found her *psychical balance*. Since then she has enjoyed complete health." Why did it take her time to recover her "psychical balance" if she had been immediately freed of her remaining disturbances? Was "psychical balance" the substrate of "complete health," simply its precondition, or otherwise? What was *psychische Gleichgewicht*? This question opens up two hitherto underexplored pathways in the history of *Studien über Hysterie* and the Breuer-Pappenheim encounter. It connects to the most significant and longest-running scientific project of Breuer's life—on the inner ear and the sense of *balance*. Then, via this link to his physiological investigations, it prompts a new understanding of the *cure* in the "talking cure," and thus of the kernel driving both of these chapters.

Breuer's physiological investigations into the inner ear and its relation to the sense of balance started in 1873, only two years after he left the hospital and started his private medical practice. After his first major paper on the topic was published in 1874, he remained devoted to it throughout his life, despite the significant limitations of his research situation. "I am a practicing physician; my working hours are in the late evening and night and my workspace is therefore my house," he wrote in response to a critique of his lack of experimentation on larger animals.[4] His published work on the matter occurred in two major spurts, 1873 to 1875 and then from 1889 to 1903, but he continued to work on the matter up until his death in 1925. From 1922 to 1924, he corresponded about these investigations and related issues with the Dutch otologist Adrianus de Kleijn, offering extremely detailed reports of his continued experimental work and readings of

4 Breuer, "Ueber Bogengänge und Raumsinn," 626n2. {"Ich bin praktischer Arzt; meine Arbeitszeit ist der Spätabend und die Nacht und darum mein Arbeitsraum meine Wohnung."}

pertinent publications.[5] Though he is much better remembered for his contributions to psychoanalysis, his physiological investigations—specifically of the labyrinth of the inner ear and the sense of balance—were his life's work.[6]

By starting with Breuer's physiological research and then moving to the psychopathology of his encounter with Pappenheim and *Studien über Hysterie*, I propose that running throughout his corpus was a three-sided concept of balance:[7] physical balance, psychical balance, and personal balance. While the first emerged in the physiology and the second from the psychopathology—the two scientific matters that caused him to stumble during his career—the third came from elsewhere, his everyday work as a practicing physician. The second of course also originated in his practice as a physician, and fittingly its main product—the "talking cure"—remains the explanandum of this chapter. These three sides were ultimately united in a larger, holistic concept of balance as a *process*. His balance wasn't the end point, a fixed status with every part in its place and no movement. It was rather the mobile and uncertain swaying working in that direction. The point of balance was in fact the process itself rather than a fixed end state; physical, psychical, and personal balance were all such unending processes of compensation, adjustment, and interplay. Viewed from this perspective, I recast the "talking cure" as a *process of balance*, building on all three sides of Breuer's concept, and

5 Hirschmüller includes a selection of the material sent from Breuer to De Kleijn. Breuer to De Kleijn, five letters and a manuscript, 1922–1924, D 17–22, Hirschmüller Documents, Deu. 336–47 / Eng. 266–76.

6 These investigations did ultimately also include the sense of hearing and specifically the cochlear anatomy of the bird, which was also a matter of discussion with De Kleijn. Breuer, "Über das Gehörorgan der Vögel."

7 A brief note on terminology: The German term *Gleichgewicht* is equivalent to both *balance* and *equilibrium* and I use the English terms interchangeably (though mostly prefer the former). *Gleichgewicht* was a sixteenth-century calque for the Latin *aequipondium*, both literally denoting "equal weight." *Equilibrium* comes from the similar *aequilibrium*, again "equal scales/line/weight," while *balance* comes from the parallel Latin term *bilanx* for "two scaled." *DWDS / Etymologisches Wörterbuch des Deutschen* (Pfeifer), s.v. "Gleichgewicht," accessed 1 April 2021, https://www.dwds.de/wb/Gleichgewicht; *OED*, s.vv., "balance," "equilibrium," accessed 1 April 2021, https://www.oed.com/view/Entry/14789, https://www.oed.com/view/Entry/63762. For a discussion of the etymological roots of *equilibrium* and *balance* in the context of medieval thought, see Kaye, *History of Balance*, 2–3.

give a new historical reading of why its coming into being in the Breuer-Pappenheim encounter was also its last instance.

Breuer motioned to this broader holistic balance in his second major publication on the inner ear and its vestibular apparatus.[8] There he introduced a new term for the object under study: the "organ of the static sense." Things needed practicable names, he noted; the "sensory organ of movement and positional sensations," the correct name for the vestibular apparatus, was unwieldy, while "organ of balance" mistook the part for a broader whole, as balance proper in fact depended on muscles, joints, and other parts of the body. He moreover recognized the irony yoking the term *static* to an apparatus that senses *movement*. Yet Breuer advocated for its use, noting its practicability and preexisting relation to balance in medical use; moreover, as Breuer hinted at, the term *static* in fact hid within the ancient Greek arts of weighing and equilibrium: *statike technē*.[9] As we'll see, the key to Breuer's physiological investigations were *reflexive compensating movements*, and thus invoking classical statics—how each side of the scale begot a change in the other—was precisely right.[10]

This conception of balance as an unending process of interplay in fact connects

8 The terms Breuer used for the anatomy and physiology of the inner ear shifted slightly over his lifetime, and I try to stick to the terms he used in specific publications. But to orient the reader, here is a brief overview: the vertebrate inner ear, also called the aural labyrinth, has two major parts, the vestibular apparatus and the cochlea. The labyrinth has an exterior bony part (containing everything) and an interior membranous part (with different layers and fluids). Here, and for most of Breuer's career, the focus was on the vestibular apparatus, consisting of three semicircular canals and the vestibule proper, which connects the canals to the cochlea and holds the otoliths.

9 Breuer, "Beiträge zur Lehre vom statischen Sinne," 87–88; and *DWDS / Etymologisches Wörterbuch des Deutschen* (Pfeifer), s.v. "statisch," accessed 5 March 2021, https://www.dwds.de/wb/statisch.

10 It's difficult to say exactly what Breuer knew of classical statics, though he would have been as familiar as any highly educated nonspecialist at the time, having taken a number of course in both Greek philosophy and physics. The importance of statics, both historically in the classical world and as part of a lineage of the physical sciences, was undergoing a change at the time. One prominent voice in this change was the physicist Ernst Mach, who plays a different role in this chapter, and we can turn to his *Die Mechanik in ihrer Entwickelung* (*The Science of Mechanics*), first published in 1883 and then subsequently revised and enlarged, for a glimpse into this perspective. Mach, *The Science of Mechanics*, 77–127; see, for the complicated historiographical reconsideration of statics happening alongside Mach in the work of Pierre Duhem, Martin, "The Genesis of a Mediaeval Historian."

directly to what Pappenheim intended when she coined the "talking cure." In reaching for the term *cure*, Pappenheim chose a cognate of the German *Kur* with a similar double-meaning: on the one side, a healing, remedy, or restoration to health; on the other, a course, method, or regime of medical treatment aimed at such a healing.[11] In the late nineteenth century, the latter sense was most prominent in the undertaking of *specific* cures, including the *Bade-*, *Hunger-*, *Milchkur*, and so on, notably at *Kurorte* as a *Kurgast*.[12] While Pappenheim and Breuer had begun their daily routine of storytelling and talking out already in spring 1881, it was only once Pappenheim reached the countryside that summer—where she was also looked after by physicians from the sanatorium next door in addition to her treatment with Breuer—that she coined the new name. In her new surroundings by a classic *Kurort*, having been brought there as an unwilling *Kurgast*, Pappenheim surely associated the regular regime that emerged in Breuer's daily visits as a *cure* on par with a spa cure. That such cures were en vogue at the time can be seen in Freud's chapter on therapy for *Studien*, where he extolled the virtues of combining his version of cathartic psychotherapy "with a rest cure that if need be can develop into the full Weir-Mitchell fattening cure."[13] This was the type of cure—an ongoing therapeutic *process* aimed at but not guaranteeing or necessarily encompassing the relief of symptoms and general restoration—Pappenheim invoked when she named the "talking cure."[14]

11 Both terms come from the Latin *cura* for "care," though only English preserved the term in the sense of *cure of souls* (from *cura animarum*), as in *curate* (for which German has *Seelsorge* and *Seelsorger*); this matters when I turn to confession in conclusion. The German *Kur* seems to have always leaned toward the latter sense of treatment, whereas the English *cure* seems to have been equally split in the nineteenth century. *DWDS* / *DWB* (Grimms), s.v., "kur, cur, f.," accessed 2 April 2021, https://www.dwds.de/wb/dwb/Kur#GK17169; *OED*, s.v., "cure, *n.1*," accessed 2 April 2021, https://www.oed.com/view/Entry/46000.

12 The sense of a specific course of treatment became so prominent in the late nineteenth century that it came back into English associated closely with Germanic health routines (at Carlsbad, Marienbad, Baden-Baden, etc.). *OED*, s.v., "cure, *n.1*, II.10" accessed 2 April 2021, https://www.oed.com/view/Entry/46000.

13 Freud, "Zur Psychotherapie der Hysterie," in *GW* 1:266 / *SE* 2:267 (my translation). {"Ich habe mich ferner daran gewöhnt, die Anwendung der kathartischen Psychotherapie mit einer Liegekur zu verbinden, die nach Bedürfnis zur vollen Weir-Mitchellschen Mastkur ausgestaltet wird."}

14 Because the "talking cure" as it emerged with Pappenheim and Breuer was limited to their encounter, it's difficult to be more precise about connections between this cure and other such cures. Nevertheless, it's

This chapter thus shifts focus from cure as outcome to cure as process and places that process in the broader context of Breuer's physiological investigations and his concept of balance. Such a shift also brings the underlying patient-physician relationship into new light; rather than worrying about what made Breuer and Pappenheim's relationship *distinct*, I show first how the emotional element of their relation was in fact a hallmark of Breuer's work as a "practicing physician," where he developed an interpersonal mode of balance between the needs of the patient and the abilities of the physician. This allows a new understanding of what about the Pappenheim-Breuer encounter ultimately troubled this personal balance so that Breuer swore to that he would avoid repeating such an experience.

In this way, my chapter deemphasizes two traditionally significant parts of the literature on the Breuer-Pappenheim encounter: hypnotism and hysteria. While both play important roles here, I believe they distract from what actually happened to bring the "talking cure" about. On the one hand, hypnotism was clearly an important conceptual resources for Breuer in thinking about Pappenheim's absences and hypnoid states. But

---

clear that the Pappenheim-Breuer encounter in fact stood at the nexus of two different strands in the history of the Germanophone *Kur*. First was the longer history, starting in the eighteenth century, of the spa and its water cures, in which a new social world emerged; this world consisted of the changing and expanding Bürgertum, physically transformed spa towns based around a specific interconnection of experiencing nature and being in public, and holistic but regimented ideas of health. Second was the specific medicalization of such cures as part of the professionalization, specialization, and competition that characterized medicine of the late nineteenth century; this medicalization brought an increased focus to neurological symptoms and treatments. See, on the first strand, Fuhs, *Mondäne Orte einer vornehmen Gesellschaft*; Lempa, *Beyond the Gymnasium*, chap. 3; on the second, Shorter, "Private Clinics in Central Europe, 1850–1933"; Guenther, "Exercises in Therapy"; and on the changing political economy behind some of the nineteenth-century shifts (apart from medicalization and specialization), Frank, "The Air Cure Town." Shorter mentions that the "Breuer-Freud cathartic method" was deployed at one of the clinics that took part in this later medicalization of the cure; he further notes that the private asylum in Inzersdorf, next to which Pappenheim spent the summer in 1881, also took part in this process, installing baths in 1902 to lure patients from spas. But he does not make the connection between *Kur* and "talking cure," though he wrote elsewhere of Pappenheim. Shorter, "Private Clinics in Central Europe, 1850–1933," 193n127, 171; Shorter, "The Matter with 'Anna O.' " For an example of the introduction of another such "cure" at the nexus of spa culture and neurological medicalization, consider the "work cure" (*Arbeits-Kur*) proposed by the psychiatrist Konrad Rieger in 1896. Rieger, "Ueber die Behandlung 'Nervenkranker.' "

he only deployed artificial hypnosis late in the encounter and then only to speed up the preparatory aspect of the cure, when he gathered the many instances when a symptom occurred (and not during the "talking away" itself);[15] in this way, it is uncertain exactly how the broader debates around hypnosis and its use in medical practice (moving at the time from France to Vienna with Freud as a major player in the transfer) played into the "talking cure" itself.[16] Hysteria was similarly a major topic and disease category at the time, but the same reasons that made Pappenheim's illness so instructive for Breuer (the clarity of its ideogenesis, pathological development, and then structured treatment) also made it the only case where he saw such matters and therefore less tractable as a specific instance of hysteria. Moreover, Breuer only landed on a diagnosis of hysteria partway through the treatment, and it did not necessarily comprise all of her symptoms.[17] I thus treat their encounter as it was when it started: a patient in need of help, to whom Breuer the house physician was called.

The chapter makes one other primary intervention in the literature: on the relation between science and medicine, between research and practice. It does so in several ways. First, I look at how these realms intersected in Breuer's professional life, as a physiological researcher by night, a practicing physician by day, and then in their fusion writing both the case history of Anna O. and a theoretical chapter on neurophysiology and psychopathology for *Studien über Hysterie*. Such an intersection has long animated the

15 Breuer, "Anna O," in *GW* suppl.:234 / *SE* 2:36.

16 On this history, see Mayer, *Sites of the Unconscious*.

17 The best attempt to grapple with what exactly hysteria meant for Breuer in Pappenheim's case is Skues, *History of Anna O.* Pappenheim plays a major role in the historiography of hysteria, to which I am adding a new perspective away from the diagnostic category. See, for two major statements of the "new hystorians" of the 1980s and 90s, Showalter, *The Female Malady*; Micale, *Approaching Hysteria*. In a sense, I'm trying to avoid the tension that Katja Guenther identifies in some more recent parts of this scholarship, between the excessive and morphing elements of hysteria—that is, its unmasterability—and the attempt by physicians and then historians to master it; while this tension can be extremely productive (per Guenther), this productivity has long burned itself out in the famous case of Anna O., so I here want to find it in avenues other than the category of hysteria. Guenther, "Mastering the Unmasterable."

history of medicine, especially in the nineteenth century, and one of my contributions is to offer a deep texture of this history for one physician.[18] Second, I emphasize scientific work that appears on the face of it not particularly related to questions of medical practice or hysterical phenomena: the physiology of the inner ear. In this was I extend work that has long placed Freud in the context of the broader sciences, most famously by Frank Sulloway, emphasizing the role particular *concepts* (here balance) played in this history.[19] Finally, my insistence on the specificity of the "talking cure" to the Breuer-Pappenheim encounter and Breuer's broader professional life distinguishes my work from the historiographies of psychoanalysis that want to arrogate their encounter as a prehistory of Freud.[20]

Most broadly, this chapter is an attempt to work out one important example of the problematic first identified by Georges Canguilhem—that of the relation between the normal and the pathological as seen from the lab and from the clinic:

> One does not scientifically dictate norms to life. But life is this polarized activity of debate with the environment, which feels normal or not depending on whether it feels that it is in a normative position or not. The physician has sided with life. Science serves him in fulfilling the duties arising from that choice. The doctor is called by the patient. It is the echo of this pathetic call which qualifies as pathological all the sciences which medical technology uses to aid life.[21]

Breuer was the physician answering Pappenheim's call in 1880. How did his conception of life, his physiology of balance, act as an echo in his treatment? How did his own mode of life—as experimental researcher, as practicing physician—play into his answer?

18 See, for two major such statements, Rosenberg, "The Therapeutic Revolution"; Warner, *The Therapeutic Perspective*; for the Germanophone world, Eulner, "Das Spezialistentum in der ärztlichen Praxis"; Heischkel-Artelt, "Die Welt des praktischen Arztes."

19 Sulloway, *Freud, Biologist of the Mind*; see also Guenther, *Localization and Its Discontents*; Forrester, *Language and the Origins of Psychoanalysis*.

20 The most significant version of such an appropriation is in Ellenberger, *The Discovery of the Unconscious*, where Breuer is just part of a long chapter on Freud. There are, of course, benefits to such an approach, seen in, for instance, Appignanesi and Forrester, *Freud's Women*.

21 Canguilhem, *The Normal and the Pathological*, 226.

A final word on the contributions of Albrecht Hirschmüller, whose book on Breuer's life and work is indispensable to this chapter. I've already noted my major divergences from his book in the introduction to these two chapters, moving away from his framing via Freud and his interpretation of Breuer's unifying project via *regulation* as its teleological leitmotif. But I should here additionally note that Hirschmüller's emphasis on regulation is another way to link Breuer's physiological research on the inner ear, his encounter with Pappenheim, and his psychopathological writings in *Studien*. Similarly, Hirschmüller first identified Breuer's use of hypnosis in his physiological work with pigeons and the application of the term *hypnoid* from *Studien* to such hypnotic birds. But he limits the connection of science and medicine on this count to Breuer's teleological worldview and "scientific method." Hirschmüller overtly downplays the importance of explicit links, calling the hypnoid connection "not a very important" analogy; he furthermore thinks such analogies are highly limited: "Inferences from animal experiments to human beings are, of course, scarcely applicable in the field of psychology."[22] This is wrong. Just as Hirschmüller overrates the importance of self-proclaimed worldview in explaining scientific work, he underrates the importance of thinking via concepts such as *balance*, which work via resonance and coordination rather than over inference.

This chapter proceeds as follows: It starts with Breuer's first publications on the labyrinth of the inner ear from 1873 to 1875, establishing the basics of his physical balance through the key phenomenon of compensating movements, specifically nystagmus. Then I move to his encounter with Pappenheim and the specific question of "psychical balance," from 1880 to 1882: How did the "talking cure" put her on a path to find such balance? Next I jump another decade forward to the publication of Breuer and Freud's "Preliminary Communication" (1893) and *Studien über Hysterie* (1895): once again *balance* was a key

22 Hirschmüller, *Josef Breuer* [English], 206, 205.

term, but here it brought the physical and the psychical together. We then turn around, bringing the psychical-physical balance of the hypnoid state back into conversation with the physiological research via some hypnotized pigeons, moving from 1895 back to 1873. And then I reconsider the entire matter from the perspective of his everyday profession as practicing physician, fleshing out the concept of personal balance. Finally, I turn to an analogy between the "talking cure" and confession made separately by both Pappenheim and Breuer and ask how two Jews came to use such a comparison.

NYSTAGMUS AND THE AURAL LABYRINTH: PHYSICAL BALANCE, 1873–1875

While perusing his newspaper on Saturday, 8 November 1873, Josef Breuer must have been surprised upon reading the week's notes from the Akademie der Wissenschaften. The physicist Ernst Mach of Prague had presented a set of experiments on the semicircular canals of the aural labyrinth—the very same subject Breuer himself had been investigating, with strikingly similar conclusions to Mach's.[23] In response, Breuer turned to the kaiserlich-königlich Gesellschaft der Ärzte, where he was a member, and made a particular request: to publish a preliminary communication featuring his "most important results" with the minutes of the upcoming meeting in the society's weekly gazette. He ultimately hoped to lecture on the matter at the subsequent meeting on 21 November; nevertheless, wrote the editor, "it appears to him desirable to establish the independence of his work through the quickest publication possible."[24]

23 The meeting of the Akademie der Wissenschaften had taken place on 6 November and the presentation of Mach's work (in absentia by the secretary) was noted in the next day's *Neue Freie Presse* (evening paper, 1); a very brief summary of the presentation was, however, not published until the next day, carried in at least three Viennese newspapers: *Deutsche Zeitung*, morning paper, 4; *Neues Fremden-Blatt*, morning edition, 3; and *Presse*, Local-Anzeiger, 7.

24 *Anzeiger der k. k. Gesellschaft der Aerzte in Wien*, no. 7 (20 November 1873), 15. {"Erscheint es diesem wünschenswerth, durch möglichst rasche Publication die Unabhängigkeit seiner Arbeit zu constatiren."} Though the function of the semicircular canals is perhaps a minor matter in the history of science, Breuer's and Mach's first communications, presentations, and publications on it in late 1873 offer a glimpse at

The basic thrust of Breuer's results was simple enough:[25] the semicircular canals in the labyrinth of the inner ear were the organs for the sense of balance of the head and thereby indirectly the whole body, and they worked via the flow of enclosed endolymph fluid.[26] This flow was generated by each and every turn of the head and then perceived by nerve endings in the ampullae at the end of each canal; perceptions by all the ampullary nerves were then combined into an overall mental picture. He concluded by musing on the teleological importance of the overall apparatus. It seemed possible that the canals allowed for "precise and energetic reflex actions," such as those needed to preserve balance.[27] But a number of observations related to *compensating movements* in response to turning of the head (so of the eyeballs, of the head itself) pointed in more specific direction; of these movements, he explicitly noted the preservation of nystagmus—the rapid oscillation of eyeballs—during vertigo and other affected states. Based on these observations, Breuer

---

the question of priority in scientific research as it was experienced in situ. At this time, as well as later in communication and publication, each of them seems in fact pleased rather than peeved to be joined by another in his conclusions. Mach had sent his treatise to Vienna for the academy meeting of 6 November. Breuer read a brief notice of this presentation, prompting his preliminary communication. Mach, in turn, learned of Breuer's preliminary communication, and added a second addendum to the publication of his work in the regular reports of the academy. Each attested not only the independence of his conclusions but in fact the complementarity of their approaches: Breuer's physiological vivisection and Mach's physical devices and mathematical elaborations. Mach, "Physikalische Versuche über den Gleichgewichtssinn des Menschen," 139–40; and Breuer, "Function der Bogengänge des Ohrlabyrinthes," 72n. Unbeknownst to them at the time, they were soon joined by a third researcher advancing a similar theory of the function of the semicircular canals, the Scottish chemist Alexander Crum Brown, in his own preliminary communication on the matter. Crum Brown, "Preliminary Note on the Sense of Rotation."

25 After the preliminary communication, Breuer ultimately gave two lectures to the Gesellschaft der Ärzte, on 21 and 28 November 1873. They were transcribed (or closely summarized) and published elsewhere, with only a few minor points of difference from the first publication. Breuer, "Ueber Bogengänge des Labyrinths."

26 As I go, I stick as much as possible with Breuer's anatomical and physiological terms. These terms, of course, were undergoing changes (in part resulting from Breuer's research) and furthermore varied from researcher to researcher. E.g., Breuer did not speak often of the vestibule or vestibular aspects in his first publication, whereas the second focused on the vestibular apparatus, naming it in the title. So my presentation follows his development, as much as possible, explaining new terms as necessary and adding clarification when necessary in footnotes. Hirschmüller works hard to frame Breuer's results in terms of subsequent science, so readers interested in such a portrayal should look there (though of course the science has continued to develop since the first publication of 1978). Hirschmüller, *Josef Breuer* [English], 80–86, 350–51n156.

27 Breuer, "Bogengänge des Labyrinths: Vorläufige Mittheilung," 18.

modestly concluded, "it thus suggests believing that a part of the teleological importance of our apparatus lies in these corrections of the visual field's position."[28]

Over the next two years, Breuer published two lengthy tracts on the matter, detailing his reproduction and reinterpretation of earlier research and his own his ongoing vivisectional experiments with pigeons; these tracts were the foundation of his lifelong investigations of the sense of balance. At their core stood these compensating movements, in particular nystagmus. Yet these movements were not exactly part of the teleological functioning of the canals aimed at the preservation of balance. Nystagmus rather stood as the material instantiation of this function, acting in two directions: first, the phenomenon needed explanation, and Breuer's flow theory provided one; and then, once connected to the canals, it provided evidence of the ongoing processes of balance even where the mental picture of that was inaccessible (in animals) or confused (in human vertigo).

Breuer's first essay, "Ueber die Function der Bogengänge des Ohrlabyrinthes" (On the function of the semicircular canals of the aural labyrinth), set out the problem simply and directly:[29] Across vertebrates, the semicircular canals were placed consistently—three canals in three different nearly perpendicular-to-each-other planes in each inner ear (for a total of six canals). This regularity suggested that they should have something to do with the three dimensions of space. Yet it was only recently in 1870 that the physiologist Friedrich Goltz had uttered the "solution to the puzzle," identifying the canals as the organ for balance of the head and thereby indirectly the entire body.[30] But Goltz's suggested mechanism—pressure of the endolymph yielding tension in the canal walls then

28 Breuer, "Bogengänge des Labyrinths: Vorläufige Mittheilung," 18. {"So liegt es nahe zu glauben, dass in diesen Correctionen der Stellung des Gesichtsfeldes ein Theil der teleologisch Bedeutung unseres Apparates liege."}

29 The following paragraphs (until I move to the second essay) draw mostly sequentially from the 1874 publication, and I limit my citations to specific quotations.

30 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 73.



Figure 5.1. The semicircular canals in situ: "The semicircular canals are somewhat enlarged. The black lines accompanying the canals are the venous sinus." Breuer, "Beiträge zur Lehre vom statischen Sinne," 96.

exerted on the nerves—was prima facie incorrect, as Breuer quickly showed.[31] "I will now attempt," so Breuer concluded the introductory section, "to show the processes that must certainly be present in the semicircular canals—thus also the function of those canals; I will try using these processes for Goltz's theory and will set out the evidence that therein really lies the essence of the apparatus in question."[32]

The first task was to offer a new mechanism replacing Goltz's. He started with a basic physical account of each canal: Presuming a semicircular canal filled with endolymph fluid acted like a tubular ring filled with water, each and every turn of a canal "undoubtedly"

31 Goltz's original publication was "Physiologische Bedeutung der Bogengänge des Ohrlabyrinths."

32 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 79. {"Ich werde nun versuchen Vorgänge aufzuweisen, die in den Bogengängen jedenfalls vorhanden sein müssen, welches auch die Function derselben sei; ich werde versuchen, diese Vorgänge für die Goltz'sche Theorie zu benutzen und den Beweis antreten, dass wirklich darin das Wesen des fraglichen Apparates liege."}

begot a countermovement by the endolymph at a direction and level fixed to the turn.[33] And just as certain devices could measure the direction and velocity of water in a ring, there existed such a device in each of three ampullae, where one side of each canal ended: microscopic hairs connected via epithelial cells to nerve endings. The work of the nerves in all six ampullae could together produce a complete picture of the precipitating movement. Breuer ultimately took this as *an assumption*, but one that undergirded the entire remaining essay.[34]

If Breuer's assumption were borne out, then artificially produced endolymph flow would also produce the perception of rotation. This, however, presented a conundrum: His first methods for generating such a flow were coarse (i.e., vivisection) and usable only with animals; yet with animals, we had no knowledge of their perceptions. But we could observe human reaction to relevant movement and see what might clue us in to such a perceptions of rotation.

Breuer here introduced his emphasis on compensating movements with a simple observation from human experience: "With closed eyes and my fingers touching touching the lids, I turn my head (with or without the whole body) in a horizontal or sagittal plane; after carrying out a certain angular rotation, I then feel a sudden rotation of the bulb in the same direction."[35] And upon further turning, the bulbs continued to jerk along rather than catching up and remaining at a consistent speed; this jerking continued for several full rotations until it ceased. You could even feel this with eyes open, provided you didn't fix on a particular object. Breuer made an important distinction between two phases of this ocular motion: first, the bulbs were "left behind," which was in fact a slow turn in their

33 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 79.
34 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 81.
35 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 82–83. {"Wenn ich mit geschlossenen Augen, die Lider mit dem Finger berührend, den Kopf (mit oder ohne den ganzen Körper) in horizontaler oder sagittaler Ebene drehe, so fühle ich, nachdem ich eine gewisse Winkeldrehung vollzogen, eine plötzliche Drehung des Bulbus in der selben Richtung."}

sockets contrary to the direction of the head; second, the bulbs jerked the other way, with the direction of the head, catching up to the sockets.[36]

Breuer continued to list such human observations on this repetitive jerking of the eyes under different circumstances (e.g., afterimages, pressure figures generated by the finger), all easily replicable by the reader; he then formalized this using one of Helmholtz's devices (a visor board). These "oscillating rotations" were *nystagmus*, and while the term generally referred to ocular movements, Breuer noted that they were also observable in the heads of birds rather than the eyes.[37] With this connection, he both sited nystagmus in its source—the semicircular canals—and answered his conundrum: When we consider artificial endolymph flow in vivisectional experiments of animals, we can assess its results via these same compensating movements, via nystagmus of the head, bypassing the question of the rotational perception.

With his explanatory assumption (endolymph flow) and touchstone phenomenon in hand (nystagmus), Breuer then turned to two well-known sets of relevant but unexplained phenomena from half a century earlier made by two famous physiologists: Pierre Flourens on the behavior of pigeons after cutting semicircular canals and Jan Purkyně on the human experience of vertigo. In Flourens's case, injuring one or a pair of semicircular canals

36 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 83. Breuer made clear that the first slow movement was certainly an active muscle movement rather than an effect of momentum, noting that it persisted even after the bulbs had time to reach the same velocity as the head and sockets.

37 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 88. Hirschmüller excavates the conceptual history of *nystagmus*: Before the eighteenth century, the term referred to the "nodding and falling of the head and eyelids owing to drowsiness," befitting the term's Greek origin *nustagmos* for "nodding" or "drowsiness." At the same time, oscillatory ocular movements were known to the Greeks under *hippos*, "horse," which remained as *hippus*/*Hippus* in both English and German after 1800 and persists today, though for specific movements rather than the general phenomenon. Hirschmüller credits Breuer with introducing *vestibular nystagmus*, though Breuer did not use this term and it now refers to pathological phenomena. Hirschmüller probably means to emphasize that Breuer was first to connect reflex movements of the eye *and the head* (in other animals) to the vestibular apparatus, including the semicircular canals. Hirschmüller, *Josef Breuer* [English], 347–48n100; *DWDS* / *GWDS* (Duden), s.vv. "Nystagmus," "Hippus," accessed 3 March 2021, https://www.dwds.de/wb/Nystagmus, https://www.dwds.de/wb/Hippus; *OED*, s.vv. "nystagmus, *n.*," "hippus, *n.*," accessed 3 March 2021, https://www.oed.com/view/Entry/129437, https://www.oed.com/view/Entry/87184; and Liu, Volpe, and Galetta, *Neuro-Ophthalmology*, 594–95.

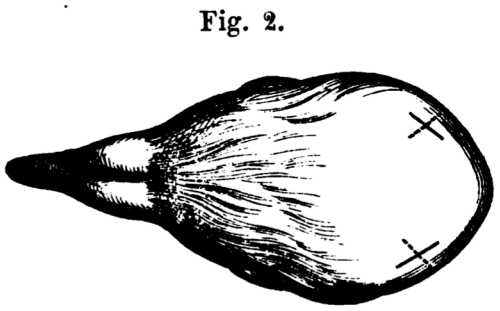

Figure 5.2. Nonhorizontal planes of the semicircular canals: "The dotted lines designate the direction of the frontal semicircular canals; the solid lines designate that of the sagittal canals." Breuer, "Beiträge zur Lehre vom statischen Sinne," 104.

resulted in highly peculiar movements, including brief nystagmus, full twisting of the head, falling over, and more. Breuer argued that injury to *one* canal yielded a flow of endolymph resulting in the described nystagmus of the head; but this soon lessened, compensated by the remaining canal on the other side. Injury to a pair of canals in the same plane (e.g., horizontal) did yield small "oscillating head movements" but these were overtaken by other larger movements through the entire body, including circular walking and rolling over, which had "nothing oscillatory, nystagmatic" to them.[38]

Purkyně's vertigo phenomena, by contrast, were like those "known all along to an everyman":[39] spinning yourself around until the room itself spun. Breuer noted that the primary feature of these phenomena—upon stopping the turning, apparent rotation now began in the *opposite direction*—was explicable by his basic assumption. After a certain time of lasting rotation of the head, endolymph ceased its original counter flow and joined the head in direction and velocity; once the head stopped rotating, the endolymph still flowed in its second direction, yielding the apparent movement counter the original

38 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 89. Breuer's own experiments included replicating and extending Flourens's, and he was quite cautious to draw too many conclusions before he had finished his work. The importance of *nystagmus* in his thinking, however, was unmistakable.

39 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 95.

rotation. To simplify: Spin yourself around to the right, stop, feel yourself spinning to the left (even more apparent when, upon stopping, you close your eyes and lie down). Breuer outlined in detail more complicated versions of this, with varying head positions and the resulting apparent movement, which could only be performed with a rotating device.

Crucially, this apparent opposite rotation *also* yielded ocular nystagmus, just like a real turn (and as Breuer's theory anticipated) and for which Purkyně could not account. This nystagmus in turn explained *ocular* vertigo, a specific phenomenon on top of the broader feeling of turning that was the basic element of rotary vertigo.[40] As Breuer explained,

> If I turned myself with ordinary head posture to the right, then the vertigo sensation is that my body is being turned to the left; the slow compensating movement of the eye bulbs thus follows to the right and the jerking adjustment to the left. The former has the field of vision always appear moving to the left; while the latter indeed moves the field back again, it is however not observed by us as the movement of objects, just like all fast eye movements. The result is thus the field of view moving continually to the left, without it seeming to make any headway—this is precisely the phenomenon of ocular vertigo.[41]

Nystagmus specifically, and compensating movement more generally, was thus the key to Breuer's reconsideration of Purkyně's and Flourens's long-known and attested phenomena. In both cases, nystagmus served as a tool, at once offering evidence of the endolymph-flow hypothesis while also serving to further elaborate exactly *what* constituted the preservation of balance.

40 Breuer offered a parallel explanation for tactile vertigo—the feeling from touching objects when dizzy. Like ocular vertigo, tactile vertigo emerged from the complicated and confusing interplay of the overall feeling of the rotary vertigo and the reflex movements that vertigo unleashed in muscles. Breuer, "Function der Bogengänge des Ohrlabyrinthes," 104.

41 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 103. {"Habe ich mich mit gewöhnlicher Kopfhaltung nach rechts gedreht, so ist die Schwindelempfindung, mein Körper werde nach links gedreht; die langsame compensirende Bewegung der Bulbi erfolgt also nach rechts, die ruckende Einstellung nach links; die erstere lässt das Gesichtsfeld immer nach links bewegt erscheinen, die letztere führt dasselbe zwar wieder zurück, wird aber von uns nicht als Bewegung der Objecte bemerkt, wie alle raschen Blickbewegungen. Das Resultat also ist ein fortwährendes Bewegen des Sehfeldes nach links, ohne dass es doch von der Stelle zu kommen scheint, das ist eben das Phänomen des Augenschwindels."}.

Compensating movements remained important over the next two sections: new interpretations of electrical vertigo and some speculations on balance and linear movement.[42] But Breuer's use of nystagmus was the meat of this first essay, the conceptual tool through which the process of keeping balance became material. "As we however now survey what has been gained so far," he wrote in conclusion, "we seek to inform ourselves about the teleological performance of the apparatus, at first primarily about its specific capability."[43] Nystagmus wasn't a necessarily part of this teleological performance, which Breuer reckoned was aimed at responding to the finer fluctuations in the preservation of balance; in fact, he called the preservation of the visual field by compensating ocular movements "our organ's other achievement."[44] But there was still so much uncertain in this teleological action, as Breuer recognized. Nystagmus and its role in elucidating the static sense, on the other hand, was omnipresent.

Just over one year after Breuer's first preliminary communication, the Gesellschaft der Ärzte published another, this one announcing his next publication on the matter. In the interim year, Breuer had carried out a series of vivisectional experiments with pigeons. His most important results were still framed in terms of the phenomena of compensating movements per his first publication. Now he had the empirical evidence showing that

42 In terms of electrical vertigo, that is, the feeling of vertigo generated by current through the head, Breuer replicated a number of experiments by the psychiatrist Eduard Hitzig, who emphasized neurological aspects; by contrast, Breuer showed how his theory of the canals was simpler and more sustainable. Then, in the penultimate section of the publication, Breuer turned from rotary to linear or progressive movement, offering some observations based on daily experience (mainly of riding of elevator); though his comments were limited, his made a number of perceptive suggestions on the role played by the otoliths—small masses in the vertebrate maculae acustica, sacs of sensory hair cells in the vestibule of the inner ear—to which he returned around two decades later. Breuer, "Function der Bogengänge des Ohrlabyrinthes," 106–116.

43 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 117. {"Indem wir aber nun das bisher Gewonnene übersehen, suchen wir uns über die teleologische Leistung des Apparates zu orientiren, zunächst über seine Leistungsfähigkeit überhaupt"}

44 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 119.

these were aroused via reflex from the ampullae of the aural labyrinth, substantiating his view on the function of the endolymph.[45]

Breuer published his detailed account of these experiments the following year, bringing his first published engagement on the inner ear and the static sense to a close. The tract carried a fitting title: "Beiträge zur Lehre vom statischen Sinne (Gleichgewichtsorgan, Vestibularapparat des Ohrlabyrinths)" (Contributions to the theory of the static sense [organ of balance, vestibular apparatus of the aural labyrinth])—lengthy and specific like its content yet somewhat hedging in its ambitions (e.g., "contributions," extended parenthetical). It covered much of the same ground as the first essay but with his own new experiments at the center. While Breuer was modest about the conclusions he could draw from these, finding himself sometimes less convinced of certain earlier suppositions, he believed them all in all to provide proof for his main theoretical points.[46] Ernst Mach was less modest in his assessment of Breuer's experimental accomplishments and the support provided for their conjoint thesis: "Unfortunately these same [experiments] are so difficult to carry out that Breuer himself doesn't recognized the probative force of the observations he already made."[47]

The primary amendment Breuer made to his views was to the action of the endolymph during rotation: Mach had shown that true lasting *flow* of the fluid was almost certainly impossible based on the dimensions of the canals. Here again he referred back to

45 Breuer, "Lehre vom statischen Sinne . . . Vorläufige Mittheilung."

46 Breuer, "Beiträge zur Lehre vom statischen Sinne," 89.

47 Mach, *Grundlinien der Lehre von den Bewegungsempfindungen*, 125. {"Leider sind dieselben so schwierig auszuführen, dass Breuer selbst die Beweiskraft der bisher von ihm gemachten Beobachtungen nicht anerkennt."} Mach's book summarizing his own research and the state of the field came out before Breuer's second treatise on the topic (though in the same year), and Breuer responded at length to many of Mach's experiments and points in his text. So while Mach dealt primarily with Breuer's brief presentation of experiments in the first publication (of 1874), Mach did mention receiving correspondence from Breuer on other experimentation. Ibid., 84. Mach's reference here to Breuer's difficult experiments definitely pointed to work published in Breuer's second essay, specifically the experiments mechanically manipulating the endolymph.

compensating movements, both to explain his original assumption and to undergird any new theory. After noting persistence of compensating movements as long as the sensation of movement persisted, he concluded, "teleologically, the necessity of the longer duration of the sensation of movement is clear."[48] He thus suggested that the endolymph acted on the nerve-ending apparatus via the moment of inertia rather than flow proper, persisting via a particular elasticity of the nerve hairs.[49]

Compensating movements were again the leitmotif of the new experimental work. Breuer started by experimentally elaborating an equivalence suggested in his first essay—between the pathological compensating movements in Flourens's birds with cut canals and the same movements in birds subject to rotary vertigo.[50] He then showed how normal compensation failed when both vestibular apparatuses were fully extirpated, taking pains to exclude the compounding effects of visual and tactile sensations; by contrast, with the extirpation of just one apparatus, the movements remained (if sluggish and otherwise affected).[51] He routinely conducted autopsies in order to ascertain that the extirpation had not led to supparation of or other significant injury to the cerebellum or brain at large.[52] Finally, he attempted to mechanically stimulate individual canals, precisely opening a canal and variously manipulating the endolymph. While these were extremely difficult to perform, they resulted the expected turning of the head counter to the endolymph pressure.[53] "That this head movement is triggered by the perception of the opposite

48 Breuer, "Beiträge zur Lehre vom statischen Sinne," 124. {"Teleologisch ist die Nothwendigkeit der längeren Dauer der Bewegungsempfindung klar."}
49 Breuer, "Beiträge zur Lehre vom statischen Sinne," 125–27.
50 Breuer, "Beiträge zur Lehre vom statischen Sinne," 90–95, 127–29.
51 Breuer, "Beiträge zur Lehre vom statischen Sinne," 95–99, 99–101. Breuer's method of full extirpation of the apparatus was given in detail and was one of his signal technical achievements.
52 Breuer, "Beiträge zur Lehre vom statischen Sinne," 98, 100–1, 117.
53 Breuer, "Beiträge zur Lehre vom statischen Sinne," 105–8. These were presumably the experiments that Mach later complimented.

rotation seems to me, after everything that's been presented, an assumption to which we are not merely entitled but compelled," he concluded.[54]

Breuer himself recognized the centrality of compensating movements to his thinking. "If I now survey again the complicated structure of hypotheses of Hitzig's theory of galvanic vertigo," Breuer wrote of the psychiatrist Eduard Hitzig, "and the transparent simplicity with which the movements in question can be deduced as 'compensating ones' from the assumption that the conducted currents stimulated the labyrinth and according to analogy with so many facts—then still today do I not want to give up the hope that Hitzig himself will finally accept the latter assumption."[55]

WHAT'S IN A "CURE"? PSYCHICAL BALANCE, 1880–1882

In the summer of 1882, roughly a decade after Breuer and Mach first learned of each other's investigations into the inner ear, Breuer read one of Mach's recent lectures, "Die ökonomische Natur der physikalischen Forschung" ("The Economical Nature of Physical Inquiry").[56] "What mastery in the internal marking out of boundaries a. from there what a marvelous outlook into that which can be achieved inside of these boundaries," exclaimed Breuer in praise. "In the complex of thinking that recently generated a critique of pure natural sciences, the talk will remain a major part of its development."[57] Mach's

54 Breuer, "Beiträge zur Lehre vom statischen Sinne," 129. {"Dass diese Kopfbewegung als compensirende Bewegung durch die Vorstellung der entgegengesetzten Drehung ausgelöst wird, scheint mir eine Annahme, zu welcher wir nach Allem, was nun dafür vorgebracht wurde, nicht bloss berechtigt sonder gezwungen sind."}

55 Breuer, "Beiträge zur Lehre vom statischen Sinne," 147. {"Uebersehe ich nun nochmals den complicirten Hypothesenbau von Hitzig's Theorie des galvanischen Schwindels, und die durchsichtige Einfachheit, mit welcher aus der Annahme, die durchgeleiteten Ströme reizten das Labyrinth, nach Analogie so vieler Thatsachen, die fraglichen Bewegungen als 'compensirende' abgeleitet werden können,—so möchte ich auch heute noch die Hoffnung nicht aufgeben, Hitzig selbst werde schliesslich die letztere Annahme acceptiren."}

56 Mach had delivered the lecture to the Akademie der Wissenschaften in Vienna on 25 May 1882 and at some point sent a copy to Breuer. We only have Breuer's later response to Mach. Breuer to Mach, 28 September 1882, in Thiele, "Zur Analyse der Bewegungsempfindungen."

57 Breuer to Mach, 28 September 1882, in Thiele, "Zur Analyse der Bewegungsempfindungen," 44. {"Welche Meisterschaft in der internen Absteckung der Grenzen u[nd] dort welch herrlicher Ausblick auf das

"marking out" concerned primarily the differentiation between physics and physiological psychology in their investigations of the same aspects of the world (e.g., "colors, sounds, temperatures, pressures, spaces, times, and so forth"), classed as "*phenomena*" by physics and "*sensations*" by psychology.[58] At the heart of the physical approach—which was much more developed and thus the basis for these reflections and the future of psychology—Mach placed a particular theory of language, concepts, and experience: "Scientific communication always contains the description, i.e., the reproduction of an experience in thought, which is meant to *replace* and therefore *spare* experience."[59] The words that composed this communication, however, were merely placeholders fixing the flux of experience, economically aiding the ordering of that experience into usable scientific form.[60]

Though Mach would not have know it, this precise question of the relation of concepts to phenomena—especially phenomena that had both physical and psychical purchase—was highly relevant to Breuer that same summer, just as Breuer's encounter with Bertha Pappenheim was coming to a close. In describing her continued convalescence subsequent to the end of his treatment, he reached for a word from his and Mach's physiological research: "Then she left Vienna for a trip; but she nevertheless needed still quite a time until she had wholly found her psychical balance. Since then she has enjoyed complete health."[61] This summary conclusion was probably not written for another

---

innerhalb dieser Grenzen zu erreichende. Die Rede wird in dem Complex von Gedanken, welche in letzter Zeit eine Kritik der reinen Naturwissenschaft erzeugen, immer ein Hauptglied der Entwicklung bleiben." (Editor's interpolation.)}

58 Mach, "Die ökonomische Natur der physikalischen Forschung," Deu. 231.

59 Mach, "Die ökonomische Natur der physikalischen Forschung," Deu. 215. {"Die wissenschaftliche Mitteilung enthält stets die Beschreibung d. i. die Nachbildung einer Erfahrung in Gedanken, welche Erfahrung *ersetzen* und demnach *ersparen* soll."}

60 Mach, "Die ökonomische Natur der physikalischen Forschung," Deu. 214.

61 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:40–41. {"Dann verließ sie Wien für eine Reise, brauchte aber doch noch längere Zeit, bis sie ganz ihr psychisches Gleichgewicht gefunden hatte. Seitdem erfreut sie sich vollständiger Gesundheit."}

decade, and it's possible Breuer himself wasn't already aware of the relevance of balance to Pappenheim's illness. Yet having examined his concept of physical balance, we now have a clue toward understanding his (retrospective) coinage of "psychical balance." First, we need to consider how the "talking cure" put Pappenheim back on the road to psychical balance.

Just as there was a development of *talk* in the Breuer-Pappenheim encounter, the *cure* too had its own arc, starting with the introduction of the "talking cure" and running through Pappenheim's final undertaking. Along the way, the *curative* effect of the cure shifted: from talking out and relieving energy, through talking away and removing symptoms and then the transformation of this talking away into a therapeutic method, and lastly the final purposeful undertaking bringing "the whole hysteria" to a close.

Of the four uses of the "talking cure" in the case history of Anna O., the first two dealt with the first level of cure: energy relief. The first use outlined the cure's lineaments in its first site, the countryside home during summer 1881—evenings, Pappenheim's autohypnosis, talking out of phantasms, relief of "stubbornness and 'energy,' " a regular daily rhythm; the second emphasized what happened when it did not take place for several weeks during Breuer's holiday: "I found her in a pathetic moral state, lethargic, indocile, moody, even malicious." Breuer took this latter fact to be "the clearest evidence for the pathogenic and stimulating effect of the ideational complexes produced during her absences or 'condition seconde' and for their settling by talking out during hypnosis."[62] At this point, the curative effect was primarily one of alleviation, resulting in an improved moral, psychical, and even physical state. But after Pappenheim's return to the city and the

62 Breuer, "Anna O," in *GW* suppl.:229, 230 / *SE* 2:30, 31 (translation modified). {"Ich fand sie in einem traurigen moralischen Zustande, träge, unfügsam, launisch, selbst boshaft." "Den deutlichsten Beweis für die pathogene, reizende Wirkung der in den Absencen, ihrer 'condition seconde' produzierten Vorstellungskomplexe und für ihre Erledigung durch die Aussprache in Hypnose."}

beginning of her reliving the previous year in December 1881, a new level was added to the cure.[63]

The third use of the "talking cure" connected it to this next form: specific symptom removal. Pappenheim now talked out three elements—new daily phantasms, one-year-old experiences and " 'vexations,' " and finally the original psychical events of her illness.[64] With these latter two elements, the "talking cure" began to talk away (as opposed to talk out) specific symptoms, starting with the drinking inhibition and the "disgusting" little dog;[65] this was the "chance observation" with which Breuer and Freud opened the preliminary communication.[66] Talking away was nevertheless laborious: not only did it require significant work to start talking in general (as already noted in the first buds of their conversations), it was harder still to move along the chain of memory. To tackle this problem, Breuer visited in the morning, purposefully hypnotized her, and elicited a series of relevant memories concerning the symptom in question; then, in the evening autohypnosis, they went into depth on these remembered events, moving back to the original event and removing the symptom.[67] This was the "talking cure" as "a therapeutic-technical procedure, which left nothing to be desired in terms of logical consistency and

63 These first two mentions of the "talking cure" in the published case history closely matched the first two in the Bellevue one. Breuer, Pappenheim case history (D 23), p. 18, 19. The third and final mention there referred to their work (with both successes and setbacks) upon Pappenheim's return to the city in fall 1881. Ibid., 21.

64 Breuer, "Anna O," in *GW* suppl.:232 / *SE* 2:34. After the introduction of this new three-part work (daily phantasms, year-old experiences, original psychical events) to the cure, Breuer used the term *talk away* (*absprechen*) to refer to each of these elements; nevertheless, he emphasized at one point its particular relation to specific symptom removal, putting it in scare quotes on its third usage: "This example, too, exhibited a feature that was always observable when a symptom was being 'talked away.' " Ibid., 235 / 39. {"Es geschah auch hier, was regelmäßig zu beobachten war, während ein Symptom 'abgesprochen' wurde."}

65 Breuer, "Anna O," in *GW* suppl.:233 / *SE* 2:34 (translation modified). On the confusing chronology here and possible disjunction between the Bellevue and published versions, see the introduction to these chapters and the previous chapter.

66 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:81 / *SE* 2:3.

67 Breuer, "Anna O," in *GW* suppl.:233–34 / *SE* 2:35–36.

systematic implementation."[68] Breuer made this new form explicit in one particular example: "During the previous evening her visual disorder had disappeared via the 'talking cure,' and this applied also to her condition seconde."[69]

With this "therapeutic-technical procedure," Breuer and Pappenheim talked away nearly all of her symptoms, walking each one back through its numerous appearances (over a hundred instances for some) to its first occurrence and removing it for good.[70] The laboriousness of this stage of the cure paid dividends: "Since this laborious analysis of her symptoms dealt with the summer months of 1880, during which the illness was primed, I obtained a full insight into the *incubation* and *pathogenesis* of this hysteria."[71] These (incubation and pathogenesis) boiled down to the following sequence: Pappenheim's snake hallucination at her father's bedside accompanied by apparent paralysis and loss of German; the next day, prompted by a snake-like stick, the recurrence of the snake hallucination accompanied by an arm contracture; the beginning of regular autohypnotic absences, during which certain symptoms appeared and solidified; and finally, the emergence of the remainder of symptoms during her *affects*, basically feelings of great intensity arising from various situations (e.g., repressing a retort, self-reproach for wanting to dance).[72] Breuer returned to the complexities of this sequence the theoretical chapter of *Studien*, written another decade later, and to which I turn in the section. Yet during their

68 Breuer, "Anna O," in *GW* suppl.:233 / *SE* 2:35 (my translation). {"Therapeutisch-technische Prozedur, die an logischer Konsequenz und systematischer Durchführung nichts zu wünschen ließ."}

69 Breuer, "Anna O," in *GW* suppl.:234 / *SE* 2:36 (translation modified). {"Am vorhergehenden Abende war durch 'talking cure' ihre Sehstörung geschwunden, und zwar auch für die condition seconde."}

70 Breuer, "Anna O," in *GW* suppl.: 233–36, 237–38 / *SE* 2:35–38, 39–40.

71 Breuer, "Anna O," in *GW* suppl.:236 / *SE* 2:38 (translation modified). {"Da sich diese mühevolle Analyse der Symptome auf die Sommermonate 1880 bezog, während welcher sich die Erkrankung vorbereitete, gewann ich einen vollen Einblick in die *Inkubation* und *Pathogenese* dieser Hysterie."}

72 Breuer, "Anna O," in *GW* suppl.:236–38 / *SE* 2:38–40. Breuer himself wasn't entirely clear on the relation between the absences, the affects, and the symptoms that arose during each. He noted, on the one hand, that her affects may have been accompanied by a momentary unobserved absence but, on the other, that certain affects (and their symptoms) were definitely part of her "waking state." Ibid., 237 / 39.

encounter itself, he picked pieces of this up as he went along.[73] And they put the primary one—the original bedside scene—to use in the final "talking cure."

At the beginning of June 1882, Pappenheim "undertook the 'talking cure' with great exciting energy," aiming to be done with everything by the 7, the anniversary of the date she had been moved to the countryside.[74] Breuer did not note which specific symptoms remained to be talked away. But it is quite clear that this last undertaking was yet another shift in the cure, first off in the re-creation of the original sickroom scene. This happened in an entirely different house, now an apartment in Vienna rather than a summer house in the Salzkammergut; and while Breuer had already mentioned the importance of circumstances (i.e., surroundings in people, places) in Pappenheim's illness, this was the first attempt to utilize this material in the cure.

Finally, this last cure wasn't aimed merely at a single symptom but at "the anxiety hallucination recounted above, which had been the root of her whole illness."[75] Breuer did emphasize her immediate inability to speak German during the original scene; but this was used as a proxy rather than as the specific symptom being targeted. "Immediately following," he wrote, "she was able to speak German and was now free from all the innumerable individual disturbances that she had earlier exhibited."[76] Now the cure reached a new, seemingly total form: beyond the general alleviation of talking out and the specific symptom removal of talking away, this final reproduction left Pappenheim

73 The chronology in which Breuer learned of the original scene, incubation, and pathogenesis of the entire hysteria is difficult to parse, mainly because of the incomplete Bellevue case history. Nevertheless, the version presented there was basically the exact same version later published with *Studien*. The main difference was that Breuer narrated this period and its elements at the outset of the Bellevue history, whereas he moved it in the published version to just before the end of the narrative history. Breuer, Pappenheim case history (D 23), p. 3–6.

74 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:40 (translation modified).

75 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:40 (translation modified). {"Die oben erzählte Angsthalluzination, welche die Wurzel der ganzen Erkrankung gewesen war."}

76 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:40 (translation modified). {"Sprach unmittelbar darauf Deutsch und war nun frei von all den unzähligen einzelnen Störungen, die sie früher dargeboten hatte."}

apparently "free" from her entire stock of disturbances and concluded the entire hysteria. Yet we here again reach the apparent paradox that started this chapter and section. Why did "psychical balance" elude Pappenheim even once the "talking cure" had removed her "innumerable individual disturbances" and concluded her overall hysteria?

Looking at two particular aspects of the cure, we begin to see an answer emerge. First, in the foundational first use of the "talking cure," its most basic function was to relieve "stubbornness and 'energy,' " which Breuer described in depth in both case histories. He had indeed recognized this as an outcome of their duo-talk before it was more formalized (as discussed last chapter); but this took on a particular character once Pappenheim moved to the countryside and the cure received its name. There, the content of their talk shifted from stories to her daily hallucinations and the consequences of not adequately relieving these became apparent (most obviously when Breuer went on his summer holiday). A new connection emerged: Pappenheim's absences or second state were the source of her hallucinations; these then resulted in excess psychical energy and its attended ill-effects.[77] This connection was solidified by the next stage of the cure: the shift to specific symptoms. The shift *depended* on Pappenheim's reliving of the previous year, specifically in her second state; Breuer now actively saw the move of older psychical stimuli into the present, from the second to the first state. This set the stage for the Breuer's "chance observation" removing the drink inhibition and the subsequent transformation of the cure into a formal "therapeutic-technical procedure" aimed at entire symptom removal.[78] This procedure, too, observed a similar transit of psychical elements: During the talking away of a particular symptom, "this symptom appeared with increased intensity while it was

77 Breuer, Pappenheim case history (D 23), p. 18–20; and Breuer, "Anna O," in *GW* suppl.:228–30 / *SE* 2:29–32.

78 Breuer, "Anna O," in *GW* suppl.:230–34 / *SE* 2:32–35.

being recounted. Thus during the analysis of her not being able to hear the patient was so deaf that I had to in part communicate with her in writing."[79]

This nexus of excess energy, psychical states, and symptom formation and removal would ultimately occupy Breuer as he wrote his theoretical consideration on hysteria for *Studien* in the 1890s. Yet around it, he had already started to sketch the beginnings of a theory of psychical balance in line with his theory of physical balance: centered on compensating actions. In the specifics of Pappenheim's illness, we already see the importance of such compensating actions: the storing up of energy then relieved by talking out, the movement of psychical stimuli from state to state, and the reappearance of symptoms during their removal. Developing this theory more fully would take Breuer time, and only by delving next into this developed theory can we answer our precipitating question—how did the final cure relate to Pappenheim's later psychical balance?

FROM HYPNOID STATES TO BLOWING OFF STEAM: PSYCHICAL-PHYSICAL BALANCE I, 1893–1895

"Preliminary Communication": Hypnoid States

Breuer's invocation of "psychical balance" at the end of the case of Anna O. was only one of several significant uses of the term *Gleichgewicht* in *Studien über Hysterie*, all of which appeared in sections of the work bearing Breuer's name: the preliminary communication, the case of Anna O., and his theoretical chapter.[80] The first use, in Breuer and Freud's preliminary communication of 1893, established its most basic meaning for Breuer.

79 Breuer, "Anna O," in *GW* suppl.:235 / *SE* 2:39 (translation modified). {"Dieses trat mit erhöhter Intensität auf, während es erzählt wurde. So war Patientin während der Analyse des Nichthörens so taub, daß ich teilweise schriftlich mich mit ihr verständigen mußte."}

80 The term was used a total of seven times in three distinct passages, twice in the preliminary communication, once in the Anna O. case, and four times in one section of Breuer's theoretical chapter. Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:96 / *SE* 2:16; and Breuer, "Anna O" and "Theoretisches" in *GW* suppl.:238, 259–60 / *SE* 2:41, 201–2.

Starting there, where Breuer himself started, we can see how *balance* served as a key concept in his theory of hysteria, drawing explicitly and implicitly from his physiological work on the inner ear and illuminating Pappenheim's ultimate return to "psychical balance."

Breuer and Freud's preliminary communication was a curious document: possibly intended to establish priority (before the psychologist Pierre Janet), it only glancingly dealt with the evidence for its claims—the illness and treatment of hysterical patients—while simultaneously balancing the slowly diverging views of its two authors.[81] As the authors themselves noted when the communication was republished as the introduction to *Studien* two years later, they agreed on the "facts and fundamental views" but not necessarily on "interpretations and suppositions."[82] Its title—"Über den psychischen Mechanismus hysterischer Phänomene" ("On the Psychical Mechanism of Hysterical Phenomena")—expressed two basic limitations in the ambitions of their work: it dealt with hysterical phenomena and specifically the psychical mechanisms behind these phenomena, as opposed to hysteria as a whole and the entirety of its workings.

Their basic conclusions about this mechanism had two sides, one theoretical and one practical: the psychical source of hysterical symptoms and their new treatment thereof. The former was encapsulated in the famous line, "*Hysterics suffer mainly from reminiscences*".[83] Many hysterical phenomena had their origin in psychical trauma, sometimes years ago, with the trauma and the memory thereof acting "like a foreign body which long after its entry must continue to be regarded as an agent that is still

81 I briefly discuss the genesis of this essay in the introduction to these chapters. Breuer's use of "preliminary communications" in his work on the semicircular canals in the 1870s shows us further that this was a mode Breuer preferred for whatever reason.

82 Breuer and Freud, "Vorwort zur ersten Auflage," in *GW* 1:78 / *SE* 2:xxx (translation modified).

83 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:86 / *SE* 2:7. {"*Der Hysterische leide größenteils an Reminiszenzen*."}

at work."[84] This theoretical conclusion had in fact emerged from the other, practical conclusion: Bringing this trauma to light in speech had a *healing* effect; this was the cathartic effect of abreaction, the center of their new psychotherapeutic method, and the "chance observation" that had started the whole thing. As they wrote in summary, bringing the two insights together, the method "*brings to an end the effectiveness of the idea that was not originally abreacted by allowing its incarcerated affect to find a way out through speech*."[85]

Breuer and Freud began to sketch the inner *workings* of this psychical mechanism, and it was here that balance was introduced. These workings centered on a splitting of consciousness into states, with the "hypnoid state" the abnormal site of pathogenic ideas stemming from psychical trauma. This was fundamental to their new views: "The basis and prerequisite of hysteria is the existence of hypnoid states."[86] As per the name, these states were comparable with artificial hypnosis, specifically in one main aspect: they were cut off from the primary states and had their own associative ideational workings. There, in hypnoid states, the pathological development and persistence of traumatic memories took place.

They then brought their theory, at first concerned with chronic phenomena, to bear on acute hysterical attacks, notably described in four stages by the neurologist Jean-Martin Charcot. Such attacks were typically features of severe hysteria, which started with the hypnoid state and its "ideational content" taking over the entire "existence" of

84 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:85 / *SE* 2:6. {"Wir müssen vielmehr behaupten, daß das psychische Trauma, respektive die Erinnerung an dasselbe, nach Art eines Fremdkörpers wirkt, welcher noch lange Zeit nach seinem Eindringen als gegenwärtig wirkendes Agens gelten muß."}

85 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:97 / *SE* 2:17 (translation modified). {"*Sie hebt die Wirksamkeit der ursprünglich nicht abreagierten Vorstellung dadurch auf, daß sie dem eingeklemmten Affekte derselben den Ablauf durch die Rede gestattet.*"}

86 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:91 / *SE* 2:12 (translation modified). {"Grundlage und Bedingung der Hysterie ist die Existenz von hypnoiden Zuständen."}

the patient in an acute hysteria. Here balance took the stage: "If the normal person can reassume command, then what survived of that hypnoid ideational content recurs in hysterical attacks and brings the person from time to time back into similar states, which are themselves again open to influence and receptive to traumas. A state of balance is then often produced between the psychical groups that are united in the person; attack and normal life go forth side by side without influencing each other."[87] What is key here was that balance did *not* refer to the internal stability of a normal mind or consciousness. Rather, it highlighted the *doubleness* of the hysterical mind—a normal side and a hypnoid side literally, per the etymological roots of *Gleichgewicht*, sitting on two scales side by side. And, as such, the balance was not fixed; "in other cases this balance is very labile," they wrote of cases when the normal person was "exhausted and incapacitated."[88]

"Theoretical": Blowing Off Steam

With the publication of *Studien über Hysteria* as a book two years later, it fell to Breuer to elaborate upon this preliminary theory in the work's stand-alone chapter on theoretical matters. That Breuer wrote this theoretical chapter, while Freud composed the book's practical one, is another curious element of their collaboration:[89] Breuer's solo

87 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:96 / *SE* 2:16 (my translation). {"Kann die normale Person die Herrschaft wieder übernehmen, so kehrt das, was von jenem hypnoiden Vorstellungsinhalt überlebt hat, in hysterischen Anfällen wieder und bringt die Person zeitweise wieder in ähnliche Zustände, die selbst wieder beeinflußbar und für Traumen aufnahmsfähig sind. Es stellt sich dann häufig eine Art von Gleichgewicht zwischen den psychischen Gruppen her, die in derselben Person vereinigt sind; Anfall und normales Leben gehen nebeneinander her, ohne einander zu beeinflussen."}

88 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:96 / *SE* 2:16 (translation modified). {"In anderen Fällen ist dieses Gleichgewicht ein sehr labiles."}

89 It was Freud who had gone to Paris in the 1880s to work with Charcot and who had already published on the theoretical debates about hysteria; he was moreover continuing to pursue an academic career, whereas Breuer had given up his *venia legendi* and had otherwise limited his scientific investigations to his spare time outside of his busy medical career. Of course, Freud's continued use and development of the method he first learned from Breuer led to the nearly all the material evidence included in the book, thus meriting his authorship of the practical chapter.

authorship of his chapter, written distinctly in his style and with clear marking between his and Freud's thinking when pertinent, tells us that Breuer highly valued the work and thinking that went into the matter.[90] From the outset, he limited his ambitions to further developing the major points outlined in the preliminary communication, now with the established evidence of the case histories, but without going into "the entirety of hysteria."[91] Yet even such a limited aim—explaining the psychical mechanism of certain hysterical phenomena—required a broader purview of the intertwining of mind and body, that is, the psychical-physical fundament upon which the psychical mechanism played out. So over the next sixty pages, Breuer developed both a generalized picture of the mind-body relationship and on top of that a particular account of certain relevant psychical processes and structures: the hypnoid state and the split psyche. And again *balance* played a crucial role, now elaborated in a psychical-physical form.[92]

The chapter started by restating and reframing the question of a "psychical mechanism," introducing a new key term: *ideogenic*—that is, "determined by ideas."[93]

90 Breuer did compose most of the chapter in the first-person plural, framing the theories and conclusions as jointly his and Freud's. But he did specify when he drew on his own experiences specifically and when the conclusions were his own (as well as noting specific ideas of Freud's). Freud's chapter, by contrast, emphasized his own developments of the method, but similarly referred to their joint thinking on, for example, forms of hysteria.

91 Breuer, "Theoretisches," in *GW* suppl.:244 / *SE* 2:185 (my translation).

92 Breuer was highly aware of the difficulty in bringing together so many strands of research here as well as the overall complexity of thinking through psychical and physical processes that were intertwined but had clearly differentiated expressions (e.g., physical symptoms such as paralysis, psychical elements such as memories). In conclusion, he admitted that such an effort left him open to the charge of "eclecticism" and self-deprecatingly admitted to the "uncertain strokes" and "crude auxiliary conceptions" with which he worked. "Only one consideration is somewhat soothing," he wrote of this difficulty and his possible failings. "That this curse adheres—and must adhere—to all physiological representations of complicated psychical processes." Breuer, "Theoretisches," in *GW* suppl.:310 / *SE* 2:250 (my translation). {"Nur die eine Erwägung beruhigt einigermaßen: daß dieses Übel allen physiologischen Darstellungen komplizierter psychischer Vorgänge anhaftet und anhaften muß."} Breuer showed here why I am reticent to classify his theory of hysteria in terms of debates around whether the disease was fundamentally somatic or psychological or in terms of abstracted debates around the mind-body. He was an extremely *practical* thinker, evident in his physiological work as well as elsewhere, and he did not see the utility in reducing his work here to those debates and terms. Cf., for the former, Skues, *History of Anna O.*, 20–26; and the latter, Sulloway, *Freud, Biologist of the Mind*, 61–69.

93 Breuer, "Theoretisches," in *GW* suppl.245 :/ *SE* 2:186. This reframing around the term *ideogenic* took place

"*A great number of hysterical phenomena, probably more than we know today, are ideogenic,*" and it was these phenomena that drove the analysis here, though they did not exhaust hysterical phenomena in general.[94] The question of the "mechanism" of this genesis, however, remained; answering it required a look into the fundamental problems of the nervous system. Breuer's sketch of these problems would be familiar to every scientific reader and most likely any member of the educated public, as he drew extensively on the primary metaphorical resource for thinking through nerves: electricity and electrical installations.[95] Breuer's development of this metaphor was to focus on the overall *tension* (or voltage) of an electrical installation (rather than just the current), which he equated with "intracerebral tonic excitation."[96] Of this excitation (*Erregung*), he posited an "optimum": "At this level of tonic excitation, the brain is accessible to all external stimuli, the reflexes are prepared, though only to the extent of normal reflex activity, and the estate of ideas is accessible to arousal and association in the mutual relative relation of individual ideas that corresponds to a clear sober-mindedness. It is the state that is best prepared for work."[97]

---

in conversation with the work of the neurologist Paul Julius Möbius, whose *Über den Begriff der Hysterie* (1888; On the concept of hysteria) had defined hysterical phenomena as morbid phenomena caused by ideas; Breuer's thought this was the case of *some* but not all hysterical phenomena.

94 Breuer, "Theoretisches," in *GW* suppl.:250 / *SE* 2:190–91 (translation modified; emphasis in original but not *Standard Edition*).

95 Breuer even excused his own possible overuse of the electrical analogy, writing in a footnote, "I am anxious not to drive the comparison with an electrical installation to death; with the fundamental diversity of conditions, it can scarcely illustrate the processes in the nervous system and can certainly not explain them." This was immediately followed by an extension of the comparison. Breuer, "Theoretisches," in *GW* suppl.:265n / *SE* 2:207n (translation modified). {"Ich möchte den Vergleich mit einer elektrischen Anlage nicht zu Tode hetzen; bei der fundamentalen Verschiedenartigkeit der Verhältnisse kann er ja die Vorgänge im Nervensysteme kaum illustrieren und gewiß nicht erklären."} On the history of these sorts of electrical metaphors for the nervous system, which in fact ran both ways, see Otis, "The Other End of the Wire"; and Otis, "The Metaphoric Circuit."

96 "Tonic excitation" was for Breuer a *third* type of energy in the nervous system, beyond the chemical potential energy of cells and a kinetic energy of the fibers in excitation. He compared thus compared the overall "tonic excitation" within the nervous system to "electrical tension" present in an electrical system (in contrast with electrical current). Breuer, "Theoretisches," in *GW* suppl.:253n / *SE* 2:194n.

97 Breuer, "Theoretisches," in *GW* suppl.:256–57 / *SE* 2:198 (translation modified). {"Auf diesem Niveau der tonischen Erregung ist das Gehirn zugänglich für alle äußeren Reize, die Reflexe sind gebahnt, aber

But such a state wasn't of course persistent or permanent, and Breuer now deployed the concept of balance to account for out-of-whack excitation in the brain, whether pathological or not. Everyday life and language already accounted for such a psychical-physical process—"incitement, stimulation" and "excitement, agitation" (*Anregung* and *Aufregung*)—with the former a uniform and the latter a nonuniform increase in excitation, yielding different results:[98] "An interesting conversation or tea or coffee incites, stimulates; a dispute or a larger dose of alcohol excites, agitates. While incitement or stimulation only awakens the drive to functional utilization of increased excitation, excitement or agitation seeks to discharge itself in more or less severe processes that are approaching or even really are pathological."[99] It was this last fact that compelled Breuer—the link of excitement and pathological effects—and he then reconceived excitement as a "disturbance of dynamic balance in the nervous system, the nonuniform distribution of increased excitation."[100] Crucially, this disturbance wasn't *necessarily* pathological. Here Breuer remapped the balance between normal and hypnoid states onto all humans. Yet the key element of balance remained: a change in state, now level of excitation in the brain, that begot a compensating action. Again everyday language named this compensation,

---

nur in dem Ausmaße normaler reflektorischer Tätigkeit, der Besitz an Vorstellungen ist der Erweckung und Assoziation zugänglich in jenem gegenseitigen relativen Verhältnisse [*sic*: Verhältnis] der einzelnen Vorstellungen, welches klarer Besonnenheit entspricht; es ist der Zustand bester Arbeitsbereitschaft."}

98 I like the parallel translations of "incitement" and "excitement" for *Anregung* and *Aufregung*, but they are a bit awkward and hard to exactly square with Breuer's gloss of their meaning. The more pedestrian terms "stimulation" and "agitation" help in that regard. But going forward, I use "excitement" and "to excite" for *Aufregung* and *anregen* for simplicity.

99 Breuer, "Theoretisches," in *GW* suppl.:257 / *SE* 2:199 (my translation). {"Sie nennt die ersteren *Anregung*, die letzteren *Aufregung*. Ein interessantes Gespräch, Tee, Kaffee regen an; ein Streit, eine größere Dosis Alkohol regen auf. Während die Anregung nur den Trieb nach funktioneller Verwertung der gesteigerten Erregung wachruft, sucht sich die Aufregung in mehr [oder] weniger heftigen, ans Pathologische streifenden oder wirklich pathologischen Vorgängen zu entladen." (Editor's interpolation.)}

100 Breuer, "Theoretisches," in *GW* suppl.:259 / *SE* 2:201 (translation modified). {"Störung des dynamischen Gleichgewichtes im Nervensystem, die ungleichmäßige Verteilung der gesteigerten Erregung."}

with run-of-the-mill anger compensated by "crying oneself out" and "blowing off steam" (*sich ausweinen, austoben*).[101]

This everyday balancing of "crying oneself out" and "blowing off steam" took place in the realm of affect—highly laden emotion. "Excitement constitutes the psychical-physical basis of affects," and when such excitement could not "be employed in psychical activity" problems arose.[102] This happened when the increased nonuniform excitation yielded *particular* affects: "All powerful affects restrict association, the ideational course. People become 'senseless' from anger or fright. Only ideational group that aroused the affect persists in consciousness with the highest intensity. Thus the equalization of excitement is impossible through associative activity."[103] Even these affects, however, could be relieved—along with their underlying excitations—whether in diverted reaction the next day (e.g., Bismarck's breaking a vase after being angered by the king) or longterm gradual equalization. Both of which were again the compensating reactions of psychical-physical balance.

But in certain cases, you couldn't associate the ideas to other ideas, you couldn't cry yourself out, you couldn't break a vase, and you couldn't count on gradual equalization of the feeling. "If the original affect was discharged not in a normal but in an 'abnormal reflex,' " Breuer concluded in the following section, "then this abnormal reflex is triggered by memory too. The excitation starting from the affective idea is *'converted'* (Freud) into a bodily phenomenon."[104] Here conversion emerged as a new key concept, describing the

101 Breuer, "Theoretisches," in *GW* suppl.:260 / *SE* 2:202 (translation modified).

102 Breuer, "Theoretisches," in *GW* suppl.:257, 260 / *SE* 2:199, 201 (translation modified). {"Sie macht die psychisch-physische Grundlage der Affekte aus."}

103 Breuer, "Theoretisches," in *GW* suppl.:260 / *SE* 2:201 (translation modified). {"Aber diese gesteigerte Erregung kann nicht in psychischer Tätigkeit verwendet werden. Alle starken Affekte beeinträchtigen die Assoziation, den Vorstellungsablauf. Man wird 'sinnlos' vor Zorn oder Schreck. Nur jene Vorstellungsgruppe, welche den Affekt erregt hat, persistiert im Bewußtsein mit höchster Intensität. So ist die Ausgleichung der Aufregung durch assoziative Tätigkeit unmöglich."}

104 Breuer, "Theoretisches," in *GW* suppl.:264 / *SE* 2:206 (my translation). {"Hat sich der ursprüngliche Affekt nicht in dem normalen, sondern in einem 'abnormen Reflexe' entladen, so wird auch dieser durch

transformation from an "affectively marked" idea into a pathological phenomena:[105] "If, by frequent repetition, this abnormal reflex has been completely prepared, the effectiveness of the triggering ideas may be by all appearances so completely limited that the affect itself arises only in minimal strength or not at all; then the '*hysterical conversion*' is complete. The idea, however, now having no further psychical effects, can be overlooked by the individual or have its emergence promptly forgotten, such as happens with other affectless ideas."[106]

Conversion was thus the psychical mechanism named. Any affectively marked idea—a broad category including the memories and psychical traumas of the preliminary communication but more too—could start the process, disturbing the balance of tonic excitation and producing an abnormal reflex severed from the triggering idea. There were a number of different pathways of conversion—whether positive (particular associated events or symbolic chains) or negative (inhibited ideational association or normal reflexes)—but conversion was the thing.[107]

But while Breuer had basically fulfilled the narrow aims of the theoretical chapter—

---

die Erinnerung wieder ausgelöst; die von der affektiven Vorstellung ausgehende Erregung wird in ein körperliches Phänomen *'konvertiert.'* (Freud.)"}

105 Breuer, "Theoretisches," in *GW* suppl.:264 / *SE* 2:205 (my translation). Breuer placed "affektiv betonte" in scare quotes, most likely referring back to versions of the formulation in the preliminary communication. Cf. Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:87, 88 / *SE* 2:8, 9.

106 Breuer, "Theoretisches," in *GW* suppl.:265 / *SE* 2:206 (my translation). {"Ist durch oftmalige Wiederholung dieser abnorme Reflex vollständig gebahnt worden, so kann sich, wie es scheint, die Wirksamkeit der auslösenden Vorstellungen darin so vollständig erschöpfen, daß der Affekt selbst nur in minimaler Stärke oder gar nicht entsteht; dann ist die '*hysterische Konversion*' vollständig. Die Vorstellung aber, welche nun nicht mehr psychische Wirkungen hat, kann von dem Individuum übersehen oder ihr Auftauchen alsbald wieder vergessen werden, wie es bei andern, affektlosen Vorstellungen geschieht."}

107 Much of the literature on *Studien über Hysterie* focuses on types of hysteria, marking out retention, defense, and hypnoid hysteria. Breuer did focus on this final element, but only really mentioned retention and defense hysteria in passing. The former referred broadly to the retention of particularly vivid ideas, whether voluntarily or not, while the latter emphasized the voluntary suppression of such ideas. Freud subsequently elaborated defense as the key concept in hysteria and criticized the utility of retention. They were, nevertheless, minor elements of Breuer's theoretical chapter, especially in contrast with the concepts of *conversion* and *hysteria*. Breuer, "Theoretisches," in *GW* suppl.:269, 273 / *SE* 2:211, 214.

expanding upon the preliminary theories of a psychical mechanism—he was ultimately most interested in one particular form of conversion: ideas that aren't suppressed but in fact *cannot* be remembered, "because they originally emerged, endowed with affect, in states for which amnesia persists in waking consciousness—in hypnotic and hypnosis-like states."[108] Halfway through his theoretical chapter he came back to such states—hypnoid states—now with a new basic description of the psychical mechanism of hysterical phenomena (conversion) and two adjacent but different versions of psychical-physical balance (between psychical groups, of excitation). He also came back to his encounter with Bertha Pappenheim, as her case provided basically the only evidence for his theory of hypnoid states and further the splitting of the psyche.

FROM SPLITTING THE PSYCHE BACK TO HYPNOTIC BIRDS: PSYCHICAL-PHYSICAL BALANCE 2, 1895–1873

Theoretical-Practical 1: Splitting Pappenheim's Psyche

In the midst of the second half of his theoretical chapter, Breuer laid his cards on the table in terms of evidence: "Case History I (Anna O.), to which I must always keep returning, grants clear insight into the course of events."[109] Here the course of events was that leading to the splitting of the psyche, but Breuer did indeed return time and again to the "clear insight" provided by Pappenheim's experience, using it as the chapter's *primary* and often sole evidence.[110] Upon this evidence, he further developed the theory

108 Breuer, "Theoretisches," in *GW* suppl.:274 / *SE* 2:214 (my translation). {"weil sie in Zuständen ursprünglich aufgetaucht sind und mit Affekt belehnt wurden, für die im wachen Bewußtsein Amnesie besteht, in hypnotischen und hypnoseähnlichen Zuständen."}

109 Breuer, "Theoretisches," in *GW* suppl.:294 / *SE* 2:234 (translation modified). {"Die Beobachtung I (Anna O.), auf die ich immer zurückkommen muß, gewährt klaren Einblick in den Hergang."}

110 The only other case to which Breuer referred significantly in this half of the chapter was that of Cäcilie M, who had been a joint patient of Breuer's and Freud's and a major catalyst for the publication of *Studien über Hysteria*. For more on Cäcilie M., her true identity as Ana von Lieben, and her role in the development of Freud's thinking, see Swales, "Birth of Psychoanalysis"; and Rossbacher, *Literatur und Bürgertum*, 446–64.

of hypnoid states as introduced in the preliminary communication; he extrapolated the conscious and unconscious processes beneath these states—the splitting of the psyche—and the disposition to and development of both split psyche and hypnoid states as they resulted in hysteria. And while Breuer expressed caveats about generalizing entirely from Pappenheim's illness, she ultimately stood at the center of this theory of hypnoid hysteria and its concept of psychical-physical balance.[111]

Though Breuer had introduced *conversion* as the primary psychical mechanism of hysteria, he maintained hypnoid states as the theoretical core for two reasons: these states were present in "grand hysteria," the most complicated and important of instances; and their appearance in such hysterias, as with Pappenheim, offered the clearest insight into the general development and workings of hysterical phenomena. Breuer's account of the states was mainly the same from the preliminary communication: hypnosis-like states apart from waking thought with their own ideational logic and work. Pappenheim's autohypnoses were given as the clearest example. The main development connected these states to his new theory of excitation and affect: Daydreaming, dozing, or other such psychical distraction, when filled with affective ideational groups, could shift into more general "absence." Then, "the ideational course grows gradually slower and at last almost stagnates; but the affective idea and its affect remain lively and consequently so does the great quantity of excitation not functionally used up."[112] The existence of such states had three significant consequences: they made conversion easier, they protected the resulting converted ideas, and finally they conditioned a deeper splitting of the psyche.

It was this last element that most preoccupied Breuer. The "splitting of the psyche"

111 There were two caveats about the generalizability of Pappenheim's hysteria: Breuer, "Theoretisches," in *GW* suppl.:278, 295 / *SE* 2:219, 236.

112 Breuer, "Theoretisches," in *GW* suppl.:277 / *SE* 2:218 (translation modified). {"Allmählich verlangsamt sich der Vorstellungsablauf, um endlich fast zu stagnieren; aber die affektive Vorstellung und ihr Affekt bleiben lebendig und damit auch die große Quantität funktionell nicht verbrauchter Erregung."}

(*Spaltung der Psyche*) was where he both engaged most significantly with the competing account by Piere Janet and began to account for the persistent effects of *unconscious ideas* in everyday conscious life, as was the case for chronic and recurring hysterical phenomena.[113] At the center of this "difficult and obscure region" was a new concept:[114] "(in)capability of consciousness" (*Bewusstseins[un]fähigkeit*).[115] In healthy people, all ideas can enter consciousness, but "the existence of such ideas incapable of consciousness is pathological."[116] Splitting the *psyche* did not simply entail conscious and unconscious halves but the division of ideational activity into ideas and ideational complexes that were capable of consciousness and those that were not. While the latter were inaccessible to the actions of the former, they nevertheless continued to exist and exert power over consciousness, yielding both chronic hysterical phenomena and other modifications to psychical life (e.g., strong moods, strange modes of thought); Breuer analogized this one-way relationship to the everyday experience of unconscious phenomena, which had great effect to the conscious mind but could not be approached by it. This splitting was *the*

113 Breuer drew one major and one significant minor distinction between his and Janet's views: In terms of disposition to and development of hysteria, Janet claimed that it derived from a particular mental weakness, whereas Breuer emphasized a *surplus* of mental activity that then produced the observed weakness. On a more minor but still significant point, Breuer noted that Janet's emphasis on the "splitting-off" (*Abspaltung*) made the topographic metaphor of the mind-brain too concrete; by contrast, Breuer routinely came back to the fact that conscious and unconscious processes happened in the same parts of the brain and existed on a continuum. Breuer, "Theoretisches," in *GW* suppl.:287–92 / *SE* 2:227–33.

114 Breuer, "Theoretisches," in *GW* suppl.:281 / *SE* 2:222.

115 Breuer noted that the term was "not unambiguous and for that reason leaves much to be desired." Breuer, "Theoretisches," in *GW* suppl.:284n1 / *SE* 2:225n. {"Nicht eindeutig und läßt darum sehr zu wünschen übrig."} He further claimed it was built on the traditional term *hoffähig* (admissible, presentable to [imperial, royal] court), though the nineteenth century saw a proliferation of such terms in more scholarly contexts, including *widerstandsfähig* (resilient, resistant) and *zurechnungsfähig* (legally responsible). The traditional translation of *bewusstseins(un)fähig* is "(in)admissible to consciousness," based in part on the analogy to *hoffähig*. But *admissible* puts too much emphasis on the court or consciousness that would allow or disallow entry, whereas it was the *bewusstseinsunfähig* ideas themselves that were *incapable* of consciousness not the consciousness itself that kept them out (e.g., so while voluntary *defense* could initiate the conversion of an idea to being incapable of consciousness, the voluntary act subsided while the idea remained incapable of consciousness).

116 Breuer, "Theoretisches," in *GW* suppl.:284 / *SE* 2:225 (translation modified). {"Die Existenz solcher bewußtseinsunfähiger Vorstellungen ist pathologisch."}

rudiment of grand hysteria, visible in the common "*double conscience*" in French accounts of hysteria.

Pappenheim again occupied pride of place in Breuer's brief account of the development of such a split, which started with "the habitual coexistence of two heterogeneous ideational series."[117] How often do we in everyday life do two things at once, with psychical activity devoted at once (more unconsciously) to a mechanical activity and (more consciously) to another set of thoughts? Pappenheim's "private theater" was exactly such a parallel ideational chain, running alongside her housework or social life. Such parallel but heterogeneous thoughts were of course particularly potent when "affectively marked," as when caring for a sick loved one or in matters of love. Breuer then summarized his suppositions about the pathological transformation of such two distinct series, bringing it back to the hypnoid state:

> I suspect that the doubling of psychical faculty, whether habitual or caused by affectful situations in life, is essentially *disposed* to a real pathological splitting of the psyche. This doubling turns into this splitting when both of the coexisting ideational series no longer have content of the same kind, when one of them contains ideas incapable of consciousness—fended-off ideas and those stemming from hypnoid states. The confluence of both temporarily separated currents, which takes places over and over and over in healthy people, is then impossible, and there is permanently established a split-off region of unconscious psychical activity. This hysterical splitting of the psyche stands in relation to the healthy person's "double-self" as the hypnoid stands to normal reverie. In the latter, amnesia determines the pathological quality, and in the former, it is the idea's incapability of consciousness.[118]

117 Breuer, "Theoretisches," in *GW* suppl.:233 / *SE* 2:233 (translation modified).

118 Breuer, "Theoretisches," in *GW* suppl.:293–94 / *SE* 2:234 (translation modified). {"Ich vermute, daß die habituelle oder durch affektvolle Lebenslagen bedingte Verdoppelung der psychischen Fähigkeit zur wirklichen pathologischen Spaltung der Psyche wesentlich *disponiere*. Sie geht in diese über, wenn die beiden koexistierenden Vorstellungsreihen nicht mehr gleichartigen Inhalt haben, wenn die eine davon bewußtseinsunfähige Vorstellungen enthält: abgewehrte und solche, die aus hypnoiden Zuständen stammen. Dann ist das Konfluieren der beiden zeitweise getrennten Ströme, das beim Gesunden immer wieder statthat, unmöglich, und es etabliert sich dauernd ein abgespaltenes Gebiet unbewußter psychischer Tätigkeit. Diese hysterische Spaltung der Psyche verhält sich zu dem 'Doppel-Ich' des Gesunden wie das

This was the precise process to which Pappenheim's experience gave "clear insight," as quoted above: Her strong secondary imaginative life (e.g., her private theater) was the basic disposition upon which the hysteria was built. A particular situation—caring for her sick father—joined an affect of fear and situation primed for autohypnosis to create a hypnoid state, separate and alternating from her waking states; the hypnoid state ultimately took over and caused an acute hysterical attack before returning to its position alternating with normal behavior. "But even during this normal psychical behavior," Breuer concluded, "there persists somatic and psychical phenomena, which we here *know* to be based on the hypnoid's ideas (contracture, hemianaesthesia, changes in speech). It is as a result proven that even during normal behavior the hypnoid's ideational complex, the 'subconsciousness,' is present and active and that the split of the psyche persists."[119]

Pappenheim's was the only case of this kind that Breuer had seen and he recognized his account of these "halfway-understandable processes" only began to approach the genesis and workings of the split psyche, let alone its role more broadly in hysterical phenomena.[120] His account nevertheless brings us back to the original question: What did it mean for Pappenheim to reach "psychical balance"? As already suggested, Breuer's concept of psychical-physical balance in *Studien* accounted first for the process of balance between Pappenheim's normal and hypnoid sides and then turned to the specific (im)balance of excitation and psychical groups relevant in hysterical conversion. With the theory of the split mind, we have a synthesis of these first two processes of balance: the ideational complexes incapable of consciousness, which first took shape in hypnoid

---

Hypnoid zu der normalen Träumerei. Hier bedingt die Amnesie die pathologische Qualität und dort die Bewußtseinsunfähigkeit der Vorstellung."}

119 Breuer, "Theoretisches," in *GW* suppl.:294 / *SE* 2:235 (translation modified). {"Aber auch in diesem [normalen psychischen Verhalten] persistieren die somatischen und psychischen Phänomene, von denen wir hier *wissen*, daß sie auf Vorstellungen des Hypnoids beruhen (Kontraktur, Hemianästhesie, Änderung der Sprache). Dadurch ist bewiesen, daß auch während des normalen Verhaltens der Vorstellungskomplex des Hypnoids, das 'Unterbewußtsein,' aktuell ist, daß die Spaltung der Psyche fortbesteht."}

120 Breuer, "Theoretisches," in *GW* suppl.:295 / *SE* 2:236 (translation modified).

states and were then converted into recurring psychical-physical phenomena, now had a relation to consciousness and its ideas and complexes, again figured in Breuer's language of compensating balance.

As Breuer wrote in the theoretical summary of the case of Anna O.,

> During the course of the entire illness her two states of consciousness persisted side by side: the primary state, in which she was psychically quite normal, and the "second" one, which may well be likened to a dream in accordance with its wealth of phantasms and hallucinations, its large gaps of memory, and the lack of inhibition and control in its sudden notions [*Einfälle*]. In this second state, the patient was alienated. That the patient's psychical state was entirely dependent on the intrusion of this second state into the normal one seems to me to provide a good insight into the essence of at least one type of hysterical psychosis. Every evening-hypnosis supplied evidence that the patient was entirely clear and ordered and, in her feeling and volition, normal, if no product of her second state was acting as a stimulus 'in the unconscious'; the extremely striking psychosis after each longer pause in the discharge procedure proved the extent to which even these products influenced the psychical processes of the 'normal' state.[121]

This was precisely the compensating actions of the split psyche: not just the alternation of states but the intrusion of the second into the first.[122] The complementary action to

121 Breuer, "Anna O," in *GW* suppl.:242 / *SE* 2:45 (translation modified). {"Während des ganzen Krankheitsverlaufes bestanden die zwei Bewußtseinszustände nebeneinander, der primäre, in welchem Patientin psychisch ganz normal war, und der 'zweite' Zustand, den wir wohl mit dem Traume vergleichen können, entsprechend seinem Reichtum an Phantasmen, Halluzinationen, den großen Lücken der Erinnerung, der Hemmungs- und Kontrollelosigkeit der Einfälle. In diesem zweiten Zustande war Patientin alieniert. Es scheint mir nun guten Einblick in das Wesen mindestens einer Art von hysterischen Psychosen zu gewähren, daß der psychische Zustand der Kranken durchaus abhängig war von dem Hereinragen dieses zweiten Zustandes in den normalen. Jede Abendhypnose lieferte den Beweis, daß die Kranke völlig klar, geordnet und in ihrem Empfinden und Wollen normal war, wenn kein Produkt des zweiten Zustandes 'im Unbewußten' als Reiz wirkte; die eklatante Psychose bei jeder größeren Pause in dieser Entlastungsprozedur bewies, in welchem Ausmaße eben diese Produkte die psychischen Vorgänge des 'normalen' Zustandes beeinflußten."}

122 N.b., in his theoretical chapter, Breuer explicitly distinguished the split psyche from mere split consciousness. Breuer, "Theoretisches," in *GW* suppl.:284 / *SE* 2:225. Yet his use here of the language of two states of and thus an implied splitting of consciousness (rather than the psyche) is not a contradiction or divergence from his point in the theoretical chapter. I believe it merely shows that he wrote the preliminary communication and the case of Anna O., both of which used the phrase "splitting of consciousness" (*Spaltung der Bewusstsein*) before the theoretical chapter, when he fully developed his theory and adopted a new terminology (esp. considering the explicitly comparison of split consciousness and then split psyche to

the second state intruding into the first was, of course, the "talking cure" itself, moving from the first state into the second; this at first merely alleviated agitation, before becoming the therapeutic-technical procedure aimed at in fact removing the precipitating idea, otherwise incapable of consciousness. This was what Breuer meant when he emphasized the "extremely striking psychosis" that entered when they hadn't undertaken the cure for several days.

From this vantage, Pappenheim's slow return to "psychical balance" wasn't of course the return to a state of mental stability. Nor was it the reemergence of various processes of psychical-physical equilibrium—these had always been at play, even if they were seriously out of whack for much of the time. Instead, it was the slow resolution of the splitting of her mind and resolution of any ideas and ideational complexes from incapable to capable of consciousness; with it, Pappenheim moved back from the hypnoid state to normal reverie and the split psyche to the "double-self" of the healthy person, back to blowing off steam and crying herself out. It wasn't a return to psychical stasis but rather a transition *back* to the everyday challenges of healthy, holistic balance.

Theoretical-Practical 2: Hypnotic/Hypnoid Birds

Yet to fully understand the connection between psychical balance, the underlying psychical-physical processes, and Breuer's encompassing conception of holistic balance, we need to take another step back in time, via the hypnoid state. Breuer and Freud were already using the term *hypnoid* in their conjoint drafts for the preliminary communication;[123] it of course took center stage in that subsequent publication—"the

---

the French *double conscience*, the former in the preliminary communication and the latter in the theoretical chapter). Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:91 / *SE* 2:12; and Breuer, "Anna O," in *GW* suppl.:239 / *SE* 2:42.

123 Breuer and Freud, "Beiträge zu den 'Studien über Hysterie,' " in *GW* 17:17–18 / *SE* 1:149–50.

basis and prerequisite of hysteria is the existence of hypnoid states."[124] The term served at once to distinguish artificially produced hypnotic states and to encompass more than just autohypnoses, though these latter were the clearest instantiation of hypnoid states.[125]; Breuer, however, didn't fully explain the term's origin or delineate exactly the limits of its use.[126] But his scientific engagement with such hypnosis-adjacent states in fact extended back to his earliest work on the inner ear and his first treatise on the static sense. There, and throughout his physiological research into balance, he returned several times to *hypnotic birds* as experimental subjects—birds who in fact continued to produce compensating movements, the most basic expression of the static sense.

In Breuer's first major essay on the semicircular canals, he used two simple examples to set out his theory of endolymph flow via the phenomenon of compensating movements:

124 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:91 / *SE* 2:12 (translation modified). {"Grundlage und Bedingung der Hysterie ist die Existenz von hypnoiden Zuständen."}

125 On the relation of hypnoid, hypnotic, and autohypnosis, see Breuer, "Theoretisches," in *GW* suppl.:275–76, 278–79 / *SE* 2:216–17, 219–20.

126 Breuer credited the neurologist Paul Julius Möbius with important work on the pathogenic nature of certain hypnosis-like states. Breuer, "Theoretisches," in *GW* suppl.:274–75 / *SE* 2:215. Regarding the term *hypnoid* itself, Hirschmüller finds it first used in the second edition of Eulenburg's handbook from 1887, in the entry on hypnotism by the physiologist William Preyer. It was only really used in passing there and not thematized as distinct from artificially produced hypnotic states. Hirschmüller further implies that *hypnoid* was built on the model of *epileptoid*, which had already been used in the 1860s by the psychiatrist Wilhelm Griesinger. *Epileptoid* was also used, along with the term *cataleptoid* (a.k.a. *pseudocataleptic*, both attributed to Charcot), in Preyer's entry for Eulenburg; in each case, the *-oid* implied a state or phenomena similar to proper epileptic and cataleptic ones but not necessarily those exactly. Hirschmüller, *Josef Breuer* [English] 370n177; Eulenburg, *Real-Encyclopädie der gesammten Heilkunde*, 2 ed., s.v., "Hypnotismus," 10:61, 62, 94, 97, 122; and Griesinger, "Ueber einige epileptoide Zustände." In the preliminary communication, Breuer and Freud used the term *epileptoid*, using it to name the first of phase of Charcot's four-phased hysterical attack and to refer generally to epileptic-like convulsive attacks (and had used it already in the drafts); Freud had earlier used it in this sense in his encyclopedia articles on hysteria in 1888. Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:4, 13 / *SE* 2:82, 93; and "Beiträge zu den 'Studien über Hysterie,' " in *GW* 17:9–10 / *SE* 1:151–52; and Freud, "Hysterie," "Hysteroepilepsie," in *GW* suppl.:42, 91n2 / *SE* 1:42, 58n2. Breuer was apparently fond of the *-oid* formation, coining *teloid* to avoid certain difficult questions attending to the concept proper of *teleological* (viz., that any telos or purpose had to imply an idea of purpose [*Zweckvorstellung*] and thereby a consciousness to have that idea). Breuer, "Krisis des Darwinismus," 51. The term *hypnoid* in fact predated all this, being used earlier in the century in botany texts (in both English and German) as the vernacular adjective for mosses in the genus *Hypnum*. *OED*, s.v. "hypnoid, *adj.* 1," accessed 23 March 2021, https://www.oed.com/view/Entry/90423.

before he described the self-observation of ocular nystagmus, as outlined above, he reached for a slightly more obscure but broader example of the "energetically compensating" movements aimed at producing balance: "If you take a bird in the hand and turn it around the longitudinal axis, the head remains nevertheless in its ordinary position with the crown facing up. This even happens when the animals (e.g., chickens) are not awake but rather in that strange cataleptic state, which [the physiologist Johann] Czermak (whom we have to thank for this nice experiment) called hypnotism. The hypnotic chicken, turned around the longitudinal axis, holds its head in its position through compensating left-rotation and raises one leg into the air, the other sticking out."[127]

In this, and almost all the references to hypnotic birds in his physiology, the emphasis was on the fact that *even when "hypnotic," the birds still worked to maintain balance via compensating movements*.[128] Breuer had returned publicly to questions of the static

127 Breuer, "Function der Bogengänge des Ohrlabyrinthes," 82. {"Nimmt man einen Vogel in die Hand und dreht ihn um seine Längsachse, so bleibt der Kopf doch in seiner gewöhnlichen Stellung mit dem Scheitel nach oben. Das geschieht auch, wenn die Thiere (Hühner z. B.) nicht wach, sondern in jenem sonderbaren kataleptischen Zustande sind, welchen Czermak (dem wir diesen Hübschen Versuch danken) Hypnotismus nannte. Das hypnotische Huhn, um die Längsachse nach rechts gedreht, hält den Kopf durch compensirende Linksdrehung in seiner Lage und hebt das eine Bein in die Höhe, das andere ausstreckend."} Breuer almost certainly learned of Czermak's experiments via his friend and colleague, the physiologist Ernst Fleischl. Fleischl was Czermak's nephew and had made a research trip to Leipzig in 1872, when Fleischl assisted Czermak in some of the hypnotic-bird experiments. Czermak himself presented the experiments as of broad interest to nervous physiology—phenomena that were at once quite striking, easy to reproduce, and popularly known for hundreds of years, while remaining underresearched. His starting point was a brief description by the Renaissance polymath Athanasius Kircher of the phenomenon from 1646, which Kircher called "Experimentum mirabile: De imaginatione Gallinae" (A marvelous experiment: On the mental image of hens). Czermak, " 'Hypnotische' Zustände bei Thieren."

128 The matter is somewhat confused by the fact that Breuer used *hypnotic* to refer to two different states: the first was the reflexless, nearly cataleptic state produced by Czermak's hypnotism; the second was a similar state but resulting from physical vivisectional interventions, such as transection of a canal or extirpation of apparatus. The states were not equivalent, and compensating movements (e.g., nystagmus) did not persist in the latter, due in part to the transection and in part to the distinct cause of the hypnosis (here physical shock rather than hypnotic procedure). So for instance, Breuer's longer treatise of 1875 only used *hypnotic* in this latter sense. Breuer, "Beiträge zur Lehre vom statischen Sinne," 100, 108–9, 111. He was, nevertheless, repeatedly clear about the preservation of such movements after nonvivisectional hypnosis. This double-sense of *hypnotic* shows that the term had some generic purchase beyond the specific effects brought about by hypnosis and that Breuer thus used the term pragmatically; his insistence on the importance of compensating movements and their persistence in the first hypnotic states across decades of publications, however, seems dispositive on the concept's particular importance to Breuer.

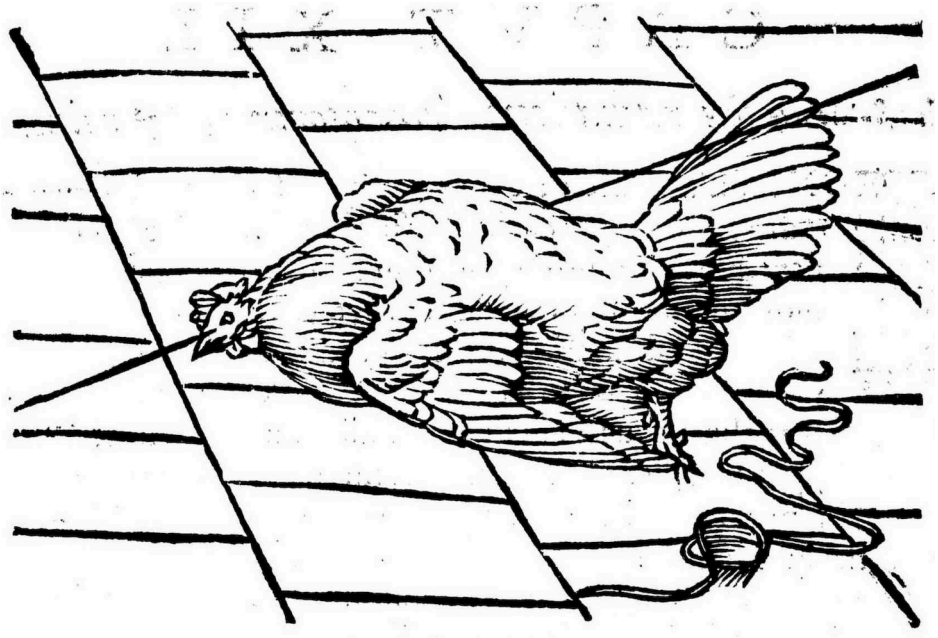

Figure 5.3. Illustration of Athanasius Kircher's "marvelous experiment" (1646): a hypnotic hen. Kircher, "Experimentum mirabile," 155.

sense and the inner ear in 1889, with a brief account of some new experiments on the semicircular canals, before publishing his major treatise on the otoliths in 1891;[129] he referred directly to this phenomenon of the preservation of compensating movements in hypnotic birds in his two longer texts dealing again with the canals, from 1897 and 1903.[130] As he wrote in 1897, rebutting the physiologist Elie von Cyon, who had initiated an intense polemic against Breuer, "As is well known, birds enter very easily into hypnotic states, in which reflexes are absent. Yet the failure of compensating movements is a relatively rare exception, even in pigeons."[131] Six years later, he analogized such a phenomena to the birds' ability to sleep sitting up on a branch, and insisted on its importance for his work: "At

129 Breuer, "Neue Versuche an den Ohrbogengängen"; and Breuer, "Ueber die Function der Otolithen-Apparate."

130 Breuer, "Ueber Bogengänge und Raumsinn," 634, 637–39; and Breuer, "Studien über den Vestibularapparat," 366–67.

131 Breuer, "Ueber Bogengänge und Raumsinn," 634. {"Die Vögel geraten bekanntlich sehr leicht in hypnotische Zustände, in welchen Reflexe ausbleiben. Doch ist das Versagen der compensirenden Bewegungen auch bei Tauben eine relativ seltene Ausnahme."}

any rate, with a pigeon in this state, we have before us an animal whose labyrinth reactions persist while still all spontaneity has died out. This seems to me a most desired behavior for our experiments."[132]

Breuer's longstanding work with hypnotic birds is of interest in part because it forms a crucial part of the connection between between hypnosis and the theory and treatment of hysteria, which has long occupied a major part of the historiography of early psychoanalysis and *Studien über Hysterie*.[133] But even more compellingly, this conception of the hypnotic state in animals points to a crucial aspect of psychical balance. For Breuer, psychical balance was a condition of the mind just as physical balance was a condition of the body. Just as even while hypnotized, pigeons were subject to the *larger* impulse of equilibrium and that of physical balance, so was a patient, in the midst of a hysterical attack or simply under the influence of the second state of a split psyche, still subject to the same impulse of equilibrium and that of psychical balance. The connection in balance between physical and psychical balance and their parallel hypnotic/hypnoid states was such that in the paper of 1897, two years after *Studien* was published, Breuer at one point employed the human "hypnoid state" when referring to what he usually called the hypnotic state of pigeons.[134]

132 Breuer, "Studien über den Vestibularapparat," 367. {"Jedenfalls haben wir bei einer Taube in diesem Zustande ein Tier vor uns, dessen Labyrinthreaktionen bestehen, während alle Spotaneität noch erloschen ist. Dies scheint mir für unsere Versuche ein höchst erwünschtes Verhalten."}

133 Hirschmüller of course details Breuer's many encounters with hypnosis, which started before the Czermak experiments in 1868 with demonstrations by the neurologist Moritz Benedikt, leading up to his encounter with Pappenheim. Hirschmüller, *Josef Breuer* [English], 91–95. It does seem to me that Hirschmüller underrates the importance of the bird experiments—the only work of Breuer's with hypnotism of which we have direct evidence—as against other influences in the air in Vienna. My contribution here is in part to show how and why this is the case. For a more recent account of the intersection of hypnosis and medical practice in Vienna at this time, see Mayer, *Sites of the Unconscious*, esp. chap. 5, 6.

134 Breuer, "Ueber Bogengänge und Raumsinn," 638–39. Here Breuer was discussing the persistence or not of a pigeon's head nystagmus when blinded, about which he and his opponent, Elie von Cyon, had slightly though not significantly different results (Breuer thought they did continue in the majority of cases, Cyon only in the minority and then in a reduced level). "The hypnoid states that pigeons so easily obtain also set in under a hood," wrote Breuer, "and then have the nystagmus disappear." Ibid. {"Die hypnoide Zustände, welche die Tauben so leicht bekommen, treten auch unter dem Häubchen ein und lassen dann den

In *Studien über Hysterie*, Breuer did at one point explicitly conjure up this linkage between his thinking on physical and psychical balance via the hypnoid state. Explaining the many routes hysterical conversion could take, he noted the possibility of "anomalous somatic phenomena" that discharged the excitation, using Pappenheim's tussis nervosa as an example.[135] To this he added a footnote citing a relevant passage from Ernst Mach's book on the inner ear and the static sense, *Grundlinien der Lehre von den Bewegungsempfindungen* (*Fundamentals of the Theory of Movement Perception*). Mach wrote of feeling nauseous when, in his motion-based self-experimentation on vertigo, he could not reconcile the sensation of movement with the optical impressions. Breuer commented, "This is nothing less than the physiological schema for the generation of pathological, hysterical phenomena through the coexistence of vivid and incompatible ideas."[136] Breuer's use of hypnotic states in birds in his research on the very same topic as Mach's was also just such a physiological schema for an aspect of psychical functioning related to hysteria.

Nystagmus verschwinden."} There's something wonky here, because Breuer elsewhere explicitly affirmed the *persistence* of nystagmus in hypnotic states. Either the hypnoid states that result from covering the eyes were *distinct* from the other hypnotic states (which would go against his entire point in this paragraph as well as elsewhere—that nystagmus was *unrelated* to ocular stimulus and generated solely through the labyrinth) or there was some sort of mistake in conveying what happened here (whether a typo, which Breuer suggested on that very page about a passage of Cyon's he couldn't parse, or some other issue). The latter seems more likely, as his longer mention of hypnotic pigeons six years later again dealt with the relation of discontinued optical stimuli, such hypnotic states, and the persistence of balance, and here he explicitly affirmed his basic claim. Breuer, "Studien über den Vestibularapparat," 366–67. Regardless of this difficulty, my point here is the slippage of terms, from the human *hypnoid* in *Studien* of 1895 to the pigeon *hypnoid* in 1897.

135 Breuer, "Theoretisches," in *GW* suppl.:269 / *SE* 2:210 (translation modified).

136 Breuer, "Theoretisches," in *GW* suppl.:269n2 / *SE* 2:210–11n2 (translation modified). {"Das ist geradezu das physiologische Schema für die Entstehung pathologischer, hysterischer Phänomene durch die Koexistenz lebhafter, unvereinbarer Vorstellungen."} The original Mach quotation is *Grundlinien der Lehre von den Bewegungsempfindungen*, 123.

Breuer recognized that his encounter with Pappenheim was special. Most simply, it provided the "chance observation" leading to a new "therapeutic-technical procedure." Its details were intricate and extensive but it clearly possessed the most prominent and significant elements of hysteria—a tension that made it the perfect case history. This tension between the particular and the general allowed him to build his entire theoretical edifice of hypnoid hysteria around her case and their encounter. Breuer himself recognized this tension: "Although I have suppressed a large number of quite interesting details, this case history of Anna O. has grown bulkier than would seem to be required for an in-itself not-unusual hysterical illness."[137] He continued, "The interest of this case seems to me above all to reside in the almost complete transparency and explainability of its pathogenesis."[138]

But the encounter was special for one further reason: the intensity and depth of the physician-patient relationship. Breuer also recognized this, introducing Pappenheim to the public as a "patient whose life became known to me to an extent which one person's life is seldom known to another."[139] Approaches to this facet of their encounter usually go via the "standard version" of the story centered on Pappenheim's supposed hysterical pregnancy and the subsequent breakdown and failure of treatment—about which there is no contemporary material evidence (as discussed in the introduction to these

137 Breuer, "Anna O," in *GW* suppl.:238 / *SE* 2:41 (translation modified). {"Soviel nicht uninteressanter Einzelheiten ich auch unterdrückt habe, ist doch die Krankengeschichte der Anna O . . . umfangreicher geworden, als eine an sich nicht ungewöhnliche hysterische Erkrankung zu verdienen scheint" (ellipsis in original).}

138 Breuer, "Anna O," in *GW* suppl.:239 / *SE* 2:41 (my translation). {"In der weitgehenden Durchsichtigkeit und Erklärbarkeit seiner Pathogenese scheint mir vor allem das Interesse dieses Falles zu liegen."} Breuer compared the qualities of the case to those of the eggs of a sea urchin whose transparent protoplasm was crucial for embryology and thus the study of life more broadly.

139 Breuer, "Anna O," in *GW* suppl.:221–22 / *SE* 2:21–22. {"Die Kranke, deren Leben mir durchsichtig wurde, wie selten das eines Menschen einem andern."}

chapters). I propose instead to consider it via the framework of *balance*: alongside physical and psychical dimensions, Breuer developed in his everyday practice as a physician an interpersonal dimension. Viewed from this everyday practice as one of Breuer's many patients, Pappenheim and her encounter with Breuer seem much less special, and that which needs explanation shifts from the question of *what really happened* to how the personal balance lost its sway.

This particularly intense nature of the Breuer-Pappenheim relationship was expressed at the time by both parties. Writing to Robert Binswanger, the director the Bellevue Sanatorium, about Pappenheim's arrival there in June 1882, Breuer signed off, "In hopes of knowing that the patient, who always meant a great deal to me, will soon be safely in the best upbringing with you."[140] The relationship had been built, of course, in their nearly two years of daily visits; it had taken its intense cast during the first winter when Breuer was her doctor, corresponding to the second phase of Pappenheim's illness, from December 1880 to April 1881. After her father died on 5 April, she entered a new stage with longer and more intense absences. Yet "only for me was she always present," Breuer wrote of this stage, "she knew me as soon as I entered, and she remained present as long as I spoke with her, save for the passing hallucinatory absences that were always intervening all of a sudden."[141] The extent of this conditionally presence for Breuer was great, as she only ate while he was there, and when he had to travel to Berlin, her anxieties and hallucinations grew worse. This was of course the beginnings of the "talking cure," the removal of stored-up agitation by telling stories.[142]

140 Breuer to Binswanger, [13–16?] June 1882, D 25, Hirschmüller Documents, Deu. 366 / Eng. 294. {"In der Hoffn<un>g, die Kranke, an der mir immer sehr viel lag, bald bei Ihnen in Sicherheit u<nd> bester Erzieh<un>g zu wissen" (editor's interpolations).}

141 Breuer, Pappenheim case history (D 23), p. 14. {"Nur für mich war sie immer präsent, kannte mich, sobald ich eintrat, blieb auch so, so lang ich mit ihr sprach, bis auf die immer ganz plötzlich dazwischen fahrenden, vorübergehenden hallucinatorischen Absencen."}

142 Breuer, Pappenheim case history (D 23), p. 14–18.

Neither party spoke publicly of their encounter after the publication of *Studien*. But Breuer did discuss it in a letter to the Swiss psychiatrist Auguste Forel in 1907.[143] "Thus I learned a great deal at that time, much of scientific value," he wrote, "but also something of practical importance: That it is impossible for a 'general practitioner' to treat such a case without his activity a. form of life being totally destroyed. I pledged at that time to myself that I would *not* again go through such an ordeal."[144] To understand what raised their encounter from the intimacy they both recognized to "an ordeal," we have to understand the "form of life" (*Lebensführung*) that was destroyed: that of a "general practitioner." It was in self-proclaimed vocation, given in English and in scare quotes, that Breuer's personal balance took shape.

After receiving his medical degree in 1864, Breuer had pursued an academic career, practicing at the Allgemeines Krankenhaus and pursuing research in several different laboratories, notably Ewald Hering's physiological one. His main affiliation was as assistant in the internal medicine clinic of Johann Oppolzer; upon Oppolzer's death in 1871, Breuer did not receive the call as successor and then left the hospital, starting his private practice. He nevertheless continued to pursue in part a scholarly career, receiving his habilitation in early 1875 based on his physiological work with Hering and then his first major work on the semicircular canals. Ultimately though this path was filled with frustrations, including

143 Forel was a famous neuroanatomist, former director of the Burghölzi Asylum in Zürich, and significant player in medical debates about hypnosis. He had written to Breuer asking for information about *Studien über Hysterie* and Breuer's early work with Freud (the letter is not preserved). It was part of a number of inquiries and correspondences Forel made at the time about psychoanalysis, spurred by the growing tension in its relation to psychiatry and institutional medicine and questions about Freud's particular control of the new science. Forel ultimately advocated for a non-Freudian "psychanalysis" (sans *o*). See, on Forel, Makari, *Revolution in Mind*, 180–86; Bynum and Bynum, *Dictionary of Medical Biography*, s.v. "Forel, August," 2:508–9; and, on Forel's role in this part of the history of psychoanalysis, Borch-Jacobsen and Shamdasani, *The Freud Files*, chap. 1, esp. 69–71.

144 Breuer to Auguste Forel, 21 November 1907, in Ackerknecht, "Anteil an der Psychoanalyse," 170. {"So habe ich damals sehr viel gelernt; viel wissenschaftlich wertvolles; aber auch das practisch wichtige, daß ein 'general practitioner' unmöglich einen solchen Fall behandeln könne, ohne daß seine Tätigkeit u. Lebensführung völlig dadurch zerstört würde. Ich habe mir damals gelobt, noch einmal durch ein solches Ordal *nicht* zu schreiten."}

low salary, bureaucratic opacity, and challenges procuring patients for research purposes, and Breuer eventually gave up his *venia legendi* (right to teach) in 1885.[145]

Despite Breuer's continued physiological research and desire for academic recognition, his commitment to practical doctoring was not merely a fallback or a source of income. Upon graduating from gymnasium in 1858, "while some of my classmates decided their choice of profession by counting off their coat buttons," he wrote in his memoir, "I was already determined for a long time to become a physician."[146] And while such a choice was conditioned equally by natural-scientific interests as practical-vocational ones, Breuer's draw to Oppolzer and his clinic was clearly weighted by a practical orientation. Oppolzer was the second chair of internal medicine in Vienna and known for his therapeutic and clinic skills, especially in contrast with the first chair, Joseph Skoda;[147] Breuer wrote glowingly of Oppolzer as "a warmly well-meaning and paternal friend and a loved role model."[148] He made his aims in joining Oppolzer's clinic clear in a letter to his friend Ignaz Brüll, later a famous pianist and composer, even if the aims were condition by obligation of his sort: "My prospects are becoming really good, and I am pretty much certain in getting the position with Oppolzer; a. even if I can't mint a practice out of it—bonheur oblige for our sort—then it will nevertheless probably work out soon enough on this count."[149]

145 Hirschmüller, *Josef Breuer* [English], 17–29.

146 "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers, p. 15. {"Während tatsächlich einige meiner Mitschüler die Berufswahl durch Abzählen der Rockknöpfe entschieden, war ich schon lange entschlossen, Arzt zu werden."}

147 Lesky, *Vienna Medical School*, 117–27. Oppolzer and Skoda shared an emphasis on new scientific ideas and techniques, but Skoda was a representative of the new pathological anatomy (associated with Carl Rokitansky) whereas Oppolzer emphasized physiology (associated with Wilhelm Griesinger).

148 "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers, p. 20. {"Mir war er ein herzlich wohlmeinender, väterlicher Freund und ein geliebtes Vorbild."}

149 Breuer to Brüll, 24 September 1866, box 1, Breuer Papers, p. 3. {"Meine Aussichten werden recht gut, ich habe so ziemlich Sicherheit die Stelle bei Oppolzer zu bekommen, u. wenn ich auch nicht Praxis draus prägen kann, denn bonheur oblige unsereinen, so wird es doch auch in diesem Betracht schon gehen."} Hirschmüller emphasizes that positions such as Breuer's at Oppolzer's clinic were aimed at an academic career; but he further notes that Breuer did little to follow this path in his years there (e.g., he married,

Once Breuer did move into private practice, he maintained and personally amplified many of his academic connections. "Gradually I had the honor of becoming physician to a not meager number of professors from our faculty. . . . [They] entrusted themselves and their families to me, a fact which filled me with great joy," Breuer remembered in his memoirs.[150] This *joy* characterized his practice at large. His emotional ties to his patients and theirs to him were evidenced in the effusive speech given by the physiologist Sigmund Exner, Breuer's friend, colleague, and patient, delivered for Breuer's seventieth birthday:

> The sensations by which we feel ourselves bound to you do not rest on an intellectual basis. They are raised and refined through mental interests, but the soil from which they grow—that is your heart, that is your essence, permeated by infinite goodness and at the same time remaining free from all sentimentality. . . . There is scarcely one among us who, in the most severe and hard times of life, has not withstood the nearly unwithstandable and found the way back to life's path supported by the power of your spirit and snuggled on your sensitive chest.[151]

The speech, signed by over a hundred, was accompanied by a sum to endow a Breuer memorial fund for scientific lectures or prizes. Breuer responded with similar sentiments,

---

published little, and did not attempt to habilitate). Moreover, Breuer made a relatively quick exit to private practice after Oppolzer's death. So while Breuer clearly had scholarly and academic ambitions, they seemed equaled by an interest in practical matters, whether in or out of the hospital or other academic settings. Hirschmüller, *Josef Breuer* [English], 21–23. On a related note, in Breuer's letter to Brüll, it's unclear whether "Praxis" here referred expressly to clinical practice, to private practice, or to both; moreover so is what Breuer meant by "bonheur oblige for our sort," but likely implies the necessity of such a practice for the happiness of Jewish doctors or at least for his family, who were not particularly rich.

150 "Dr. Josef Breuer, 1842–1925," box 2, Breuer Papers, pp. 21–22. {"Allmählich hatte ich die Ehre, Arzt einer nicht geringen Anzahl von Professoren unserer Fakultät zu sein; Brücke, Exner, Fleischl, Dumreicher, Billroth, Gersuny, Chrobak, Frisch, Kaposi, Schnabel haben sich und die Ihrigen mir anvertraut, was mich mit großer Freude erfüllte."}

151 Sigmund Exner, greetings address, D 14, Hirschmüller Documents, Deu. 328 / Eng. 259–60. {"Die Empfindungen, durch die wir uns an Dich gebunden fühlen, ruhen nicht auf intellektueller Basis. Sie werden durch die geistigen Interessen erhöht und veredelt, aber der Boden, aus dem sie hervorwachsen, der ist Dein Gemüt, ist Dein von unendlicher Güte durchdrungenes und dabei jeder Sentimentalität ferne stehendes Wesen. . . . Und kaum einer ist unter uns, der nicht in den schwersten und härtesten Zeiten seines Lebens, durch die Kraft Deines Geistes gestützt und angeschmiegt an Deine fühlende Brust das schier Unüberstehbare überstanden und auf den Pfad des Lebens zurückgefunden hat."} Overly effusive language was of course a hallmark of nineteenth-century (here early twentieth) speech. Yet the emphasis here was clearly on Breuer's emotionally inflected practice, recognized and reciprocated by his patients, regardless of any exaggerated language.

writing about the speech, "That which lies beneath it—your friendship and love and the kindness with which so many people associated themselves—that I accept with deep gratitude as one of the most valuable possessions of my old age."[152] Of course, the most significant testament to this emotional connection between physician and patient was the decades-long correspondence Breuer maintained with Marie von Ebner-Eschenbach, which occupies the center of the previous chapter.

While many of the concrete aspects of Breuer's sensitivity, goodness, and dedication were of course limited to in-person interactions, outside of material evidence, some can be seen in letters to several other "patient-friends" (as he called Ebner-Eschenbach), Rudolf Chrobak and Friedrich and Margarethe Jodl. In recovering from some undetermined malady, including something like hemiplagia, Chrobak had fallen into a depression, convinced he had a brain injury. "But that I shouldn't think of you," Breuer wrote in response to a request from Chrobak, "that I cannot offer. I think always of you: in joy when [my son] Robert writes that you are really further recovering, and in sadness when I hear from him that you are nevertheless depressed."[153] Breuer went on to take seriously Chrobak's worries about neurological issues, while giving concrete advice about moving forward mentally and holistically.[154] To Friedrich and Margarethe Jodl, Breuer offered advice on dealing with Friedrich's new and evolving heart issue, prescribing some pills but also encouraging him to become accustomed to his "sensitive" organ. "I would like to have you a bit 'mithridatized' by carefully dosed agitation," he told Friedrich, before turning to

152 Breuer to Exner, 18 January 1912, D 15, Hirschmüller Documents, Deu. 333 / Eng. 264–65. {"Aber was dahinter steht, Deine Freundschaft und Liebe und die Freundlichkeit, mit der so viele sich angeschlossen haben, die nehme ich mit tiefer Dankbarkeit an, als eines der wertvollsten Besitztümer meines Alters."}

153 Breuer to Chrobak, 7 August 1909, box 1, Breuer Papers. {"Aber dass ich nicht an Sich denken soll, das kann ich nicht bieten. Ich denke immer an Dich; in Freude wenn mir Robert schreibt, dass Du Dich weiter recht erholst und in Betrübnis, wenn ich von ihm erfahre, dass Du trotzdem so deprimiert bist."}

154 Breuer to Chrobak, 7 August, 5 September 1909, box 1, Breuer Papers.

Margarethe: "What do you think, dear gracious lady: Might someone there be found with whom your husband could fall a bit in love? Not too much of course!"[155]

Breuer in fact conceptualized the emotional relations that characterized practical doctoring, marking out his work there from the concerns of his physiological research. In 1903, he wrote to the philosopher Franz Brentano (who had become a patient of Breuer's via marriage to Ida von Lieben) about the complications the curative aspects of medicine introduced into the process of scientific judgment.[156] When faced with a patient whose fever and cerebral symptoms equally point to typhus, most likely nonfatal, and miliary tuberculosis, most likely fatal, the engaged physician responded differently than the scientific researcher, who was restrained by the evidence from offering one diagnosis over the other. "But when it's a matter of a dear person," he wrote,

> the clinician may perhaps say, I don't know which of the two diagnoses is right, but I hope that it's typhus and there is a chance of recovery. I am then not simply a clinical professor but also this patient's working physician. As such I will act entirely differently if I have a case of typhus before me then I would in another case. Only in the former will I be able to do anything at all that would be helpful. Therefore I hope it's typhus; I act as it it were; but I remain aware that this is a matter of hoping belief and scientifically not secured.[157]

155 Breuer to the Jodls, 19 November 1909, box 1, Breuer Papers, p. 13. {"Ich möchte Sie auch gerne durch wohldosierte Aufregungen etwas 'mithridatisieren' lassen; was meinen Sie, liebe gnädige Frau, fände sich vielleicht jemand dort, in den Sich Herr Gemahl etwas verlieben könnte? Nicht zu viel natürlich!"}

156 Breuer and Brentano exchanged a number of letters regarding teleology, deism, and the physicist Gustav Theodor Fechner around the turn of the century (after Brentano had already left Vienna), of which Hirschmüller includes three from Breuer to Brentano. Breuer to Brentano, D 10–12, Hirschmüller Documents.

157 Breuer to Brentano, March 1903, D 11, Hirschmüller Documents, Deu. 313 / Eng. 246. {"Aber wenn es sich dabei um einen teuren Menschen handelt, dann darf auch der Kliniker sagen, ich weiß nicht, welche der beiden Diagnosen richtig ist, aber ich hoffe, es sei Typhus, und eine Chance der Genesung sei vorhanden. Auch bin ich nicht bloß klinischer Professor, sondern auch der tätige Arzt dieses Kranken. Als solcher werde ich ganz anders handeln, wenn ich einen Typhus vor mir habe, als im anderen Falle. Nur im ersteren werde ich überhaupt etwas tun können, was hilfreich wäre. Darum hoffe ich, es sei Typhus; ich handle, als wäre dem so; aber ich bleibe mir dessen bewußt, daß dies Sache des hoffenden Glaubens ist und wissenschaftlich nicht gesichert."}

In his investigations of the inner ear, Breuer had no need for such hoping belief against scientific knowledge; there was no "dear person" in danger.[158]

One such "dear person" was the composer Johannes Brahms, who came into Breuer's care right at the end of Brahms's life.[159] Breuer directly expressed the particularly emotion-laden role of the physician in a letter on Brahms's care sent to to the physiologist and music patron Theodor Wilhelm Engelmann. Based on certain symptoms, including "a spherical object of the size of an small apple," Breuer believed Brahms to have liver cancer. But a few countersymptoms, including Brahms's enormous appetite, gave Breuer pause. "So I am *hoping against hope* that it may be syphilitic hepatitis; or rather, I don't hope for that, but naturally I don't want to give up on even the lowest and most distant possibility that would offer a better prospect. So I had him take iodine sodium in any case. But as I said, without faith."[160] Though Brahms was not part of Breuer's social circle or a friend, he still, as a patient in need, exerted the emotional pull that demanded more than just a scientific answer in response from the physician. Even if that response was "hoping against hope," Breuer was committed to it and played it through to the end.

This was the basic condition of Breuer's personal balance: he *cared*. His patients knew this and responded in kind. One of these patients, Emilie Exner, described such emotional balance in her tract on gender relations, *Die Emancipation in der Ehe* (1895; Emancipation in marriage); the argument took shape as a series of letters from a patient to her now-moved-away physician: "That a spiritual rapport, for whose nuance our language

158 Breuer immediately moved on to the question of hope with regards to "scientific certainty" but in so doing left behind the question of doctor and patient. Breuer to Brentano, March 1903, D 11, Hirschmüller Documents, Deu. 313 / Eng. 246.

159 See, on the end of Brahms's life and the part played by Breuer, as well as his son, including a letter from Breuer to the author echoing the question of "dear person" explored here, Kalbeck, *Johannes Brahms*, 511–18.

160 Breuer to Engelmann, 9 February 1897, Mus.ep. Breuer, J. 1, Musikabteilung, Staatsbibliothek zu Berlin ("hoping against hope" in English). {"Ein kugeliges Gebilde von der Grösse eines kleinen Apfels." "So bin ich hoping against hope, dass es vielleicht doch Hepatitissyphilitica sei; oder vielmehr ich hoffe das nicht, aber ich will natürlich auch nicht auf die geringste u. entfernteste Möglichkeit verzichten, die bessere Aussicht böte. So lass ich ich ihm auf alle Fälle Jodnatrium nahmen. Aber wie gesagt, ohne Glauben."}

has no term, is produced under these circumstances is something that every compassionate physician should have experienced for themselves."[161] Breuer's emotion begot the patient's, and they continued from there. This interpersonal balance undergirded the duo-talk that occupied my last chapter and itself transformed into the *talk* of the "talking cure." Without such balance, the Pappenheim-Breuer encounter would not have taken this route and the "talking cure" left unobserved, unnamed, and undescribed.

Viewed from this perspective, the difference between Pappenheim and Exner, Brahms, Jodl, Chrobak, Ebner-Eschenbach, and every other of Breuer's patients *wasn't* emotional investment. Such emotion was part and parcel of Breuer's doctoring, and each of them was a "dear person" who demanded an approach of "hoping against hope." Instead it was precisely the *disturbance* of this personal balance that turned into an "ordeal" and derailed Breuer's "form of life." As I've already asserted, *what* exactly disturbed this balance remains, with the current evidence base, unknowable; but the *how* we do know: the "talking cure."

Though Breuer took into account broader contextual and holistic factors in his doctoring (e.g., his advice to Chrobak and Jodl), he was by and large committed to direct interventional treatments, especially with drugs. His use of chloral and morphine with Pappenheim resulted in her addiction; drugs were similarly his main recourse for Ebner-Eschenbach's many pains.[162] "When it came to such symptoms in his family," remembered Ernst Hammerschlag, Breuer's grandnephew by marriage, "the old Dr. Breuer didn't think

161 Exner, *Die Emancipation in der Ehe*, 3. {"Daß sich unter diesen Umständen ein geistiger Rapport herstellt, für dessen Nuance unsere Sprache keine Bezeichnung hat, dürfte jeder teilnehmende Arzt an sich erfahren haben."}

162 From Breuer and Ebner's letters, we know that he prescribed bromine and cocaine to numb pain and assist with her ever-disturbed sleeping. But his advice extended beyond such newer pharmaceuticals (which also included strophanthin, "Glonvin," and phenacetin) to include matters of daily routine (sleeping, standing, lying down, and walking), hot-water compresses and bottles, the specifics of her spa cures, and the pros and cons of various possible summer and winter travel destinations. MEE and JB, May, June 1906; September, November 1907; 11, 14 April 1914; 8, 20 June 1915, in *Bw*, 84–90, 92–94, 141, 142, 143, 163, 164.

of psychotherapy but far sooner of codeine."[163] But the drugs were still part of the personal balance at play. In 1903, he prescribed bromine to Josephine von Knorr, a notable poet and friend of Ebner-Eschenbach's; in response to her hesitance, Ebner-Eschenbach gave the following advice, illustrating the role of drugs in this balance, "Bromine is like a good educator. Its purpose is to make itself dispensable. When I started to use it more than twenty years ago, I had to employ it often. Now months and months pass by before I need to test its never-failing healing power. Please, trust Breuer's advice."[164]

The "talking cure" was in a sense no different than such drugs: it was aimed first at relieving pent-up energy before turning toward specific symptoms and their removal. But the *mechanism* of the cure was entirely different. The very talk that composed the cure ultimately heightened the basic emotional elements present in his doctoring. The cure demanded regularity and repetition and, once it was turned toward specific symptoms, it acquired a new intricacy and depth. Of Pappenheim's many symptoms, Breuer only outlined the details of talking-away one—her inability to hear. They identified 7 different types of this symptom, with 303 total specific examples (ranging from 12 to 108 of each).[165] Breuer declared this detailed work to be "laborious,"[166] and it was via such work that he came to know his patient more intimately than most.

But this "laborious" work had another aspect: It took over his life as a scientific researcher. As Breuer recognized in his letters to Brentano and Forel, there was no clinical encounter that did not also have a component of scientific research; he was a practical

163 K. R. Eissler and Ernst Hammerschlag, interview, n.d. [ca. 1950?], box 115, Freud Papers, p. 32. {"Ich glaube, dass der alte Dr. Breuer, wenn es zu solchen Symptomen gekommen ist in seiner Familie, nicht an Psychotherapie gedacht hat, sondern weit eher an Codein."}

164 Ebner-Eschenbach to Knorr, 24 January 1903, in *Briefwechsel 1851–1908* 1:573 (no. 889). {"Brom ist wie ein guter Erzieher. Sein Zweck ist sich entbehrlich zu machen. Als ich es vor mehr als zwanzig Jahren zu gebrauchen anfing, mußte ich es oft anwenden. Jetzt vergehen Monate und Monate bevor ich seine nie versagende Heilkraft zu erproben brauche. Bitte, vertraue dem Rate Breuers."}

165 Breuer, "Anna O," in *GW* suppl.:234–35 / *SE* 2:36.

166 Breuer, "Anna O," in *GW* suppl.:236 / *SE* 2:38.

physician *and* a scientific researcher at once, not the former rather than the latter. The laborious work with Pappenheim ultimately required much of each persona. The case history of his encounter, prepared for Binswanger, was at least twenty-two-pages long (with probably the last quarter of the treatment not preserved), many times longer than the referral letters Breuer sent for the several other women he referred there.[167] Regarding his physiological work, Breuer noted, "My working hours are in the late evening and night and my workspace is therefore my house"; surely the intensity of his work with Pappenheim strained at the limits of these nights at home.[168]

To borrow from Breuer's own theoretical approach to tonic excitation in the brain: the Pappenheim-Breuer encounter had a double effect on his personal balance, at once practical-emotional and scientific-stimulative. But Breuer's "form of life" was not that of a brain, and there was no easy release of that scientific stimulation let alone for the agitation of his overemotional daily interchange with Pappenheim. In this way, his form of personal balance was pushed to its limit and ultimately broke out.

CONFESSION AND THE "TALKING CURE"

After her encounter with Breuer and subsequent published transformation into Anna O., Pappenheim only wrote publicly about psychoanalysis once, in 1929:[169] "Psychoanalysis

167 Hirschmüller found that Breuer sent a number of patients to Bellevue between 1881 and 1912 and recounts the details of three particularly relevant cases. He furthermore reproduced Breuer's referral letters for two of these cases, which add up to eight pages and six pages (though based on rough length, these were on smaller correspondence paper whereas Pappenheim's was on a larger sheet). Hirschmüller notes that these cases show that Breuer did not shy from neurological and psychiatric matters in his practice, let alone ones where sex played a part. Hirschmüller, *Josef Breuer* [English], 136–41; Breuer to Binswanger, on the cases of Emma L. and Clara B., D 37–39, Hirschmüller Documents, Deu. 383–87 / Eng. 309–312.

168 Breuer, "Ueber Bogengänge und Raumsinn," 626n2. {"Meine Arbeitszeit ist der Spätabend und die Nacht und darum mein Arbeitsraum meine Wohnung."}

169 Whether Pappenheim knew of her role in *Studien über Hysterie* and took an interest in the growing science of psychoanalysis has long been debated (along with who else in Vienna or Frankfurt knew of her identity as Anna O.). Most evidence relies on conjecture and memories of parties who had varying interests in the 1950s. The evidence is well summarized by Elizabeth Loentz: *Speak the Truth* 195–209. The most important newest

is in the hand of the physician as confession is in the hand of the Catholic clergyman: it depends on the user and the use whether it is a good instrument or a double-edged sword."[170] The proclamation was one of Pappenheim's dozen-plus "thoughts about upbringing" (*Gedanken über Erziehung*) privately composed over the previous decade and then published in the newspaper of the women's organization she had founded, *Blätter des Jüdischen Frauenbundes* (Paper of the league of Jewish women). At this point, her interest in psychoanalysis was from the perspective of an advocate for orphaned and otherwise disadvantaged young girls.[171]

Whether Pappenheim's own experience with Breuer played into her skeptical assessment is of course uncertain.[172] But the assessment did otherwise directly link to her encounter with Breuer, who used the very same analogy between the "talking cure" and confession in *Studien über Hysterie*. "Excitation caused by very vivid and incompatible ideas has a normal, appropriate reaction: communication through talk," Breuer wrote. "We find the urge to do this comically exaggerated in the story of Midas's barber, who spoke his secret aloud to the reeds; we find the same urge as one

---

research concerns Pappenheim's probable doctor in Frankfurt, Ludwig Edinger, who was the father-in-law of Dora Edinger (Pappenheim's first chronicler) and a prominent neurologist with an interest in Breuer and Freud's work. Kreft, "Zur Archäologie der Psychoanalyse in Frankfurt"; Kreft, "Anna O. und/oder Bertha Pappenheim"; for an English summary, see Skues, *History of Anna O.*, 160–63.

170 Pappenheim, "Gedanken über Erziehung." {"Die Psychoanalyse ist in der Hand des Artes, was die Beichte in der Hand des katholischen Geistlichen ist; es hängt von dem Anwender und der Anwendung ab, ob sie ein gutes Instrument oder ein zweischneidiges Schwert ist."}

171 Aside from Pappenheim personal history with and possible interest in psychoanalysis, it had grown tremendously in public stature during her professional life and was hotly debated in matters pertaining to the women's movement and children's upbringing and pedagogy, especially after 1910. It was not possible for Pappenheim to have played such a public role in those topics without encountering and engaging with psychoanalysis.

172 One of the subsequent "thoughts on upbringing" does suggest that Pappenheim did include her own upbringing as part of her consideration: "The sins of milieu against the children of the prosperous are just as frequent and just as large as those against the children of the impecunious—only that the prosperous bear more severe personal blame for the corruption and brutalization of children." Pappenheim, "Gedanken über Erziehung." {"Die Milieusünden an den Kindern der Wohlhabenden sind ebenso häufig und ebenso groß, wie die an den Kindern der Unbemittelten, nur daß die Wohlhabenden an der Verbildung und Verrohung der Kinder eine schwere persönliche Schuld trifft."}

of the basic factors of a grandiose historical institution—Catholic auricular confession. Communication relieves; it discharges tension even when it happens not with a priest and is not followed by absolution."[173] Breuer had already made the same analogy in the preliminary communication: "In other cases talking is itself adequate reflex, as lament for or as talking out the torment of a secret (confession!)."[174]

Freud made the same analogy separately in *Studien*, and the link between psychoanalysis and confession has since then been an object of significant attention.[175] Much of this attention places this link as part of a broader history of secularization, with newer medicalized discourses of the self taking over from older religious ones.[176]

173 Breuer, "Theoretisches," in *GW* suppl.:269 / *SE* 2:211 (translation modified). {"Die Erregung, welche durch sehr lebhafte und durch unvereinbare Vorstellungen erzeugt wird, hat eine normale, adäquate Reaktion: die Mitteilung durch die Rede. Wir finden den Drang danach in komischer Übertreibung in der Geschichte vom Barbier des Midas, der sein Geheimnis ins Schilf hineinruft; wir finden ihn als eine der Grundlagen einer großartigen historischen Institution in der katholischen Ohrenbeichte. Die Mitteilung erleichtert, sie entladet die Spannung auch dann, wenn sie nicht gegen den Priester geschieht und nicht von der Absolution gefolgt ist."} After this introduction of confession into the matter, Breuer used the term once more in an brief example of hysterical retention that Breuer treated. Ibid., 270 / 212.

174 Breuer and Freud, "Über den psychischen Mechanismus hysterischer Phänomene," in *GW* 1:87 / *SE* 2:8 (translation modified). {"In anderen Fällen ist das Reden eben selbst der adäquate Reflex, als Klage und als Aussprache für die Pein eines Geheimnisses (Beichte!)."} Breuer had used the verb *beichten* (to confess) more generically in one of the letters to Robert Binswanger at the Bellevue Sanatorium in 1882: "Today the patient is in a light hyst<ical> insanity, momentarily confessing all of her true a<nd> untrue delus<io>ns; she occasionally still sees rubbish, surveill<an>ce, espionage, a<nd> t<he> l<ike>, and acts really strangely during visits." Breuer to Binswanger, [13–16?] June 1882, D 25, Hirschmüller Documents, Deu. 366 / Eng. 293 (editor's interpolations). {"Heute ist die Kranke in leichtem hyst<erischem> Irresein, momentan im beichten aller wahren u<nd> unwahren Irreführ<un>gen, sieht gelegentlich noch dummes Zeug, Überwach<un>gen, Spionagen u<nd> d<er>gl<eichen>, benimmt sich bei Besuchen recht sonderbar."}

175 Freud's uses aren't always translated with the English *confession*. Freud, *Studien über Hysterie*, in *GW* 1:133, 151n, 192, 200, 207, 208, 285 / *SE* 2:79, 95n, 131, 139, 144, 145, 148, 282. For an early link between psychoanalysis and confession, see Bopp, *Moderne Psychanalyse, katholische Beichte und Pädagogik*.

176 The most famous enunciation of the link between secularization, medicalization, psychoanalysis, and confession was made by Foucault, first in the conclusion to *Madness and Civilization*, where psychoanalysis took over the structures of the modern asylum, moving them from a physical institution to a social relation between doctor and patient, and then in the *The History of Sexuality*, where the veneer of Victorian repression masked an incitement to speech, evident in both confession and psychoanalysis. For an attempt to elaborate Foucault's philosophical genealogy, both to include Foucault himself and to avoid his alternating attention on modern disciplinary forces and ancient self-cultivating ones, see Taylor, *The Culture of Confession* (including a relatively generic treatment of Pappenheim's comparison of psychoanalysis and confession, on 225–30). Henri Ellenberger includes Protestant *Seelsorge* (cure of souls) in his history of the unconscious and dynamic psychotherapy: *The Discovery of the Unconscious*, 43–46.

Or it emphasizes the literary and artistic aspects of this discourse of the self, connecting psychoanalysis to these aesthetic practices.[177] Yet one aspect of Breuer's and Pappenheim's analogy doesn't exactly fit these interpretations: the specific focus on auricular confession with a Catholic priest.[178] What did these two lifelong committed Jews know of the confessional booth?[179]

Both Breuer and Pappenheim were born to highly religious families: Breuer's father was a religious teacher (though with a modern bent), while Pappenheim's father had played a part in founding the Schiffschul, a breakaway Orthodox synagogue in Vienna.[180] In the Bellevue case history, Breuer described Pappenheim's lack of religiosity in contrast

177 Most relevant is Karlheinz Rossbacher's analysis of confessional writing in the rise of literature as the ersatz religion of the Bildungsbürgertum: "In the nineteenth century, writing, poetry in particular, was an accepted form of expressing oneself, a form of secularized confession. The modification consists in the fact that the monological-dialogical character of poems enables confessing on one's own behalf." Rossbacher, *Literatur und Bürgertum*, 382. {"Dichten, und besonders Lyrik, war im 19. Jahrhundert eine akzeptierte Form des Sich-Aussprechens, eine Form säkularisierter Beichte. Die Variante besteht darin, dass der monologisch-dialogische Charakter von Gedichten ein Für-sich-selbst-Beichten ermöglicht."}

178 The historiography on Christian confession and specifically Catholic auricular confession is enormous. My basic understanding derives from three shorter summary sources and one classic text on confession and the Counter-Reformation: Bilstein, "Die Beichte und ihre Bedeutung"; Krause and Müller, *Theologische Realenzyklopädie*, s.v., "Beichte," 5:411–38; Bernasconi, "The Infinite Task of Confession"; Bossy, "Social History of Confession." Two points are broadly relevant: The canonization of obligatory yearly confession at the fourth Lateran Council, in 1215, and further Counter-Reformation formalization of private confession at the Council of Trent (e.g., asserting the standard three parts [*contritio*, *confessio*, *satisfactio*], a new confessional booth, a shift from the social to the psychological in aims and effects) remained mostly in effect through the nineteenth century (especially in reaction to that century's surging anticlericalism, embodied in Michelet's attacks). At the same time, this extensive historiography has trouble taking into account the most fundamental aspect of confession: the question "of redemption, of absolution, of the liberatory experiences grounded in magic and sacrament, that nevertheless indeed make up confession's principal earthly result in the case of successful outcome" (per Bilstein). This is precisely the unknowable experience that at once undergirded the analogy between the "talking cure" and confession and makes it difficult to assess what exactly Breuer and Pappenheim meant when they invoked it. Bilstein, "Die Beichte und ihre Bedeutung," 624. {"Von einem ist in den vielen Untersuchungen zum Thema Beichte kaum je die Rede: Von der Erlösung, von der Absolution, von den magisch und sakramental fundierten Befreiungserlebnissen, die bei gutem Gelingen ja immerhin das irdische Hauptergebnis der Beichte ausmachen."}

179 Here Pappenheim and Breuer's emphasis on Catholic auricular confession is important. Judaism possesses a concept of confession, with which both would have been very familiar; at the same time, both Lutheran and reformed Protestantisms emphasized the practice of general (with the entire congregation) as opposed to private confession (though there were various remaining practices of private confession). But rather that pointing to their own traditions or the broader Christian tradition, they used the private Catholic practice.

180 Hirschmüller, *Josef Breuer* [English], 9–14; Loentz, *Speak the Truth*, 157–59, 223–24.

with that of her family's: "She is absolutely not religious; the daughter of very Orthodox pious Jews, accustomed to the most scrupulous compliance with the regulations for the sake of her father, she probably still holds on to these only for his sake. Religion played a roll in her life only as the object of silent struggles and silent opposition."[181] Pappenheim nevertheless ultimately devoted herself not only to Jewish social causes but to Jewish beliefs and spirituality, slowly developing her own spiritual and practical perspectives, especially regarding the role of women in Judaism.[182] Breuer, on the other hand, moved toward a Fechnerian ensoulment of the world in his spiritual beliefs, while remaining steadfastly committed to his Jewishness as an important social fact.[183] In 1894, he wrote a long letter to the Kadimah, a Jewish student organization at the Universität Wien, detailing his thoughts on assimilation and solidarity in the face of rising anti-Semitism and how he reconciled his Jewish solidarity with his strong attachment to German culture; thirty years later, he passed the letter on to his grandson, claiming his stance was unchanged.[184] The specifics of their Judaism, however, are less important than their commitment to it. The simple fact that they did not convert to Christianity means that they almost certainly never took confession.[185]

181 Breuer, Pappenheim case history (D 23), p. 1–2. {"Sie ist durchaus nicht religiös; die Tochter sehr orthodox frommer Juden, gewohnt an die peinlichste Befolgung der Vorschriften um des Vaters willen, dürfte sie auch jetzt noch um seinetwillen daran festhalten. Eine Rolle in ihrem Leben spielte Religion nur als Gegenstand stiller Kämpfe und stiller Opposition."}

182 Loentz, *Speak the Truth*, chap. 5. Loentz points out that we lack evidence from the most crucial period of Pappenheim's life in terms of a broader spiritual transformation, that is, after the death of her pious father through her move to Frankfurt and joining the world of Jewish social work. Nevertheless, Loentz points out that Pappenheim's reconciliation with religiosity and a new professional life in the Jewish women's movement were in fact complementary, with the movement providing the possibility of "social motherhood" that Pappenheim enacted via a Jewish upbringing at the orphanage. Her turn toward personal spirituality happened after 1922.

183 Hirschmüller, *Josef Breuer* [English], 46–48.

184 Breuer to the Kadimah, 1894, D 6, Hirschmüller Documents, Deu. 282–85 / Eng. 213–21. N.b., Hirschmüller only had excerpts for the first German publication, whereas the English was based on the full letter, now available in the Breuer Papers (reel 1).

185 I say "almost certainly" because it's impossible to know for sure. The sacrament of penance—confession—was by rule limited to the baptized. But what did this mean in practice? I have not found discussion of the possibility of such transgression in the literature; even if I had a framework to discuss it, it seems unlikely that

Of course, both Pappenheim and Breuer would have been extremely familiar with the concept of confession, in its broader spiritual valence running from Augustine to Goethe as well as in its particular role in Catholicism and the institution of the Church.[186] They were well educated, highly read children of Vienna, each living steps from the Stephansdom cathedral at the time of their encounter. The Church was woven into all bits of Austrian life, including that of Jews. Yet what happened *in the confessional*—the experience of telling ones sins to a priest and receiving absolution—was unknown and unknowable to them.

So what to make of their shared analogy between the "talking cure" and auricular confession? One could pursue a social historical approach, querying whether Breuer (and Freud) were "selling" the new cure to a predominately Christian readership and medical establishment via analogy. One could similarly explore the political role of the (Jewish) physician versus that of the priest against the backdrop of rising populism and

---

Breuer or Pappenheim would have recorded such an act. The public act of entering the confessional was a significant part of the experience, and it is hard to imagine transgressing in such a public way. This doesn't mean that Jews were not *interested* in the sacraments of the Church, a feeling expressed most concretely in conversion. Yet the same feeling drove many Jews closer to Christianity without fully committing apostasy, as discussed compelling by Alan Levenson. Nonetheless, movements up to the edge of apostasy by those such as Theodor Herzl and Franz Rosenzweig (who ultimately underwent "conversionary experiences" *back into* committed Judaism) would not have permitted confession. Levenson, "Conversionary Impulse." Pappenheim herself spent much of her professional energies specifically *combating* conversion, especially in Eastern Europe. Loentz, *Speak the Truth*, chap. 4.

186 According to Edinger, Pappenheim attended a Catholic school; Hirschmüller further identifies six possible such schools in Vienna at the time, noting that their records have been lost. It is generally assumed that she attended all ten years of primary and middle school, which would have had her finishing around her sixteenth year, not inconsistent with Breuer's note about her leaving school in the case history. There's no reason to doubt Edinger's claim but the lack of detail makes it difficult to know how such a school affected Pappenheim's understanding of Catholicism and the sacraments. On the one hand, Hirschmüller relies on an older source that emphasizes the social and aesthetic aims of these schools, preparing the students for society or to be governesses for the nobility; on the other hand, a more recent source posits the continued prominence of religious instruction at these schools. Regardless, it is almost certain that Pappenheim had her religious instruction at home (as suggested by Marion Kaplan). Along those same lines, Breuer completed at least one of his gymnasium's required religion courses at home with his father. Pappenheim and Edinger, *Freud's Anna O.*, 14; Hirschmüller, *Josef Breuer* [English], 99–100; Breuer, "Anna O," in *GW* suppl.:221 / *SE* 2:21; Mayer, Meissner, and Siess, *Geschichte der österreichischen Mädchenmittelschule*, 11–14; Friedrich, *"Ein Paradies ist uns verschlossen . . .,"* 367–68; Kaplan, *The Jewish Feminist Movement in Germany*, 30; Breuer's diploma, D 1, Hirschmüller Documents, Deu. 274 / Eng. 210.

anti-Semitism in the streets, parliament, and city government; the conflict between these roles was ultimately dramatized by the playwright and physician Arthur Schnitzler in *Professor Bernhardi* (1912), which in turn loosed its own controversy and conflict.[187] But I think these social and political approaches fall short, especially with the evidence we have at hand.

The coming into being of the "talking cure" as such depended equally on a number of contingent factors: the talk emerged from the highly cultivated and yet highly restrained culture of conversation reigning in Vienna Bildungsbürgertum, while the cure derived from the particularities of Pappenheim's illness and Breuer's broad concept of balance. Yet to explain it and its emergence to themselves, Breuer and Pappenheim reached for an analogy that was in fact a mystery to them: confession. Indeed, confession was supposed to relieve tension, regardless of priest or absolution—but did it? How would they have known? But this was precisely the point: Breuer and Pappenheim *didn't* fully understand what had happened to them, and they chose an appropriately mysterious comparison.

Of course the "talking cure" had been, in Pappenheim's words, a double-edged sword: For Pappenheim, it relieved daily overexcitation and then removed a number of extreme symptoms; but it concluded with an addiction to chloral and morphine and the need to leave her home for the sanatorium. For Breuer, the intensity of the cure derailed his regular "form of life"; yet he indeed helped Pappenheim a great deal and moreover won extraordinary insight into the psychical pathogenesis of certain hysterical symptoms.

Most of all, they were transformed by the experience, a transformation far greater than

187 The Jewish head of a Viennese polyclinic, the titular Bernhardi, refuses a priest access to a dying patient for last rites, knowing that the priest's entry will end the patient's reverie and bring about a more painful death; the patient is alerted by a nurse and dies while the priest and physician argue. The matter becomes an major affair debated in parliament, encompassing power struggles between the Jews and Christians on the board of the polyclinic and questions of both aristocratic and parliamentary patronage and power. It ultimately stood as a conviction of widespread corruption in Vienna, and for that reason was banned there, premiering in Berlin and taking six further years to arrive back on the Danube. For a good summary of the play and the surrounding controversy, see Yates, *The Austrian Theatre*, 83–105.

any broadly known feeling of relief from talking out a secret. It was a transformation worthy of laying the foundation for a "grandiose historical institution." Perhaps it had some resonance with the "awesome shivers deep in the chest" that Breuer identified as the root of religious experience in a letter to Marie von Ebner-Eschenbach.[188] Perhaps it was something entirely otherwise yet equally difficult to name. Either way, this transformation was both what constituted the "talking cure" and what prevents it from transiting beyond its origin point: an encounter between patient in need and physician willing to listen.

188 JB to MEE, 24 January 1902, in *Bw*, 48. {" 'Heilige Schauer tief in der Brust.' "}

ACKNOWLEDGMENTS

If you turned to this page before you read much of the body of this thesis, then you approached it much the way I would: acknowledgments first. I suspect many academics do this, though discussing private reading habits is not something we generally do or is done in a highly normed way (like with nearly all of our daily scholarly habits). Reading the acknowledgments first is perhaps akin to the so-called Washington read—scanning the index for one's own name—but it ultimately is much less self-interested and serves a much greater purpose. In the acknowledgments, we see how a book came to be: the formal and informal networks that sustained and shaped it, the sites—institutional and otherwise—where it shifted emphases, and the personal ties that made it all worthwhile.

The particular unstated but crucial role played by acknowledgments is no original insight. The *American Historical Review* published a thoughtful meditation "On Acknowledgments" by Emily Callaci just last year: She emphasizes the background care work and the gendered modes of both work and thanks that are made visible in the acknowledgments (e.g., the older form of a male author's thanking his wife for typing, childcare, and much more; the newer one of extensive thanks for a broader network of care, almost always by women). Who's allowed in and who's kept out of the academy, she suggests, is made clear in these liminal pages.[1] Within the world of information science, where citation networks and analysis were long bread and butter, Blaise Cronin suggested a six-part typology of acknowledgments about thirty years ago: paymaster, moral support, dogsbody, technical, prime mover, and trusted assessor (each sequential pair then aggregated into resource, procedure, and concept related). But he concluded that much more would need to be done—about the basic function of acknowledgments for authors and readers and in terms of standardization—to allow for meaningful bibliometric analysis.[2] The situation in that field seems relatively unchanged today.[3]

The acknowledgments of a historical dissertation are, of course, a highly specific form: The work is not exactly a book and definitely not an article. The still "early career" scholar is extremely dependent on the support and patronage of more established scholars and thus highly pressured to thank the right people. Yet a combination of other factors—relief of reaching such a milestone, often youthful insouciance, and the limitations of

1 Emily Callaci, "On Acknowledgments," *American Historical Review* 125, no. 1 (February 2020): 126–31, https://doi.org/10.1093/ahr/rhz938.

2 Blaise Cronin, "Let the Credits Roll: A Preliminary Examination of the Role Played by Mentors and Trusted Assessors in Disciplinary Formation," *Journal of Documentation* 47, no. 3 (1991): 227–39, https://doi.org/10.1108/eb026878.

3 Adèle Paul-Hus and Nadine Desrochers, "Acknowledgements Are Not Just Thank You Notes: A Qualitative Analysis of Acknowledgements Content in Scientific Articles and Reviews Published in 2015," *PLOS ONE* 14, no. 12 (December 19, 2019): e0226727, https://doi.org/10.1371/journal.pone.0226727. The approaches from information science are centered on journal articles from the technical rather than humanistic sciences. Yet the typologies and forms under consideration do not seem to me that distinct from a historian's acknowledgments.

dissertation distribution—imbue dissertation acknowledgments with vigor, glee, and some abandon. In-jokes and bars are mentioned not infrequently.

And as historians are fond of saying: this form of acknowledgments itself has a history. Looking over all the dissertations from the Program in History of Science at Princeton, starting in 1965, we can see it take shape:[4] Acknowledgments started as a scant, mostly formal paragraph at the end of a brief preface, centered on a prime mover or two and some funding acknowledgments. By 1980, they had moved to their own stand-alone section, which then grew over that decade. It reached something like its now usual form—more informal, with nice touches of personal biography and sentiment and the occasional stylish or framing flourish (not unlike this one), all over three to seven pages—sometime in the 1990s. Beyond personal and stylistic touches, the main difference between earlier and current acknowledgments was the addition of more support staff and individually named friends and colleagues (as opposed to professors).[5]

So what? Well, the basic conceit of my dissertation is that there are many, many aspects to the life of the mind and we as historians have only begun to scratch the surface of considering its multifariousness. This same conceit has always made me somewhat uncomfortable with our standard acknowledgments: not because we shouldn't say thanks but because—even or perhaps especially in the current elaborated form that I find so endlessly readable and alluring—acknowledgments so often feel like they cannot in fact encapsulate what we owe for all the little ins and outs of our own lives of the mind.[6] How could I properly acknowledge everything and everyone that made the last eight years of my life possible, let alone what made it intellectually and spiritually engaging? Simply put, I can't.

Thank you to those without whom this project would surely not have happened; to those from whom I've learned how to ask a question and how to listen to an answer; to those who have shaped my sense of what it means to be curious, to be kind, to be present, to be thoughtful:

4 A list of all Princeton history of science dissertations can be found here: https://history.princeton.edu/academics/history-science-academics/alumni/doctoral-degrees-awarded.

5 The growth in length of acknowledgments most likely had something to do with the advent of the word processor and personal computer. But the concurrent changes in style and content may have been related to the slightly diversifying makeup of Princeton graduate students, moving beyond the midcentury standard of a pedigreed white man. Per Emily Callaci's suggestion about different gendered norms related to acknowledgments, the arrival of students from marginalized backgrounds (even just a few) might have significantly altered the student social norms around acknowledgments. Consider the acknowledgments to Monica Green's 1985 dissertation, "The Transmission of Ancient Theories of Female Physiology and Disease through the Early Middle Ages," which read like a template for those written twenty years later and stand out from others in the 1980s. But the pool I read is too small and what I know of the authors too minimal to say anything concrete; it's in part a suggestion to hedge against the unpleasant taste of technological determinism (word processing = longer acknowledgments).

6 This in a sense echoes Callaci's point: that the extension of thanks to all providers of care work just makes visible another hierarchy upon which the academy stands.

My advisers: D. Graham Burnett and Katja Guenther

My "first" reader: Michael Gordin

My outside reader: Deborah Coen

Princeton professors: Angela Creager, Jeff Dolven, Anthony Grafton, Stephen Kotkin, Federico Marcon, Erika Milam, Anson Rabinbach, Jennifer Rampling, Keith Wailoo, Christy Wampole

Brown TAs and professors: Gillian Frank, Phil Rosen, Michael Siegel, Rose Subotnik

My writing partners: Carolina Malagon, Wangui Muigai

My history of science cohort: Elaine Ayers, Kathryn Maxson, Ezelle Sanford

My pandemic reading group: Ohad Reiss Sorokin, Richard Spiegel

My scholarly friends: Danny Braun, Henry Cowles, Matthew Vollgraff

In Vienna: Bernhard Luthringshausen, Ramon Pils, Michaela Theurl, Hanna Worliczek, Martina Zerovnik

In Leipzig: Felix and Svetlana Biryukova, Anneros Meischner-Metge, Wieland Zumpe

In Princeton: Anat Benzvi, Andrew Edwards, Florian Fuchs, Yael Geller, Mostafa Heddaya, Antonio Iannarone, Mariel Kessel, Elias Kleinbock, George Olken, David Thurn, Xiyue Wang, Robert Zeinstra

At the History Department: Lee Horinko, Kristy Novak, Jackie Wasneski

Members of the Princeton History of Science Program Seminar

My students at Princeton and the Princeton Prison Teaching Initiative

My old bosses: Sina Najafi, C. Jason Wang

The Cranial Nerve Review: Danny Bowman, Ellen Chu, Ashton Graham Cumberbatch, Sarah Hotchkiss, Ben Mercer, Jen Tan

My dear friends: Will Bowling, Sam Ellison, Clare Frost, Jaime Guarnaccia, Chris Hu, Nathan Karp, Minsuk Kim, Ariela Kuh, Claire Lehmann, Chloe Malle, Nora Mendis, Ben Mercer, Nicholas Moore, Wangui Muigai, Daniel Pearce, Stephanie Pottinger, Dillon Savage, Daniel Sonshine, Akili Tommasino, Alex Zevin

My extended families: McElroy-Bauchners, Gould-Schuettges, Hellman-Masses

RK

Sophia Li

My family: my mother, Eda Spielman; my father, Arnold Bauchner; my sister, Shayna Bauchner

ABBREVIATIONS AND ARCHIVES

BP MF1: microfilm reel 1, Breuer Papers.
Breuer Papers: Josef Breuer Papers, MSS60392, Library of Congress, Washington, DC.
Bw: Ebner-Eschenbach, Marie von, and Josef Breuer. *Ein Briefwechsel, 1889–1916*. Edited by Robert A. Kann. Vienna: Bergland-Verlag, 1969.
EP: Fechner, Gustav Theodor. *Elemente der Psychophysik*. 2 vols. Leipzig: Breitkopf und Härtel, 1860.
Freud Papers: Sigmund Freud Papers, MSS39990, Library of Congress, Washington, DC.
GW: Freud, Sigmund. *Gesammelte Werke: Chronologisch geordnet*. Edited by Anna Freud. PEP ed. 18 plus supplement vols. Frankfurt am Main: Fischer, 1940–. http://www.pep-web.org/static.php?page=gesammeltewerke.
Hirschmüller Documents: Hirschmüller, Albrecht. [Deutsch] *Physiologie und Psychoanalyse in Leben und Werk Josef Breuers*. Jahrbuch der Psychoanalyse, Beiheft 4. Bern: Huber, 1978, part 5 ("Briefe und Dokumente") // [English] *The Life and Work of Josef Breuer: Physiology and Psychoanalysis*. New York: New York University Press, 1989, part 5 ("Letters and Documents").
ÖNB Autogr.: Autografensammlung, Handschriften und alten Drucken, Österreichische Nationalbibliothek, Vienna.
Pappenheim case history: D 23, Hirschmüller Documents.
SE: Freud, Sigmund. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Edited and translated by James Strachey. PEP ed. 24 vols. London: Hogarth, 1953–. http://www.pep-web.org/static.php?page=standardedition.
Tb: Fechner, Gustav Theodor. *Tagebücher 1828 bis 1879*. Edited by Anneros Meischner-Metge and Irene Altmann. 2 vols. Leipzig: Verlag der Sächsischen Akademie der Wissenschaften, 2004.
UA Fechner Nachlass: NA Gustav Theodor Fechner, Universitätsarchiv Leipzig.
UB Fechner Nachlass: Nachlass Gustav Theodor Fechner, Universitätsbibliothek Leipzig.
Wienbibliothek: Wienbibliothek im Rathaus, Vienna.

BIBLIOGRAPHY

Primary Works

Ackerknecht, Erwin H., and Josef Breuer. "Josef Breuer über seinen Anteil an der Psychoanalyse." *Gesnerus* 14, no. 3–4 (1957).

Andersen, H. C., and Fritz Kredel. *The Complete Andersen: All of the 168 Stories*. Edited and translated by Jean Hersholt. New York: Heritage, 1949. https://andersen.sdu.dk/vaerk/hersholt/index_e.html.

Andersen, Hans Christian. *A Picture Book without Pictures: And Other Stories*. New York: Alden, 1883. http://hdl.handle.net/2027/mdp.39015055393220.

———. *Bilderbuch ohne Bilder*. Berlin: Hofmann, 1856. http://hdl.handle.net/2027/uc1.31175035487456.

Andreas-Salomé, Lou. *Lebensrückblick: Autobiographie*. Reprint of 1951 original. Severus Verlag, 2013.

Berger, Alfred von. "Chirurgie der Seele." *Morgen-Presse*. February 2, 1896, 1 edition.

———. "Wahrheit und Irrtum in der Katharsistheorie des Aristoteles." In *Aristoteles' Poetik*, edited and translated by Theodor Gomperz, 69–98. Leipzig: Veit, 1897.

"Bertha Pappenheim: Zum Gedächtnis [special issue]." *Blätter des Jüdischen Frauenbundes* 12, no. 7–8 (August 1936).

Bettelheim, Anton. *Marie von Ebner-Eschenbach's Wirken und Vermächtnis*. Leipzig: Quelle & Meyer, 1920.

Bleuler, Eugen. "Dr. Jos. Breuer und Dr. Sigm. Freud: Studien über Hysterie [review]." *Münchener medicinische Wochenschrift* 43, no. 22 (June 2, 1896).

Bluemel, C. S. *Stammering and Cognate Defects of Speech*. 2 vols. New York: G. E. Stechert, 1913. http://hdl.handle.net/2027/coo.31924012454983.

Bopp, Linus. *Moderne Psychanalyse, katholische Beichte und Pädagogik*. Munich: Kempten Kösel & Pustet, 1923.

Brentano, Franz, and Gustav Theodor Fechner. *Briefwechsel über Psychophysik, 1874–1878*. Edited by Mauro Antonelli. Phenomenology and Mind 18. Berlin: De Gruyter, 2015.

Breuer, Josef. "Autobiography of Josef Breuer (1842–1925)." Edited and translated by C. P. Oberndorf. *International Journal of Psycho-Analysis* 34 (January 1, 1953): 64–67.

———. "Beiträge zur Lehre vom statischen Sinne (Gleichgewichtsorgan, Vestibularapparat des Ohrlabyrinths)." *Medizinische Jahrbücher*, 1875, 87–156.

———. "Bemerkungen zu Dr. Hans Abels Abhandlung 'über Nachempfindungen im Gebiete des kinästhetischen und statischen Sinnes.' " *Zeitschrift für Psychologie und Physiologie der Sinnesorgane (1. Abteilung)* 45 (1907): 78–84.

———. "Berichtigung." *Archiv für die gesammte Physiologie des Menschen und der Thiere* 72 (1898): 216–23.

———. "Die Krisis des Darwinismus und die Telelogie." In *Vorträge und Besprechungen über die Krisis des Darwinismus*, by Max Kassowitz, Christian Freiherr von Ehrenfels, Robert Eisler, and Josef Breuer. Leipzig: Verlag der Philosophischen Gesellschaft an der Universität zu Wien, 1902.
———. "Die Selbststeuerung der Athmung durch den *Nervus vagus*." *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe (Abteilung 2)* 58 (1868): 909–37.
———. "Ein telepathisches Dokument." *Umschau* 28 (1924): 215–16.
———. "Neue Versuche an den Ohrbogengängen." *Archiv für die gesammte Physiologie des Menschen und der Thiere* 44 (1889): 135–52.
———. "Sitzung am 20. February 1900 [Ueber die Bogengangampullen]." *Wiener klinische Wochenschrift*, no. 22 (1900): 512.
———. "Studien über den Vestibularapparat." *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Klasse (Abteilung 3)* 112 (1903): 315–97.
———. "Über Brommastitis." *Wiener Medizinische Presse* 35, no. 26 (1894): 1028.
———. "Über das Gehörorgan der Vögel." *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Klasse (Abteilung 3)* 116 (1907): 249–97.
———. "Über den Galvanotropismus (Galvanotaxis) bei Fischen." *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Klasse (Abteilung 3)* 114 (1905): 27–56.
———. "Über Ewalds Versuch mit dem 'pneumatischen Hammer' (Bogengangapparat)." *Zeitschrift für Psychologie und Physiologie der Sinnesorgane (2. Abteilung): Zeitschrift für Sinnesphysiologie* 42, no. 373–378 (1908).
———. "Ueber Bogengänge des Labyrinths." *Allgemeine Wiener medizinische Zeitung* 18 (December 2, 1873): 598, 606.
———. "Ueber Bogengänge und Raumsinn." *Archiv für die gesammte Physiologie des Menschen und der Thiere* 68 (1897): 596–648.
———. "Ueber die Bogengänge des Labyrinths: Vorläufige Mittheilung [Protokoll der Sitzung vom 14. November 1873]." *Anzeiger der k. k. Gesellschaft der Aerzte in Wien*, no. 7 (November 20, 1873): 15–18.
———. "Ueber die Function der Bogengänge des Ohrlabyrinthes." *Medizinische Jahrbücher*, 1874, 72–124.
———. "Ueber die Function der Otolithen-Apparate." *Archiv für die gesammte Physiologie des Menschen und der Thiere* 48 (1891): 195–306.
———. "Ueber Galvanotropismus bei Fischen." *Centralblatt für Physiologie* 16, no. 18 (December 6, 1902): 481–83.
———. "Zur Lehre vom statischen Sinne (Gleichgewichtsorgan): Vorläufige Mittheilung [Protokoll der Sitzung vom 11. December 1874]." *Anzeiger der k. k. Gesellschaft der Aerzte in Wien*, no. 9 (December 17, 1874): 31–33.
Breuer, Josef, and Sigmund Freud. *Studien über Hysterie*. Leipzig: Deutike, 1895.

———. "Ueber den psychischen Mechanismus hysterischer Phänomene: Vorläufige Mittheiluug 1." *Neuroligisches Centralblatt* 12, no. 1 (January 1, 1893): 4–10.
———. "Ueber den psychischen Mechanismus hysterischer Phänomene: Vorläufige Mittheiluug 2." *Neuroligisches Centralblatt* 12, no. 2 (January 15, 1893): 43–47.
Breuer, Josef, and Alois Kreidl. "Ueber die scheinbare Drehung des Gesichtsfeldes während der Einwirkung einer Centrifugalkraft." *Archiv für die gesammte Physiologie des Menschen und der Thiere* 70 (1898): 494–510.
Bruce, H. Addington. *The Riddle of Personality*. New and rev. Ed. New York: Moffat, Yard, 1916. http://hdl.handle.net/2027/uc1.b4086040.
Buber, Martin. "*Dialogue*." In *Between Man and Man*, translated by Ronald Gregor Smith, 1–39. New York: Macmillan, 1965.
———. "*Zwiesprache*." In *Das dialogische Prinzip*, New ed., 137–96. Heidelberg: Schneider, 1965.
Clarke, J. Michell. "Studien über Hysterie [review]." *Brain* 19, no. 2–3 (1896): 415–31. https://doi.org/10.1093/brain/19.2-3.415.
Cranefield, Paul F. "Josef Breuer's Evaluation of His Contribution to Psycho-Analysis." *International Journal of Psycho-Analysis* 39 (1958): 319–22.
Crum Brown, Alexander. "On the Sense of Rotation and the Anatomy and Physiology of the Semicircular Canals of the Internal Ear." *Journal of Anatomy and Physiology* 8, no. 2 (1874): 327–31.
———. "Preliminary Note on the Sense of Rotation and the Function of the Semicircular Canals of the Internal Ear." *Proceedings of the Royal Society of Edinburgh* 8, no. 19 January 1874 (1874 1873): 255–57.
Cyon, Elias von. "Bogengänge und Raumsinn: Experimentelle und kritische Untersuchung." *Archiv für Physiologie*, 1897, 29–111.
Czermak, Johann Nepomuk. "Beobachtungen und Versuche über 'hypnotische' Zustände bei Thieren." *Archiv für Physiologie* 7 (1873): 107–21.
Du Bois-Reymond, Emil Heinrich, and Carl Ludwig. *Zwei grosse Naturforscher des 19. Jahrhunderts: Ein Briefwechsel zwischen Emil du Bois-Reymond und Karl Ludwig*. Edited by Estelle Du Bois-Reymond and Paul Diepgen. Leipzig: Barth, 1927.
Ebner-Eschenbach, Marie von. *Gesammelte Schriften: Aphorismen, Parabeln, Märchen und Gedichte*. Vol. 1. 10 vols. Berlin: Paetel, 1893.
———. *Tagebücher*. Edited by Karl Konrad Polheim and Norbert Gabriel. 6 vols. Marie von Ebner-Eschenbach: Kritische Texte und Deutungen. Tübingen: Niemeyer, 1991.
Ebner-Eschenbach, Marie von, and Josef Breuer. *Ein Briefwechsel, 1889–1916 [BW]*. Edited by Robert A. Kann. Vienna: Bergland-Verlag, 1969.
Ebner-Eschenbach, Marie von, and Josephine von Knorr. *Briefwechsel 1851-1908: Kritische Und Kommentierte Ausgabe*. Edited by Ulrike Tanzer, Irene Fußl, Lina Maria Zangerl, and Gabriele Radecke. 2 vols. Berlin: De Gruyter, 2016.
Eitingon, M. "Anna O. (Breuer) in psychoanalytischer Betrachtung." *Jahrbuch der Psychoanalyse* 40 (1998): 14–30.

Ellis, Havelock. "Hysteria in Relation to the Sexual Emotions." *Alienist and Neurologist* 19 (1898): 599–615.
Elsas, Adolf. "Zum Andenken Gustav Theodor Fechners." *Die Grenzboten: Zeitschrift für Politik, Litteratur und Kunst* 47, no. 2 (1888): 73–80, 113–24.
Emerson, Ralph Waldo. "Friendship, in *Essays: Second Series*." In *Essays and Lectures*, edited by Joel Porte, 339–54. 1844. Reprint, New York: Library of America, 1983.
Ettlinger, Anna. *Lebenserinnerungen: Für ihre Familie verfasst*. Edited by Thomas Lindemann and Hansgeorg Schmidt-Bergmann. Kleine Karlsruher Bibliothek 5. 1920. Reprint, Karlsruhe: Info Verlag, 2011.
Eulenburg, Albert, ed. *Real-Encyclopädie der gesammten Heilkunde: Medicinisch-chirurgisches Handwörterbuch für praktische Aerzte*. 3 fully rev. 26 vols. Berlin: Urban & Schwarzenberg, 1894.
———, ed. *Real-Encyclopädie der gesammten Heilkunde: Medicinisch-chirurgisches Handwörterbuch für praktische Ärzte*. 1 ed. 15 vols. Vienna: Urban & Schwarzenberg, 1880.
———, ed. *Real-Encyclopädie der gesammten Heilkunde: Medicinisch-chirurgisches Handwörterbuch für praktische Ärzte*. 2 rev. and exp. Ed. 22 vols. Vienna: Urban & Schwarzenberg, 1885.
Exner [Felicie Ewart, pseud.], Emilie. *Die Emancipation in der Ehe: Briefe an einen Arzt*. Hamburg: Voß, 1895.
Fechner, Clara. *Die schwarze Tante: Märchen und Geschichten für Kinder*. 2nd ed. Leipzig: Bernhard Schlicke, 1853.
Fechner, Clara Volkmann. *The Black Aunt: Stories and Legends for Children*. Translated by Charles A. Dana. New York: Rudolph Garrigue, 1848.
Fechner [Dr. Mises, pseud.], Gustav Theodor. *Das Büchlein vom Leben nach dem Tode*. 1st ed. Dresden: Grimmersche Buchhandlung, 1836.
———. "Die Reise nach Halle." *Illustrirte Zeitung*, no. 16 (October 14, 1843): 250–51.
———. *Gedichte*. Leipzig: Breitkopf und Härtel, 1841.
———. *Kleine Schriften*. Leipzig: Breitkopf und Härtel, 1875.
———. *Rätselbüchlein*. 3rd ed. Leipzig: Schlicke, 1865.
Fechner, Gustav Theodor. *Das Büchlein vom Leben nach dem Tode*. 3rd ed. Hamburg: Voß, 1887.
———. *Die drei Motive und Gründe des Glaubens*. Leipzig: Breitkopf und Härtel, 1863.
———. *Die Tagesansicht gegenüber der Nachtansicht*. Leipzig: Breitkopf und Härtel, 1879.
———. "Einige Bemerkungen über den Fahnenschmuck Leipzigs in den verwichenen Tagen." *Leipziger Tageblatt und Anzeiger*, September 8, 1870, no. 251 edition.
———. *Einige Ideen zur Schöpfungs- und Entwickelungsgeschichte der Organismen*. Leipzig: Breitkopf und Härtel, 1873.
———. *Elemente der Psychophysik*. 2 vols. Leipzig: Breitkopf und Härtel, 1860.
———. *Elemente der Psychophysik*. Edited by Wilhelm Wundt. 2nd ed. 2 vols. Leipzig: Breitkopf und Härtel, 1889.

———. *Elemente der Psychophysik*. Edited by Wilhelm Wundt. 3rd ed. 2 vols. Leipzig: Breitkopf und Härtel, 1907.
———. *Elements of Psychophysics*. Edited by Edwin G. Boring and Davis H. Howes. Translated by Helmut E. Adler. Vol. 1. New York: Holt, Rinehart and Winston, 1966.
———. "Fechners Beziehungen zu Literaten: Einige bisher unveröffentlichte Briefe." In *Fechner und die Folgen außerhalb der Naturwissenschaften: Interdisziplinäres Kolloquium zum 200. Geburtstag Gustav Theodor Fechners*, edited by Irene Altmann and Ulla Fix. Tübingen: Niemeyer, 2003.
———. *In Sachen der Psychophysik*. Leipzig: Breitkopf und Härtel, 1877.
———. "In Sachen des Zeitsinnes und der Methode der richtigen und falschen Fälle, gegen Estel und Lorenz." *Philosophische Studien* 3, no. 1 (1885): 1–37.
———. *Kollektivmaßlehre*. Edited by Gottlieb Friedrich Lipps. Leipzig: Engelmann, 1897.
———. "Krankheitsgeschichte." In *Gustav Theodor Fechner (Dr. Mises): Ein deutsches Gelehrtenleben*, by Johannes Emil Kuntze, 105–26. Leipzig: Breitkopf und Härtel, 1892.
———. "Lebensabriss." In *Gustav Theodor Fechner (Dr. Mises): Ein deutsches Gelehrtenleben*, by Johannes Emil Kuntze, passim. Leipzig: Breitkopf und Härtel, 1892.
———. "Lebenslauf." In *Tagebücher 1828 bis 1879*, edited by Anneros Meischner-Metge and Irene Altmann, 1220–22. Leipzig: Verlag der Sächsischen Akademie der Wissenschaften, 2004.
———. *Nanna; oder, Über das Seelenleben der Pflanzen*. Leipzig: Voß, 1848.
———. *Praemissae ad theoriam organismi generalem*. Leipzig: Literis Staritii, 1823.
———. *Revision der Hauptpuncte der Psychophysik*. Leipzig: Breitkopf und Härtel, 1882.
———. *Tagebücher 1828 bis 1879*. Edited by Anneros Meischner-Metge and Irene Altmann. 2 vols. Leipzig: Verlag der Sächsischen Akademie der Wissenschaften, 2004.
———. *Über die Seelenfrage: Ein Gang durch die sichtbare Welt, um die unsichtbare zu finden*. Edited by Eduard Spranger. 2nd ed. Leipzig: Voß, 1907.
———. "Über einige Verhältnisse des binocularen Sehens." *Abhandlungen der königlich sächsischen Gesellschaft der Wissenschaften* 5 (1860): 337–564.
———. *Ueber das höchste Gut*. Leipzig: Breitkopf und Härtel, 1846.
———. "Ueber das Lustprincip des Handelns." *Zeitschrift für Philosophie und philosophische Kritik* 19 (1848): 1–30, 163–94.
———. *Ueber die Frage des Weber'schen Gesetzes und Periodicitaetsgesetzes im Gebiete des Zeitsinnes*. Leipzig: Hirzel, 1884.
———. *Ueber die Methode der richtigen und falschen Fälle in Anwendung auf die Massbestimmungen der Feinheit oder extensiven Empfindlichkeit des Raumsinnes*. Leipzig: Hirzel, 1884.
———. *Ueber die physikalische und philosophische Atomenlehre*. 2nd ed. Leipzig: Mendelssohn, 1864.
———. "Ueber die psychischen Massprincipien und das Weber'sche Gesetz: Discussion mit Elsas und Köhler." *Philosophische Studien* 4, no. 2 (1888): 161–230.

———. "Ueber die subjectiven Complementarfarben." *Annalen der Physik und Chemie* 44 (1838): 221–45, 513–45.
———. "Ueber eine Scheibe zur Erzeugung subjectiver Farben." *Annalen der Physik und Chemie* 45 (1838).
———. "Verhältniss der weiblichen zur männlichen Schrittgrösse." *Centralblatt für Naturwissenschaften und Anthropologie* 1, no. 9 (1853): 167–68.
———. *Vorschule der Aesthetik*. Leipzig: Breitkopf und Härtel, 1876.
———. *Zend-Avesta; oder, Über die Dinge des Himmels und des Jenseits: vom Standpunkt der Naturbetrachtung*. Leipzig: Voß, 1851.
———. "Zur Kritik der Grundlagen von Herbart's Metaphysik." *Zeitschrift für Philosophie und philosophische Kritik* 23 (1853): 70–102.
Fechner, Gustav Theodor, and Walter Lowrie. *Religion of a Scientist: Selections from Gustav Th. Fechner*. Edited and translated by Walter Lowrie. New York: Pantheon Books, 1946.
Fechner, Gustav Theodor, and William Preyer. *Wissenschaftliche Briefe von Gustav Theodor Fechner und W. Preyer*. Edited by William Preyer. Hamburg: Voß, 1890.
Flourens, Pierre. *Récherches expérimentales sur les propriétés et les fonctions du système nerveux, dans les animaux vertébrés*. Paris: Crevot, 1824.
Freud, Sigmund. *Gesammelte Werke: Chronologisch geordnet*. Edited by Anna Freud. PEP ed. 18 plus supplement vols. Frankfurt am Main: Fischer, 1940. http://www.pep-web.org/static.php?page=gesammeltewerke.
———. *On Aphasia: A Critical Study*. Translated by E. Stengel. New York: International Universities Press, 1953.
———. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Edited and translated by James Strachey. PEP ed. 24 vols. London: Hogarth, 1953. http://www.pep-web.org/static.php?page=standardedition.
Freud, Sigmund, and Josef Breuer. "Beiträge zu den "Studien über Hysterie'." In *Schriften aus dem Nachlass (1892–1938)*, edited by Anna Freud, PEP ed., 1 of *Gesammelte Werke: Chronologisch geordnet*:5–18. Frankfurt am Main: Fischer, 1991.
———. "Sketches for the 'Preliminary Communication' of 1893." edited and translated by James Strachey, PEP ed., 1 of *The Standard Edition of the Complete Psychological Works of Sigmund Freud*:145–54. London: Hogarth, 1966.
Goethe, Johann Wolfgang von. *Faust I & II [English]*. Edited and translated by Stuart Atkins. Princeton Classics ed. Vol. 2. 12 vols. Goethe's Collected Works. Princeton University Press, 2014.
———. *Goethe's Werke: Vollständige Ausgabe letzter Hand*. Stuttgart: Cotta, 1827.
Goethe, Johann Wolfgang von, and Alexander Liezen-Mayer. *Faust: eine Tragödie; erster Theil, illustrirt in 50 Compositionen von Alexander Liezen-Mayer*. Munich: Theodor Stroefer's Kunstverlag, 1881.
Goltz, Friedrich. "Ueber die physiologische Bedeutung der Bogengänge des Ohrlabyrinths." *Archiv für Physiologie* 3 (1870): 172–92.

Gomperz, Theodor, and Heinrich Gomperz. *Theodor Gomperz: Ein Gelehrtenleben in Bürgertum Der Franz-Josefs-Zeit; Auswahl Seiner Briefe Und Aufzeichnungen, 1869–1912*. Edited by Heinrich Gomperz and Robert A. Kann. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1974.

Griesinger, Wilhelm. "Ueber einige epileptoide Zustände: Erster Artikel." *Archiv für Psychiatrie und Nervenkrankheiten* 1, no. 1 (1868): 320–33.

Hall, G. Stanley. *Adolescence: Its Psychology, and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education*. 2 vols. New York: Appleton, 1905.

Hameln, Glückel von. *Die Memoiren der Glückel von Hameln, geboren in Hamburg 1645, gestorben in Metz 19. September 1724*. Translated by Bertha Pappenheim. Vienna: Stefan Mayer und Wilhelm Pappenheim, 1910.

Handel-Mazzetti, Enrica von. "Meine Beziehungen zu Marie Ebner (1903–1916): Einige Details." In *Der Dichterinnen stiller Garten: Marie von Ebner-Eschenbach und Enrica von Handel-Mazzetti; Bilder aus ihrem Leben und ihrer Freundschaft*, by Johannes Mumbauer, Marie von Ebner-Eschenbach, and Enrica von Handel-Mazzetti, 24–39. edited by Johannes Mumbauer. Freiburg im Breisgau: Herdersche Verlagshandlung, 1918.

Hase, Karl von. *Heiligenbilder: Franz von Assisi–Caterina von Siena*. Leipzig: Breitkopf und Härtel, 1892.

Helmholtz, Hermann. *Handbuch Der Physiologischen Optik*. Leipzig: Voss, 1867. http://hdl.handle.net/2027/uc2.ark:/13960/t5p84k33g.

Hirschfeld, Magnus. "Die Vergeistigung des Geschlechtstriebs." *Die neue Generation*, no. 10 (1911): 411–21.

Hitzig, Eduard. *Physiologische und klinische Untersuchungen über das Gehirn: Gesammelte Abhandlungen*. 2 vols. Berlin: Hirschwald, 1904.

———. *Untersuchungen über das Gehirn: Abhandlungen physiologischen und pathologischen Inhalts*. Berlin: Hirschwald, 1874.

Infeld, Moriz. "Jos. Breuer und Sigm. Freud: Studien über Hysterie [review]." *Wiener klinische Rundschau* 10, no. 51 (1896): 877–78.

Jaspers, Karl. *Psychologie der Weltanschauungen*. 5th ed. Berlin: Springer, 1960.

Jentsch. "Jos. Breuer und Sigm. Fred: Studien über Hysterie [review]." *Centralblatt für Nervenheilkunde und Psychiatrie* 19 (1896): 194–97.

Kalbeck, Max. *Johannes Brahms*. Vol. 4–2. 4 vols. Berlin: Deutsche Brahms-Gesellschaft, 1915.

Kant, Immanuel. "Kritik der Urtheilskraft." In *Kritik der praktischen Vernunft, Kritik der Urtheilskraft*, edited by Königlich Preußischen Akademie der Wissenschaften, Electronic ed. Vol. 5. Kant's gesammelte Schriften. Reimer / de Gruyter, 1908. https://korpora.zim.uni-duisburg-essen.de/Kant/aa05/.

Kaplan, Leo. *Grundzüge der Psychoanalyse*. Leipzig: Deuticke, 1914.

Károlyi, Mihály. *Memoirs of Michael Karolyi: Faith without Illusion*. Translated by Catherine Károlyi. New York: E. P. Dutton, 1957.

Kircher, Athanasius. *Ars magna lucis et umbrae in decem libros digesta*. 2 vols. Rome, 1646.
———. "Experimentum mirabile: De Imaginatione Gallinae." In *Ars magna lucis et umbrae in decem libros digesta*, 2:154–55. Rome, 1646.
Köppen, Wladimir. "Betrachtungen und kleine Mitteilungen: Telepathie oder Eidetik?" *Umschau* 28 (1924): 572–73.
Kuntze, Johannes Emil. *Gustav Theodor Fechner (Dr. Mises): Ein deutsches Gelehrtenleben*. Leipzig: Breitkopf und Härtel, 1892.
Leipzig Und Seine Umgebung: Neuester Wegweiser Für Fremde Und Einheimische. 3rd ed. Leipzig: Carl B. Lorck, 1846.
Lipps, Gottlieb Friedrich. "Bericht über das Fechner-Archiv." *Berichte über die Verhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften zu Leipzig (mathematische-physiche Klasse)* 57 (1905): 247–312.
Lipps, Gottlieb Friedrich, Wilhelm Weber, and Gustav Theodor Fechner. "Zwei Briefe von Wilhelm Weber an G. Th. Fechner über das psychische Maß." *Berichte über die Verhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften zu Leipzig (mathematische-physiche Klasse)* 57 (1905): 388–95.
Ludwig, Carl, and Emil Heinrich Du Bois-Reymond. *Two Great Scientists of the Nineteenth Century: Correspondence of Emil Du Bois-Reymond and Carl Ludwig*. Edited by Estelle Du Bois-Reymond, Paul Diepgen, and Paul F. Cranefield. Translated by Sabine Lichtner Ayed. Baltimore: Johns Hopkins University Press, 1982.
Mach, Ernst. "Die ökonomische Natur der physikalischen Forschung." In *Populär-wissenschaftliche Vorlesungen*, 2nd ed., 208–36. Leipzig: Barth, 1897.
———. *Grundlinien der Lehre von den Bewegungsempfindungen*. Leipzig: Engelmann, 1875.
———. "Physikalische Versuche über den Gleichgewichtssinn des Menschen." *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Klasse (Abteilung 3)* 68 (1873): 124–40.
———. "The Economical Nature of Physical Inquiry." In *Popular Scientific Lectures*, translated by Thomas J. McCormack, 186–213. Chicago: Open Court, 1895.
———. *The Science of Mechanics: A Critical and Historical Account of Its Development*. Translated by Thomas J. McCormack. 3 rev. and exp. Ed. Chicago: Open Court, 1907.
Marx, Karl, and Frederick Engels. *The Communist Manifesto*. New York: International Publishers, 1948.
Marx, Karl, and Friedrich Engels. *Das Kommunistische Manifest*. Munich: Futurus-Verlag, 1848.
Mittenzwey, Kuno. "Versuch zu einer Dastellung und Kritik der Freudschen Neurosenlehre." *Zeitschrift für Pathopsychologie* 1 (1912): 164–86, 369–421.
Montaigne, Michel de. "Of the Art of Conferring." In *The Essayes*, translated by John Florio, 5:229–70. The Temple Classics. London: Dent, 1897.

———. "On the Art of Conversation." In *The Complete Essays*, edited and translated by M. A. Screech, 1044–69. London: Penguin Books, 1993.
———. "Von der Kunst der Unterredung." In *Gedanken und Meinugen über allerley Gegenstände: Ins Teutsche übersetzt*, 5:279–327. Vienna: Haas, 1797.
Müller, C. L. *C. L. Müllers neu erfundener Schreib-Maschine*. Vienna: Anton Strauß, 1823.
Musil, Robert. *Der Mann ohne Eigenschaften*. Neu durchgesehene und verb. Aufl. 2 vols. Reinbek bei Hamburg: Rowohlt, 1981.
Myers, Frederic W. H. *Human Personality, and Its Survival of Bodily Death*. 2 vols. London: Longmans, Green, 1903.
Nietzsche, Friedrich. *Die fröhliche Wissenschaft*. Edited by Giorgio Colli, Mazzino Montinari, and Paolo D'Iorio. Vol. *Digitale Kritische Gesamtausgabe Werke und Briefe (eKGWB)*. Berlin: De Gruyter, 1967. http://www.nietzschesource.org/#eKGWB/FW.
———. *Human, All Too Human*. Translated by R. J. Hollingdale. Cambridge: Cambridge University Press, 1996.
———. *Menschliches Allzumenschliches*. Edited by Giorgio Colli, Mazzino Montinari, and Paolo D'Iorio. Vol. *Digitale Kritische Gesamtausgabe Werke und Briefe (eKGWB)*. Berlin: De Gruyter, 1967. http://www.nietzschesource.org/#eKGWB/MA-I.
Ohm, Georg Simon, and Ludwig Hartmann. "Sein Briefwechsel mit Schweigger, Fechner und anderen Gelehrten." In *Aus Georg Simon Ohms handschriftlichem Nachlass: Briefe, Urkunden und Dokumente*. Munich: Bayerland-Verlag, 1927.
Ormeron, J. A. "On Some Modern Theories Concerning Hysteria: Lecture III." *Lancet*, May 9, 1914, 1259–1305.
Pappenheim [anon.], Bertha. *Kleine Geschichten für Kinder*. Karlsruhe: Braun, 1888. http://www.digital.wienbibliothek.at/wbrobv/2765612.
Pappenheim, Bertha. "Gedanken Über Erziehung." *Blätter Des Jüdischen Frauenbundes* 5, no. 2 (February 1929): 5.
———. *In the Junk Shop and Other Stories*. Translated by Renate Latimer. Studies in Austrian Literature, Culture, and Thought. Translation Series. Riverside, CA: Adriadne, 2008.
Pappenheim, Bertha, and Dora Edinger. *Bertha Pappenheim: Freud's Anna O*. Highland Park, IL: Congregation Solel, 1968.
———. *Bertha Pappenheim: Leben und Schriften*. Edited by Dora Edinger. Frankfurt am Main: Ner-Tamid-Verlag, 1963.
Pappenheim [P. Berthold, pseud.], Bertha. *In der Trödelbude: Geschichten*. Lahr, Germany: Moritz Schauenburg, 1890. http://digipres.cjh.org:1801/delivery/DeliveryManagerServlet?dps_pid=IE3882727&.
———. "Zur Erziehung der weiblichen Jugend in den höheren Ständen." *Ethische Kultur: Monatsblatt für ethisch-soziale Neugestaltung* 6, no. 8 (1898): 61–63.

Pataky, Sophie, ed. *Lexicon deutscher Frauen der Feder: Eine Zusammenstellung der seit dem Jahre 1840 erschienenen Werke weiblicher Autoren*. Vol. 2. 2 vols. Berlin: Pataky, 1898.

Petermann, Theodor, ed. *Die Großstadt: Vorträge und Aufsätze zur Städteausstellung; Gehe-Stiftung zu Dresden, Winter 1902–1903*. Jahrbuch der Gehe-Stiftung zu Dresden 9. Dresden: Von Zahn & Jaensch, 1903.

"Philosophical Periodicals: American Journal of Psychology." *Mind* 19 (1910): 598–600.

Ramshorn, Carl. *Leipzig und seine Umgebungen, mit Rücksicht auf ihr historisches Interesse*. Braunschweig: Westermann, 1841. Reprint, Braunschweig: Westermann, 1988.

Renz, Th., and Aug. Wolf. "Versuche über die Unterscheidung differenter Schallstärken." *Archiv für physiologische Heilkunde*, 1856, 185–93.

Rieger, K. "Ueber die Behandlung 'Nervenkranker.' " *Schmidt's Jahrbücher* 251 (1896): 193–98, 273–76.

Saar, Ferdinand von. "Begegnungen mit Marie von Ebner-Eschenbach." In *Sämtliche Werke*, edited by Jakob Minor, 12:161–67. Leipzig: Max Hesse, 1908.

Schleiermacher, Friedrich. *On Religion: Speeches to Its Cultured Despisers*. Edited and translated by Richard Crouter. Cambridge: Cambridge University Press, 1996.

———. *Über die Religion: Reden an die Gebildeten unter ihren Verächtern*. 1st ed. Berlin: Unger, 1799.

Schnitzler, Arthur. "*Professor Bernhardi*." In *Professor Bernhardi und andere Dramen*, 127–254. Frankfurt am Main: Fischer Taschenbuch, 1979.

Schüle, Heinrich. *Handbuch der Geisteskrankheiten*. Leipzig: Vogel, 1878.

Simmel, Georg. "Die Großstädte und das Geistesleben." In *Die Großstadt: Vorträge und Aufsätze zur Städteausstellung; Gehe-Stiftung zu Dresden, Winter 1902–1903*, edited by Theodor Petermann, 185–206. Jahrbuch der Gehe-Stiftung zu Dresden 9. Dresden: Von Zahn & Jaensch, 1903.

Stœber-Damm, Else. "Psychology: Freuds Psychoanalyse." *Sozialistische Monatshefte* 16/18, no. 1 (January 11, 1912): 61–62.

Strümpell, Adolf von. "Studien über Hysterie: Von Dr. Jos. Breuer und Dr. Sig. Freud (Wien) [review]." *Deutsche Zeitschrift für Nervenheilkunde* 8 (1896): 159–61.

Thiele, Joachim. "Briefe von Gustav Theodor Fechner und Ludwig Boltzmann an Ernst Mach." *Centaurus* 11, no. 3 (December 1966): 222–35. https://doi.org/10.1111/j.1600-0498.1966.tb00063.x.

———. "Zur Analyse der Bewegungsempfindungen: Briefe von Josef Breuer an Ernst Mach." *Centaurus* 19, no. 1 (March 1975): 40–53. https://doi.org/10.1111/j.1600-0498.1975.tb00311.x.

Umpfenbach. "Breuer und Freud: Studien über Hysterie [review]." *Zeitschrift für Psychologie und Physiologie der Sinnesorgane* 10 (1896): 308–9.

Verzeichniß der neu erschienenen und neu aufgelegten Bücher, Landkarten, u. Vol. 2. 2 vols. Leipzig: Hinrichs'sche Buchhandlung, 1890. https://hdl.handle.net/2027/uc1.b3141020.

Vogel, Julius. *Das römische Haus in Leipzig: Ein Beitrag zur Kunstgeschichte des neunzehnten Jahrhunderts*. Leipzig: Breitkopf und Härtel, 1903.
Volkmann, Alfred Wilhelm. "Über das Vermögen, Grössenverhältnisse zu schätzen." *Berichte über die Verhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften zu Leipzig: Mathematisch-Physische Klasse* 10 (1858): 173–204.
Weber, Ernst Heinrich. "Der Tastsinn und das Gemeingefühl." In *Handwörterbuch der Physiologie mit Rücksicht auf die physiologische Pathologie*, edited by Rudolf Wagner, 3, bk. 2:481–588. Braunschweig: Vieweg, 1846.
———. *Tastsinn und Gemeingefühl*. Edited by Ewald Hering. Leipzig: Engelmann, 1905.
Weber, Max. *Charisma and Disenchantment: The Vocation Lectures*. Edited by Paul Reitter and Chad Wellmon. Translated by Damion Searls. NYRB Classics. New York: New York Review Books, 2020.
———. *Geistige Arbeit als Beruf: Vorträge vor dem Freistudentischen Bund*. Vol. 1, *1. Vortrag: Wissenschaft als Beruf*. Munich: Duncker & Humboldt, 1919.
———. *The Vocation Lectures*. Edited by David S. Owen and Tracy B. Strong. Translated by Rodney Livingstone. Indianapolis: Hackett, 2004.
Weber, Wilhelm, and Eduard Weber. *Mechanik der menschlichen Gehwerkzeuge: Eine anatomisch-physiologische Untersuchung*. Göttingen: Dieterich, 1836.
Wieland, Christoph Martin. "Idris und Zenide: Ein romantisches Gedicht in fünf Gesängen." In *Poetische Werke*, 151–338. Sämmtliche Werke 12. Göschen, 1857.
Wundt, Wilhelm. *Gustav Theodor Fechner: Rede zur Feier seines hundertjährigen Geburtstages*. Leipzig: Engelmann, 1901.
Zur Mühlen, Hernia, and George Grosz. *Was Peterchens Freunde erzählen: Märchen*. Berlin: Malik, 1921. https://dada.lib.uiowa.edu/items/show/220.

Secondary Works

Abrams, Thomas. "Is Everyone Upright? Erwin Straus' 'The Upright Posture' and Disabled Phenomenology." *Human Affairs* 24, no. 4 (January 1, 2014). https://doi.org/10.2478/s13374-014-0249-2.
Algazi, Gadi. "Scholars in Households: Refiguring the Learned Habitus, 1480–1550." *Science in Context* 16, no. 1–2, special issue on "Scientific Personae" (March 2003): 9–42. https://doi.org/10.1017/S0269889703000681.
Alkemade, Mechtild. *Die Lebens- und Weltanschauung der Freifrau Marie von Ebner-Eschenbach*. Graz: Wächter-Verlag, 1935.
Althans, Birgit. *Der Klatsch, die Frauen und das Sprechen bei der Arbeit*. Frankfurt am Main: Campus, 2000.
Altmann, Irene. "Zur Edition der Tagebücher." In *Tagebücher 1828 bis 1879*, by Gustav Theodor Fechner, xxix–xxxii. edited by Anneros Meischner-Metge and Irene Altmann. Leipzig: Verlag der Sächsischen Akademie der Wissenschaften, 2004.
Amato, Joseph Anthony. *On Foot: A History of Walking*. New York: New York University Press, 2004.

Ankersmit, F. R. *Sublime Historical Experience*. Stanford, CA: Stanford University Press, 2005.
Appignanesi, Lisa, and John Forrester. *Freud's Women*. New York: Basic Books, 1992.
Arendt, Hannah. *The Life of the Mind*. 2 vols. New York: Harcourt Brace Jovanovich, 1971.
Arendt, Hans-Jürgen. "Gustav Theodor Fechner (1801–1887) und die Leipziger bürgerliche Gesellschaft im 19. Jahrhundert." *NTM International Journal of History & Ethics of Natural Sciences, Technology and Medicine* 9, no. 1 (March 2001): 2–14. https://doi.org/10.1007/BF02911844.
———. *Gustav Theodor Fechner: Ein deutscher Naturwissenschaftler und Philosoph im 19. Jahrhundert*. Daedalus 12. Frankfurt am Main: Peter Lang, 1999.
Atterton, Peter. " 'The Talking Cure': The Ethics of Psychoanalysis." *Psychoanalytic Review* 94, no. 4 (August 2007): 553–76.
Bacopoulos-Viau, Alexandra, and Aude Fauvel. "The Patient's Turn: Roy Porter and Psychiatry's Tales, Thirty Years On." *Medical History* 60, no. 1 (January 2016): 1–18. https://doi.org/10.1017/mdh.2015.65.
Benjamin, Walter. *Gesammelte Schriften: Das Passagen-Werk*. Edited by Rolf Tiedemann. 1st ed. Vol. 5. Frankfurt am Main: Suhrkamp, 1982.
Berman, Jeffrey. *The Talking Cure: Literary Representations of Psychoanalysis*. New York: New York University Press, 1987.
Bernasconi, Robert. "The Infinite Task of Confession: A Contribution to the History of Ethics." Edited by Tomonobu Imamichi. *Acta Institutionis Philosophiae et Aestheticae: Revue Internationale de Philosophie Moderne* 6 (1988): 75–92.
Bernfeld, Siegfried. "Sigmund Freud, M.D., 1882–1885." *International Journal of Psycho-Analysis* 32 (1951): 204–17.
Bilstein, Johannes. "Die Beichte und ihre Bedeutung im Sozialisationsprozess." *Zeitschrift für Erziehungswissenschaft* 3, no. 4 (2000): 609–28.
Bolkosky, Sidney. "The Alpha and Omega of Psychoanalysis: Reflections on Anna O. and Freud's Vienna." *Psychoanalytic Review* 69, no. 1 (1982): 131–50.
Bonitz, Manfred. "Gustav Theodor Fechner: Der anonyme erste Redakteur des 'Pharmaceutischen Central-Blatt.' " *Zentralblatt für Bibliothekswesen* 97, no. 2 (1983): 70–72.
Borch-Jacobsen, Mikkel. *Remembering Anna O.: A Century of Mystification*. New York: Routledge, 1996.
Borch-Jacobsen, Mikkel, and Sonu Shamdasani. *The Freud Files: An Inquiry into the History of Psychoanalysis*. Cambridge: Cambridge University Press, 2012.
Boring, Edwin Garrigues. *A History of Experimental Psychology*. 2nd ed. New York: Appleton-Century-Crofts, 1950.
Borvitz, Sieglinde, and Mauro Ponzi, eds. *Schwellen: Ansätze für eine neue Theorie des Raums*. Düsseldorf: Düsseldorf University Press, 2014.
Brain, Robert Michael. *The Pulse of Modernism: Physiological Aesthetics in Fin-de-Siècle Europe*. Seattle: University of Washington Press, 2015.

Brentzel, Marianne. *Anna O.—Bertha Pappenheim: Biographie*. Göttingen: Wallstein, 2002.

Bringmann, W. G., N. J. Bringmann, and N. L. Medway. "Fechner and Psychical Research." In *G. T. Fechner and Psychology: International Gustav Theodor Fechner Symposium, Passau, 12–14 June 1987*, edited by Josef Brožek and Horst Gundlach, 243–57. Passauer Schriften Zur Psychologiegeschichte 6. Passau: Passavia Universitätsverlag, 1988.

Browne, Janet. "I Could Have Retched All Night: Charles Darwin and His Body." In *Science Incarnate: Historical Embodiments of Natural Knowledge*, edited by Christopher Lawrence and Steven Shapin, 240–87. Chicago: University of Chicago Press, 1998.

Brožek, Josef, and Horst Gundlach, eds. *G. T. Fechner and Psychology: International Gustav Theodor Fechner Symposium, Passau, 12–14 June 1987*. Passauer Schriften Zur Psychologiegeschichte 6. Passau: Passavia Universitätsverlag, 1988.

Brunken, Otto, Bettina Hurrelmann, Maria Michels-Kohlhage, and Gisela Wilkending, eds. *Handbuch zur Kinder- und Jugendliteratur*. Vol. 5, *Von 1850 bis 1900*. Stuttgart: J.B. Metzler, 2008.

Bryant, Chad, Arthur Burns, and Paul Readman, eds. *Walking Histories, 1800–1914*. London: Palgrave Macmillan, 2016.

Buggle, Franz, and Paul Wirtgen. "Gustav Theodor Fechner und die Psychoanalytischen Modellvorstellungen Sigmund Freuds: Einflüsse und Parallelen." *Archiv für die gesamte Psychologie* 121 (1969): 148–201.

Burnett, D. Graham. "Life of the Mind Dept.: The Care and Feeding of Humanists." *New Yorker*, November 1, 1999.

Bynum, W. F., and Helen Bynum, eds. *Dictionary of Medical Biography*. 5 vols. Westport, CT: Greenwood, 2007.

Canales, Jimena. *A Tenth of a Second: A History*. Chicago: University of Chicago Press, 2009.

Canguilhem, Georges. *La formation du concept de réflexe aux XVIIe et XVIIIe siècles*. 2nd ed. Paris: J. Vrin, 1977.

———. *The Normal and the Pathological*. Translated by Carolyn R. Fawcett and Robert S. Cohen. New York: Zone Books, 1989.

Certeau, Michel de. *The Practice of Everyday Life*. Translated by Steven Rendall. Berkeley: University of California Press, 1984.

Certeau, Michel de, Luce Giard, and Pierre Mayol. *The Practice of Everyday Life*. Edited by Luce Giard. Translated by Timothy J. Tomasik. Rev. and augm. Ed. Vol. 2, *Living and Cooking*. Minneapolis: University of Minnesota Press, 1998.

Chertok, L. "On the Discovery of the Cathartic Method." *International Journal of Psycho-Analysis* 42 (1961): 284–87.

Cherubim, Dieter. "Zur bürgerlichen Sprache des 19. Jahrhunderts: Historisch-pragmatische Skizze." *Wirkendes Wort* 33, no. 6 (1983): 398–422.

Clark, Christopher, and Wolfram Kaiser, eds. *Culture Wars: Secular-Catholic Conflict in Nineteenth-Century Europe*. Cambridge: Cambridge University Press, 2009.
Clark, William. "On the Professorial Voice." *Science in Context* 16, no. 1–2, special issue on "Scientific Personae" (March 2003): 43–57. https://doi.org/10.1017/S0269889703000693.
Coen, Deborah R. "The Common World: Histories of Science and Domestic Intimacy." *Modern Intellectual History* 11, no. 02 (August 2014): 417–38. https://doi.org/10.1017/S1479244314000079.
———. *Vienna in the Age of Uncertainty: Science, Liberalism, and Private Life*. Chicago: University of Chicago Press, 2007.
Coleman, William, and Frederic Lawrence Holmes, eds. *The Investigative Enterprise: Experimental Physiology in Nineteenth-Century Medicine*. Berkeley: University of California Press, 1988.
Collins, H. M. "The Place of the 'Core-Set' in Modern Science: Social Contingency with Methodological Propriety in Science." *History of Science* 19, no. 1 (March 1981): 6–19. https://doi.org/10.1177/007327538101900102.
Colpe, Carsten, and Wilhelm Schmidt-Biggemann, eds. *Das Böse: Eine historische Phänomenologie des Unerklärlichen*. Suhrkamp Taschenbuch Wissenschaft. Frankfurt am Main: Suhrkamp, 1993.
Corbin, Alain. *The Foul and the Fragrant: Odor and the French Social Imagination*. Cambridge, MA: Harvard University Press, 1986.
Cowles, Henry M. *The Scientific Method: An Evolution of Thinking from Darwin to Dewey*. Cambridge, MA: Harvard University Press, 2020.
Cranefield, Paul F. "The Organic Physics of 1847 and the Biophysics of Today." *Journal of the History of Medicine and Allied Sciences* 12, no. 4 (1957): 407–23.
———. "The Philosophical and Cultural Interests of the Biophysics Movement of 1847." *Journal of the History of Medicine and Allied Sciences* 21, no. 1 (1966): 1–7.
Creutz, Walter. "Der Dichterarzt Ernst Frhr. v. Feuchtersleben und die psychosomatische Medizin." *Medizinische Monatsschrift* 5, no. 4 (1951): 286–89.
Czakó, István. *Geist und Unsterblichkeit: Grundprobleme der Religionsphilosophie und Eschatologie im Denken Søren Kierkegaards*. Berlin: De Gruyter, 2015.
Czeike, Felix. *Historisches Lexikon Wien*. 6 vols. Vienna: Kremayr & Scheriau, 1992. https://www.digital.wienbibliothek.at/wbrobv/content/titleinfo/1112764.
Dalma, Juan. "La catarsis en Aristoteles, Bernays y Freud." *Revista psiquiatrica* 11, no. 6 (1963): 253–69.
Danziger, Kurt. *Constructing the Subject: Historical Origins of Psychological Research*. Cambridge: Cambridge University Press, 1990.
Daston, Lorraine, ed. *Biographies of Scientific Objects*. University of Chicago Press, 2000.
———, ed. *Things That Talk: Object Lessons from Art and Science*. New York: Zone Books, 2004.
Daston, Lorraine, and Peter Galison. *Objectivity*. New York: Zone Books, 2007.

Daston, Lorraine, and H. Otto Sibum. "Introduction: Scientific Personae and Their Histories." *Science in Context* 16, no. 1–2, special issue on "Scientific Personae" (March 2003): 1–8. https://doi.org/10.1017/S026988970300067X.
Davies, Winifred V. " 'Sprachkultur' in Lay and Academic Discourse in Modern Germany." *German Life and Letters* 61, no. 4 (2008): 435–50. https://doi.org/10.1111/j.1468-0483.2008.00435.x.
Ditrich, Tamara. "Buddhism between Asia and Europe: The Concept of Mindfulness through a Historical Lens." *Asian Studies* 4, no. 1 (2016): 197–213. https://doi.org/10.4312/as.2016.4.1.197-213.
Döcker, Ulrike. "Bürgerlichkeit Und Kultur—Bürgerlichkeit Als Kulture: Eine Einführung." In *Bürgertum in Der Habsburgermonarchie*, edited by Ernst Bruckmüller, Ulrike Döcker, Hannes Stekl, and Peter Urbanitsch, 95–104. Bürgertum in Der Habsburgermonarchie 1. Vienna: Böhlau, 1990.
Doniger, Wendy. "Assume the Position: The Fight Over the Body of Yoga." In *On Hinduism*. Oxford: Oxford University Press, 2014. https://doi.org/10.1093/acprof:oso/9780199360079.003.0009.
Döring, Detlef, and Annelies Plätsch. "Kommentiertes Verzeichnis des handschriftlichen Nachlasses Gustav Theodor Fechners in der Universitätsbibliothek Leipzig." In *Psychophysische Grundlagen mentaler Prozesse: in memoriam G. Th. Fechner (1801–1887)*, edited by Hans-Georg Geißler and Konrad Reschke. Leipzig: Karl-Marx-Universität, 1987.
Dornik, Wolfram. "Conrad von Hötzendorf and the 'Smoking Gun': A Biographical Examination of Responsibility and Traditions of Violence against Civilians in the Habsburg Army." In *1914: Austria-Hungary, the Origins, and the First Year of World War I*, edited by Günter Bischof, Ferdinand Karlhofer, and Samuel R. Williamson, 55–75. Contemporary Austrian Studies 23. University of New Orleans Press, 2014. https://doi.org/10.2307/j.ctt1n2txft.6.
Drechsel, Wiltrud Ulrike. *Höhere Töchter: Zur Sozialisation bürgerlicher Mädchen im 19. Jahrhundert*. Beträge zur Sozialgeschichte Bremens 21. Bremen: Edition Temmen, 2001.
Duda, Sibylle. "Bertha Pappenheim (1859–1936): Erkundungen zur Geschichte der Hysterie oder 'Der Fall Anna O.' " In *Wahnsinns-Frauen*, edited by Sibylle Duda, 123–45. Suhrkamp Taschenbuch 1876. Frankfurt am Main: Suhrkamp, 1992.
———, ed. *Wahnsinns-Frauen*. Suhrkamp Taschenbuch 1876. Frankfurt am Main: Suhrkamp, 1992.
Duden, Barbara. *The Woman beneath the Skin: A Doctor's Patients in Eighteenth-Century Germany*. Translated by Thomas Dunlap. Cambridge: Harvard University Press, 1991.
Dumoulin, Heinrich. "Buddhism and Nineteenth-Century German Philosophy." *Journal of the History of Ideas* 42, no. 3 (1981): 457–70. https://doi.org/10.2307/2709187.
Dunning, David E. "Writing the Rules of Reason: Notations in Mathematical Logic, 1847–1937." PhD diss., Princeton University, 2020.

Ellenberger, Henri F. "Fechner and Freud." In *Beyond the Unconscious: Essays of Henri F. Ellenberger in the History of Psychiatry*, 89–103. Princeton, NJ: Princeton University Press, 1993.
———. *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry*. New York: Basic Books, 1970.
———. "The Story of 'Anna O': A Critical Review with New Data." *Journal of the History of the Behavioral Sciences* 8, no. 3 (July 1972): 267–79.
Elspaß, Stephan. "Briefe und Tagebücher als Quellen der Alltags- und Alltagssprachgeschichte." *Der Deutschunterricht* 3 (2007): 42–51.
Engelhardt, Dietrich von. *Historisches Bewusstsein in der Naturwissenschaft: von der Aufklärung bis zum Positivismus*. Munich: Alber, 1979.
———. "Romanticism in Germany." In *Romanticism in National Context*, edited by Roy Porter and Mikuláš Teich, 109–33. Cambridge: Cambridge University Press, 1988.
———. "Science, Society and Culture in the Romantic *Naturforschung* around 1800." In *Nature and Society in Historical Context*, edited by Mikuláš Teich, Roy Porter, and Bo Gustafsson, 195–208. Cambridge: Cambridge University Press, 1997.
Eulner, Hans-Heinz. "Das Spezialistentum in der ärztlichen Praxis." In *Der Arzt und der Kranke in der Gesellschaft des 19. Jahrhunderts: Vorträge eines Symposiums vom 1. bis 3. April 1963 in Frankfurt am Main*, edited by Walter Artelt and Walter Rüegg. Stuttgart: Enke, 1967.
Evers, Dirk. "Der Fechner'sche Gottesbegriff." In *Fechner und die Folgen außerhalb der Naturwissenschaften: Interdisziplinäres Kolloquium zum 200. Geburtstag Gustav Theodor Fechners*, edited by Irene Altmann and Ulla Fix, 43–66. Tübingen: Niemeyer, 2003.
Farber, Sharon K. "Free Association Reconsidered: The Talking Cure, The Writing Cure." *The Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry* 33, no. 2 (June 2005): 249–73. https://doi.org/10.1521/jaap.2005.33.2.249.
Fechner, Gustav Theodor, and Walter Lowrie. *Religion of a Scientist: Selections from Gustav Th. Fechner*. Edited and translated by Walter Lowrie. New York: Pantheon Books, 1946.
Fellner, Hans G., and William F. Lindgren. "Gustav Theodor Fechner: Pioneer of the Fourth Dimension." *Mathematical Intelligencer* 33, no. 3 (September 2011): 126–37. https://doi.org/10.1007/s00283-011-9214-7.
Fix, Ulla, and Irene Altmann, eds. *Fechner und die Folgen außerhalb der Naturwissenschaften: Interdisziplinäres Kolloquium zum 200. Geburtstag Gustav Theodor Fechners*. Tübingen: Niemeyer, 2003.
Forrester, John. *Language and the Origins of Psychoanalysis*. New York: Columbia University Press, 1980.
———. "The True Story of Anna O." *Social Research* 53, no. 2 (1986): 327–47.
Forrester, John, and Laura Cameron. " 'A Cure with a Defect': A Previously Unpublished Letter by Freud Concerning 'Anna O.' " *International Journal of Psycho-Analysis* 80, no. 5 (1999): 929–42.

Forster-Hahn, Françoise. "A Hero for All Seasons? Illustrations for Goethe's 'Faust' and the Course of Modern German History." *Zeitschrift Für Kunstgeschichte* 53, no. 4 (1990): 511–36. https://doi.org/10.2307/1482552.
Foucault, Michel. *Madness and Civilization: A History of Insanity in the Age of Reason*. Translated by Richard Howard. New York: Vintage Books, 1988.
———. *The History of Sexuality*. Vol. 1. New York: Pantheon Books, 1978.
Frank, Alison F. "The Air Cure Town: Commodifying Mountain Air in Alpine Central Europe." *Central European History* 45, no. 2 (June 2012): 185–207. https://doi.org/10.1017/S0008938912000027.
Freeman, Lucy. "Immortal Anna O.: From Freud to Feminism." *New York Times*, November 11, 1979, sec. SM.
———. *The Story of Anna O.* New York: Walker, 1972.
Friedrich, Margret. *"Ein Paradies ist uns verschlossen . . .": Zur Geschichte der schulischen Mädchenerziehung in Österreich im "langen" 19. Jahrhundert*. Vienna: Böhlau, 1999.
Fuhs, Burkhard. *Mondäne Orte einer vornehmen Gesellschaft: Kultur und Geschichte der Kurstädte, 1700–1900*. Hildesheim, Germany: Georg Olms, 1992.
Fusenig, Thomas. "*Faust*-Rezeption in der bildenden Kunst." *Goethe-Handbuch* 2 (1996): 514–21.
Gabriel, Norbert. " '. . . dass die Frauen in Deutschland durchaus Kinder bleiben müssen . . .': Die Tagebücher der Marie von Ebner-Eschenbach." In *Des Mitleids tiefe Liebesfähigkeit: Zum Werk der Marie von Ebner-Eschenbach*, edited by Joseph P. Strelka, 77–95. Bern: Peter Lang, 1997.
Gaffikin, Brigid. "Material Witnesses: Hans Christian Andersen's *tingseventyr* and the Memories of Things." *Edda*, no. 3 (2004): 186–200.
Galison, Peter. *Einstein's Clocks and Poincaré's Maps: Empires of Time*. New York: W. W. Norton, 2003.
———. "Einstein's Clocks: The Place of Time." *Critical Inquiry* 26, no. 2 (2000): 355–89.
Gambarotto, Andrea. "Lorenz Oken (1779–1851): Naturphilosophie and the Reform of Natural History." *British Journal for the History of Science* 50, no. 2 (June 2017): 329–40. https://doi.org/10.1017/S0007087417000310.
Gay, Peter. *Freud: A Life for Our Time*. New York: W. W. Norton, 1988.
Geertz, Clifford. "Thick Description: Toward an Interpretive Theory of Culture." In *The Interpretation of Cultures: Selected Essays*, 3–32. New York: Basic Books, 1973.
Geisenhanslüke, Achim, and Georg Mein, eds. *Schriftkultur und Schwellenkunde*. Literalität und Liminalität 1. Bielefeld: Transcript, 2008.
Gellhaus, Axel, Christian Moser, and Helmut J. Schneider, eds. *Kopflandschaften, Landschaftsgänge: Kulturgeschichte und Poetik des Spaziergangs*. Köln: Böhlau, 2007.
George, Alys X. *The Naked Truth: Viennese Modernism and the Body*. Chicago: University of Chicago Press, 2020.
Gilman, Sander L. *Jewish Self-Hatred: Anti-Semitism and the Hidden Language of the Jews*. Baltimore: Johns Hopkins University Press, 1992.

Gobert, R. Darren. "Historicizing Emotion: The Case of Freud Hysteria and Aristotelian 'Purgation.' " In *Emotion, Place and Culture*, edited by Mick Smith, 57–86. Aldershot, England: Ashgate Publishing, 2009.
Goldberg, Christine. "The Ungrateful Serpent (AaTh 155)." *Fabula* 37, no. 3–4 (1996): 248–58.
Golden, Mason. "Emerson-Exemplar: Friedrich Nietzsche's Emerson Marginalia; Introduction." *Journal of Nietzsche Studies* 44, no. 3 (2013): 398–408.
Goldstein, Jan. *The Post-Revolutionary Self: Politics and Psyche in France, 1750–1850*. Cambridge, MA: Harvard University Press, 2005.
Goodstein, Elizabeth S. *Experience without Qualities: Boredom and Modernity*. Stanford, CA: Stanford University Press, 2005.
Gordin, Michael D. *Einstein in Bohemia*. Princeton, NJ: Princeton University Press, 2020.
Görner, Rüdiger. *Grenzen, Schwellen, Übergänge: zur Poetik des Transitorischen*. Göttingen: Vandenhoeck und Ruprecht, 2001.
Greene, Jeremy A. "Knowledge in Medias Res: Toward a Media History of Science, Medicine, and Technology." *History and Theory* 59, no. 4 (2020): 48–66. https://doi.org/10.1111/hith.12181.
Gregory, Frederick. *Nature Lost? Natural Science and the German Theological Traditions of the Nineteenth Century*. Cambridge, MA: Harvard University Press, 1992.
Gröger, Helmut. "Marie von Ebner-Eschenbach im Spiegel des Briefwechsels mit Josef Breuer." In *Marie von Ebner-Eschenbach: život a dílo; sborník příspěvků ze sympozia (Kroměříž, 3.–4.5.1995)*, edited by Marie von Ebner-Eschenbach and František Valouch, 59–64. Brno: Masarykova univerzita, 1999.
Gros, Frédéric. *A Philosophy of Walking*. Translated by John Howe. London: Verso, 2014.
Grosse, Siegfried. "Die Tagebücher Gustav Theodor Fechners (1801–1887): Beobachtungen zum Sprachgebrauch eines Gelehrten im 19. Jahrhundert." In *Fechner und die Folgen außerhalb der Naturwissenschaften: Interdisziplinäres Kolloquium zum 200. Geburtstag Gustav Theodor Fechners*, edited by Irene :w and Ulla Fix. Tübingen: Niemeyer, 2003.
Guenther, Katja. "Exercises in Therapy—Neurological Gymnastics between *Kurort* and Hospital Medicine, 1880–1945." *Bulletin of the History of Medicine* 88, no. 1 (2014): 102–31. https://doi.org/10.1353/bhm.2014.0022.
———. *Localization and Its Discontents: A Genealogy of Psychoanalysis and the Neuro Disciplines*. Chicago: University of Chicago Press, 2015.
———. "The Disappearing Lesion: Sigmund Freud, Sensory-Motor Physiology, and the Beginnings of Psychoanalysis." *Modern Intellectual History* 10, no. 3 (November 2013): 569–601. https://doi.org/10.1017/S147924431300022X.
Guldi, Joanna. "The History of Walking and the Digital Turn: Stride and Lounge in London, 1808–1851." *Journal of Modern History* 84, no. 1 (2012): 116–44. https://doi.org/10.1086/663350.

Gundlach, Horst. *Entstehung und Gegenstand der Psychophysik*. Lehr- und Forschungstexte Psychologie 45. Berlin: Springer, 1993.
———. *Index Psychophysicus: Bio- und bibliographischer Index zu Fechners Elementen der psychophysik und den Parerga*. Passau: Passavia Universitätsverlag, 1988.
———. "Was hat Fechner gemessen?" In *Gustav Theodor Fechner: Werk und Wirkung*, edited by Anneros Meischner-Metge, 49–56. Leipzig: Leipziger Universitätsverlag, 2010.
Guttmann, Melinda Given. *The Enigma of Anna O.: A Biography of Bertha Pappenheim*. Wickford, RI: Moyer Bell, 2001.
Hacking, Ian. "Historical Meta-Epistemology." In *Wahrheit Und Geschichte: Ein Kolloquium Zu Ehren Des 60. Geburtstages von Lorenz Krüger*, edited by Wolfgang Carl and Lorraine Daston, 53–77. Göttingen: Vandenhoeck und Ruprecht, 1999.
———. *Historical Ontology*. Cambridge, MA: Harvard University Press, 2002.
———. *The Taming of Chance*. Cambridge: Cambridge University Press, 1990.
Hadot, Pierre. *Philosophy as a Way of Life: Spiritual Exercises from Socrates to Foucault*. Edited by Arnold I. Davidson. Translated by Michael Chase. Oxford: Blackwell, 1995.
Hagner, Michael. *Homo cerebralis: Der Wandel vom Seelenorgan zum Gehirn*. Berlin: Berlin Verlag, 1997.
Harrington, Anne. *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler*. Princeton, NJ: Princeton University Press, 1996.
———. *The Cure within: A History of Mind-Body Medicine*. New York: Norton, 2008.
Heaton, John M. *The Talking Cure: Wittgenstein's Therapeutic Method for Psychotherapy*. Basingstoke, Hampshire: Palgrave Macmillan, 2013.
Heidelberger, Michael. "Fechner's Impact for Measurement Theory." *Behavioral and Brain Sciences* 16, no. 1 (March 1993): 146–48. https://doi.org/10.1017/S0140525X00029368.
———. "Gustav Theodor Fechner and the Unconscious." In *Thinking the Unconscious: Nineteenth-Century German Thought*, edited by Angus Nicholls and Martin Liebscher, translated by Simon Thomas. Cambridge: Cambridge University Press, 2010.
———. *Nature from within: Gustav Theodor Fechner and His Psychophysical Worldview*. Pittsburgh: University of Pittsburgh Press, 2004.
Heischkel-Artelt, Edith. "Die Welt des praktischen Arztes im 19. Jahrhundert." In *Der Arzt und der Kranke in der Gesellschaft des 19. Jahrhunderts: Vorträge eines Symposiums vom 1. bis 3. April 1963 in Frankfurt am Main*, edited by Walter Artelt and Walter Rüegg, 1–16. Stuttgart: Enke, 1967.
Helbig, Daniela Katharina. "The Known and the Lived: Studies in Techno-Scientific 'Experience.' " PhD diss., Harvard University, 2012.
Hirschmüller, Albrecht. "Durch Leiden zur schöpferischen Kraft? Anna O. und Bertha Pappenheim." In *Dokumentation zum 50. Todestag von Bertha Pappenheim: Veranstaltungsreihe im Auftrag des Magistrates der Stadt Neu-Isenburg 1986*, 51–69. Neu-Isenburg, 1988.

———. *Physiologie und Psychoanalyse in Leben und Werk Josef Breuers*. Jahrbuch der Psychoanalyse, Beiheft 4. Bern: Huber, 1978.
———. *The Life and Work of Josef Breuer: Physiology and Psychoanalysis*. New York: New York University Press, 1989.
Honigmann, Barbara. "Ein Buch, das ich nicht geschrieben habe: Zürcher Poetikvorlseung (III); Über biographisches Schreiben." In *Das Gesicht wiederfinden: Über Schreiben, Schriftsteller und Judentum*, 89–111. Edition Akzente. Munich: Hanser, 2006.
Hoskyns, Tam. *The Talking Cure*. London: Hamish Hamilton, 1997.
Huerkamp, Claudia. *Der Aufstieg der Ärzte im 19. Jahrhundert: Vom gelehrten Stand zum professionellen Experten; Das Beispiel Preußens*. Kritische Studien zur Geschichtswissenschaft 68. Göttingen: Vandenhoeck & Ruprecht, 1985.
Hui, Alexandra. *The Psychophysical Ear: Musical Experiments, Experimental Sounds, 1840–1910*. Transformations: Studies in the History of Science and Technology. Cambridge, MA: MIT Press, 2013.
Hunt, Morton M., Rena Corman, and Louis R. Ormont. *The Talking Cure: A Concise and Practical Guide to Psychoanalysis Today*. New York: Harper & Row, 1964.
Hunter, Dianne. "Hysteria, Psychoanalysis, and Feminism: The Case of Anna O." *Feminist Studies* 9, no. 3 (1983): 465–88. https://doi.org/10.2307/3177609.
Husserl, Edmund. *Phenomenology and the Crisis of Philosophy*. Translated by Quentin Lauer. New York: Harper and Row, 1965.
———. *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. Translated by David Carr. Evanston, IL: Northwestern University Press, 1970.
Hyder, David, and Hans-Jörg Rheinberger, eds. *Science and the Life-World: Essays on Husserl's "Crisis of European Sciences."* Stanford, CA: Stanford University Press, 2010.
Jackson, Catherine M. "Chemistry as the Defining Science: Discipline and Training in Nineteenth-Century Chemical Laboratories." *Endeavour* 35, no. 2 (June 2011): 55–62. https://doi.org/10.1016/j.endeavour.2011.05.003.
Jackson, Myles. "Harmonious Investigators of Nature: Music and the Persona of the German *Naturforscher* in the Nineteenth Century." *Science in Context* 16, no. 1–2, special issue on "Scientific Personae" (March 2003): 121–45. https://doi.org/10.1017/S0269889703000759.
Jacobus, Mary. "Taking Liberties with Words." In *Reading Woman: Essays in Feminist Criticism*. New York: Columbia University Press, 1986.
Jay, Martin. *Songs of Experience: Modern American and European Variations on a Universal Theme*. Berkeley: University of California Press, 2005.
Jensen, Ellen. "Anna O.: Ihr Späteres Schicksal." *Acta Psychiatrica Scandinavica* 36, no. 1 (1961): 119–31. https://doi.org/10.1111/j.1600-0447.1961.tb01763.x.
Jensen, Ellen M. "Anna O—A Study of Her Later Life." *Psychoanalytic Quarterly* 39, no. 2 (April 1970): 269–93. https://doi.org/10.1080/21674086.1970.11926529.

———. *Streifzüge durch das Leben von Anna O. / Bertha Pappenheim: Ein Fall für die Psychiatrie—Ein Leben für die Philanthropie*. Frankfurt am Main: ZTV, 1984.
Jones, Ernest. *Sigmund Freud: Life and Work*. 3 vols. London: Hogarth, 1953.
Jones, Matthew L. *The Good Life in the Scientific Revolution: Descartes, Pascal, Leibniz, and the Cultivation of Virtue*. Chicago: University of Chicago Press, 2006.
Judson, Pieter M. *Exclusive Revolutionaries: Liberal Politics, Social Experience, and National Identity in the Austrian Empire, 1848–1914*. Ann Arbor: University of Michigan Press, 1996.
Jungnickel, Christa, and Russell McCormmach. *Intellectual Mastery of Nature: Theoretical Physics from Ohm to Einstein*. 2 vols. Chicago: University of Chicago Press, 1986.
———. *The Torch of Mathematics, 1800–1870*. Vol. 1. Intellectual Mastery of Nature: Theoretical Physics from Ohm to Einstein. Chicago: University of Chicago Press, 1986.
Kalbeck, Max. *Johannes Brahms*. Vol. 4–2. 4 vols. Berlin: Deutsche Brahms-Gesellschaft, 1915.
Kaplan, Marion A. *The Jewish Feminist Movement in Germany: The Campaigns of the Jüdischer Frauenbund, 1904–1938*. Contributions in Women's Studies 8. Westport, Connecticut: Greenwood, 1979.
Karpe, Richard. "The Rescue Complex in Anna O's Final Identity." *Psychoanal Quarterly* 30 (1961): 1–27.
Kaye, Joel. *A History of Balance, 1250-1375: The Emergence of a New Model of Equilibrium and Its Impact on Medieval Thought*. Cambridge: Cambridge University Press, 2014.
Kenny, Dianna T. *From ID to Intersubjectivity: Talking about the Talking Cure with Master Clinicians*. London: Karnac, 2014.
Kettmann, Gerhard. "Die Existenzformen der deutschen Sprache im 19. Jahrhundert: Ihre Entwicklung und ihr Verhältnis zueinander unter den Bedingungen der indu- striellen Revolution." In *Auswirkungen der industriellen Revolution auf die deutsche Sprachentwicklung im 19. Jahrhundert*, edited by Joachim Schildt. Berlin: Akademie-Verlag, 1981.
Killen, Andreas. *Berlin Electropolis: Shock, Nerves, and German Modernity*. Berkeley: University of California Press, 2006.
Kittler, Friedrich A. *Discourse Networks 1800/1900*. Translated by Michael Metteer and Chris Cullens. Stanford, CA: Stanford University Press, 1990.
———. *Gramophone, Film, Typewriter*. Translated by Geoffrey Winthrop-Young and Michael Wutz. Stanford, CA: Stanford University Press, 1999.
Kleeberg, Bernhard. "God-Nature Progressing: Natural Theology in German Monism." *Science in Context* 20, no. 3 (September 2007): 537–69. https://doi.org/10.1017/S026988970700141X.
———. *Theophysis: Ernst Haeckels Philosophie des Naturganzen*. Cologne: Böhlau, 2005.

———. "Vestiges of the Book of Nature: Religious Experiences and Hermeneutic Practices in Protestant German Theology, ca. 1900." In *Historical Perspectives on Erklären and Verstehen*, edited by Uljana Feest, 37–59. Archimedes 21. Dordrecht: Springer, 2010.
Klostermaier, Doris. "Anton Bettelheim: Creator of the Ebner-Eschenbach Myth." *Modern Austrian Literature* 29, no. 2 (1996): 15–43.
Klostermaier, Doris M. *Marie von Ebner-Eschenbach: The Victory of a Tenacious Will*. Studies in Austrian Literature, Culture, and Thought. Riverside, CA: Ariadne, 1997.
Koestenbaum, Wayne. *Double Talk: The Erotics of Male Literary Collaboration*. New York: Routledge, 1989.
König, Gudrun M. *Eine Kulturgeschichte des Spazierganges: Spuren einer bürgerlichen Praktik 1780–1850*. Vienna: Böhlau, 1996.
Koselleck, Reinhart. "On the Anthropological and Semantic Structure of *Bildung*." In *The Practice of Conceptual History: Timing History, Spacing Concepts*, translated by Todd Samuel Presner, 170–207. Stanford, CA: Stanford University Press, 2002.
———. *The Practice of Conceptual History: Timing History, Spacing Concepts*. Translated by Todd Samuel Presner and others. Stanford, CA: Stanford University Press, 2002.
Krause, Gerhard, and Gerhard Müller, eds. *Theologische Realenzyklopädie*. 36 vols. New York: De Gruyter, 1976.
Krebber, Sabine. *Der Spaziergang in der Kunst: eine Untersuchung des Motives in der Kunst des 18. und 19. Jahrhunderts*. Frankfurt am Main: P. Lang, 1990.
Kreft, Gerald. "Anna O. und/oder Bertha Pappenheim . . .: Umschreibungen eines Desiderats anläßlich der Edition des nachgelassenen Manuskripts (1959) von Max M. Stern (1895–1982)." In *Den Menschen zugewandt leben: Festschrift für Werner Licharz*, edited by Ulrich Lilienthal and Werner Licharz, 205–37. Osnabrück: Secolo, 1999.
———. "Zur Archäologie der Psychoanalyse in Frankfurt: Fundstücke und Perspektiven um Ludwig Edinger." In *Psychoanalyse in Frankfurt am Main: Zerstörte Anfänge, Wiederannäherungen, Entwicklungen*, 195–234. Tübingen: Diskord, 1996.
Kreiter, Berend Geert. "Philosophy as Weltanschauung in Trendelenburg, Dilthey and Windelband." Doctoral diss., Vrije Universiteit, 2007.
Krell, David Farrell. "Emerson—Nietzsche's Voluptuary?" *Comparative and Continental Philosophy* 7, no. 1 (May 2015): 8–17. https://doi.org/10.1179/1757063815Z.00000000045.
Kuehn, Manfred. *Immanuel Kant: A Biography*. New York: Cambridge University Press, 2001.
Kügelgen, Wilhelm von. *Erinnerungen aus dem Leben des Alten Mannes: Tagebücher und Reiseberichte*. Edited by Hans Schöner and Anton Knittel. Munich: Koehler und Amelang, 1994.
Kuriyama, Shigehisa. *The Expressiveness of the Body and the Divergence of Greek and Chinese Medicine*. New York: Zone Books, 1999.

Kusch, Martin. *Psychologism: A Case Study in the Sociology of Philosophical Knowledge*. Philosophical Issues in Science. London: Routledge, 1995.
Lang, Hermann. *Das Gespräch als Therapie*. Frankfurt am Main: Suhrkamp, 2000.
Laplanche, Jean, and Jean-Bertrand Pontalis. *The Language of Psycho-Analysis*. Translated by Donald Nicholson-Smith. London: Karnac Books, 1988.
Lawrence, Christopher, and Steven Shapin, eds. *Science Incarnate: Historical Embodiments of Natural Knowledge*. Chicago: University of Chicago Press, 1998.
Lempa, Heikki. *Beyond the Gymnasium: Educating the Middle-Class Bodies in Classical Germany*. Lanham, MD: Lexington Books, 2007.
Lennig, Petra. *Von der Metaphysik zur Psychophysik: Gustav Theodor Fechner (1801-1887): eine ergobiographische Studie*. Frankfurt am Main: P. Lang, 1994.
Lenoir, Timothy. "Laboratories, Medicine and Public Life in Germany, 1830–1849: Ideological Roots of the Institutional Revolution." In *The Laboratory Revolution in Medicine*, edited by Andrew Cunningham and Perry Williams. Cambridge: Cambridge University Press, 1992.
Lepore, Jill. "Historians Who Love Too Much: Reflections on Microhistory and Biography." *Journal of American History* 88, no. 1 (2001): 129–44. https://doi.org/10.2307/2674921.
Lesky, Erna. *The Vienna Medical School of the 19th Century*. Translated by L. Williams and I. S. Levij. Baltimore: Johns Hopkins University Press, 1976.
Leuzinger, Paul. *Katharsis: Zur Vorgeschichte Eines Therapeutischen Mechanismus Und Seiner Weiterentwicklung Bei J. Breuer Und in S. Freuds Psychoanalyse*. Beiträge Zur Psychologischen Forschung 36. Opladen: Westdeutscher Verlag, 1997.
Levenson, Alan. "The Conversionary Impulse in Fin De Siècle Germany." *Leo Baeck Institute Year Book* 40, no. 1 (January 1995): 107–22. https://doi.org/10.1093/leobaeck/40.1.107.
Linke, Angelika. "Körperkonfigurationen: Die Sitzgruppe; Zur Kulturgeschichte des Verhältnisses von Gespräch, Körpern und Raum vom 18. bis zum Ende des 20. Jahrhunderts." *Jahrbuch für Germanistische Sprachgeschichte* 3, no. 1 (January 2012). https://doi.org/10.1515/jbgsg-2012-0013.
———. *Sprachkultur und Bürgertum: Zur Mentalitätsgeschichte des 19. Jahrhunderts*. Stuttgart: Metzler, 1996.
———. "Zur Kulturalität und Historizität von Gesprächen und Gesprächsforschung." *Gesprächsforschung* 9 (2008): 115–28.
Liu, Grant T., Nicholas J. Volpe, and Steven L. Galetta. *Neuro-Ophthalmology: Diagnosis and Management*. 2 rev. ed. Philadelphia: Saunders, 2010.
Loentz, Elizabeth. *Let Me Continue to Speak the Truth: Bertha Pappenheim as Author and Activist*. Cincinnati: Hebrew Union College Press, 2007.
Lopate, Phillip. "The Life of the Mind." *Hopkins Review* 3, no. 2 (April 2010): 189–95. https://doi.org/10.1353/thr.0.0153.
Lorenz, Dagmar C. G. *Wiener Moderne*. 2 updated and Revised. Sammlung Metzler 290. Stuttgart: Metzler, 2007.

Lund, Katrín. "Landscapes and Narratives: Compositions and the Walking Body." *Landscape Research* 37, no. 2 (April 2012): 225–37. https://doi.org/10.1080/01426397.2011.651111.
MacCabe, Colin, ed. *The Talking Cure: Essays in Psychoanalysis and Language*. Basingstoke, Hampshire: Macmillan, 1986.
Madison, Greg, ed. *Theory and Practice of Focusing-Oriented Psychotherapy: Beyond the Talking Cure*. London: Jessica Kingsley, 2014.
Makari, George. *Revolution in Mind: The Creation of Psychoanalysis*. New York: HarperCollins, 2008.
Marshall, Marilyn E. "Biographical Genre and Biographical Archetype: Five Studies of Gustav Theodor Fechner." *Storia e Critica Della Psicologia* 1, no. 2 (1980): 197–233.
———. "G. T. Fechner: Premises toward a General Theory of Organisms (1823)." *Journal of the History of the Behavioral Sciences* 10, no. 4 (October 1974): 438–47.
———. "Gustav Fechner, Dr. Mises, and the Comparative Anatomy of Angels." *Journal of the History of the Behavioral Sciences* 5, no. 1 (January 1969): 39–58.
———. "Gustav Theodor Fechner: Psychological Acrobat." In *G. T. Fechner and Psychology: International Gustav Theodor Fechner Symposium, Passau, 12–14 June 1987*, edited by Josef Brožek and Horst Gundlach, 31–44. Passauer Schriften Zur Psychologiegeschichte 6. Passau: Passavia Universitätsverlag, 1988.
———. "Physics, Metaphysics, and Fechner's Psychophysics." In *The Problematic Science: Psychology in Nineteenth-Century Thought*, edited by William R. Woodward and Mitchell G. Ash, 65–87. New York: Praeger, 1982.
———. "The Theme of Quantification and the Hidden Weber in the Early Work of Gustav Theodor Fechner." *Canadian Psychology / Psychologie Canadienne* 31, no. 1 (1990): 45–53.
———. "William James, Gustav Fechner, and the Question of Dogs and Cats in the Library." *Journal of the History of the Behavioral Sciences* 10, no. 3 (July 1974): 304–12.
Martin, R. N. D. "Duhem and the Origins of Statics: Ramifications of the Crisis of 1903–04." *Synthese* 83 (1990): 337–55.
———. "The Genesis of a Mediaeval Historian: Pierre Duhem and the Origins of Statics." *Annals of Science* 33, no. 2 (March 1976): 119–29. https://doi.org/10.1080/00033797600200181.
Mausfeld, Rainer. "Von der Zahlenmetapher zur Maßformel: Fechners Psychophysik in der Tradition der *Mathethis universalis*." In *Gustav Theodor Fechner: Werk und Wirkung*, edited by Anneros Meischner-Metge, 14–27. Leipzig: Leipziger Universitätsverlag, 2010.
Mauss, Marcel. "Techniques of the Body." *Economy and Society* 2, no. 1 (1973): 70–88. https://doi.org/10.1080/03085147300000003.
Mayer, Amalie, Hildegard Meissner, and Henriette Siess, eds. *Geschichte der österreichischen Mädchenmittelschule*. 2 vols. Vienna: Österreichischer Bundesverlag, 1952.

Mayer, Andreas. *Sites of the Unconscious: Hypnosis and the Emergence of the Psychoanalytic Setting*. Chicago: University of Chicago Press, 2013.
———. *Wissenschaft vom Gehen*. Frankfurt am Main: Fischer, 2013.
McClelland, Charles E. *State, Society, and University in Germany, 1700–1914*. Cambridge: Cambridge University Press, 1980.
McCormmach, Russell. *Night Thoughts of a Classical Physicist*. Cambridge, MA: Harvard University Press, 1991.
Medwed, Hans-Peter. "Ernst Fleischl von Marxow (1846–1891): Leben und Werk." Doctoral diss., Medezinische Fakultät der Eberhard-Karls-Universität zu Tübingen, 1997.
Mehrpour, Masoud, Mohammad R. Motamed, Mahboubeh Aghaei, Nazanin Jalali, and Zahra Ghoreishi. "Unusual Recovery of Aphasia in a Polyglot Iranian Patient after Ischemic Stroke." *Basic and Clinical Neuroscience* 5, no. 2 (2014): 173–75.
Meischner-Metge, Anneros. "Einleitung." In *Tagebücher 1828 bis 1879*, by Gustav Theodor Fechner, ix–xxviii. edited by Anneros Meischner-Metge and Irene Altmann. Leipzig: Verlag der Sächsischen Akademie der Wissenschaften, 2004.
———. "Gustav Theodor Fechner: Life and Work in the Mirror of His Diary." *History of Psychology* 13, no. 4 (2010): 411–23. https://doi.org/10.1037/a0021587.
———, ed. *Gustav Theodor Fechner: Werk und Wirkung*. Leipzig: Leipziger Universitätsverlag, 2010.
Micale, Mark S. *Approaching Hysteria: Disease and Its Interpretations*. Princeton, NJ: Princeton University Press, 1995.
———. *Hysterical Men: The Hidden History of Male Nervous Illness*. Cambridge, MA: Harvard University Press, 2008.
Milam, Erika Lorraine, and Robert A. Nye. "An Introduction to *Scientific Masculinities*." *Osiris* 30, "Scientific Masculinities", no. 1 (2015): 1–14. https://doi.org/10.1086/682953.
Moloney, Paul. *The Therapy Industry: The Irresistible Rise of the Talking Cure, and Why It Doesn't Work*. London: Pluto, 2013.
Mortensen, Klaus P. "The Poetry of Chance: On Hans Christian Andersen's 'Picture Book without Pictures.' " *Fabula* 46, no. 1–2 (April 20, 2005): 55–66. https://doi.org/10.1515/fabl.2005.46.1-2.55.
Mullen, Pierce C. "The Romantic as Scientist: Lorenz Oken." *Studies in Romanticism* 16, no. 3 (1977): 381–99. https://doi.org/10.2307/25600091.
Müller-Wille, Klaus. "Hans Christian Andersen und die Dinge." In *Hans Christian Andersen und die Heterogenität der Moderne*, edited by Klaus Müller-Wille, 132–58. Beiträge zur nordischen Philologie 46. Tübingen: Francke, 2009.
Murray, David J. "A Perspective for Viewing the History of Psychophysics." *Behavioral and Brain Sciences* 16, no. 1 (March 1993): 115–37. https://doi.org/10.1017/S0140525X00029277.
———. "Fechner's Later Psychophysics." *Canadian Psychology* 31, no. 1 (January 1, 1990): 54–60.

Musner, Lutz. *Der Geschmack von Wien: Kultur und Habitus einer Stadt*. Frankfurt am Main: Campus, 2009.
Nautz, Jürgen, Jürgen P. Nautz, and Richard Vahrenkamp, eds. *Die Wiener Jahrhundertwende: Einflüsse, Umwelt, Wirkungen*. Vienna: Böhlau, 1996.
Nehamas, Alexander. *Nietzsche, Life as Literature*. Cambridge, MA: Harvard University Press, 1985.
Nicholls, Angus, and Martin Liebscher, eds. *Thinking the Unconscious: Nineteenth-Century German Thought*. Cambridge: Cambridge University Press, 2010.
Nicholson, Geoff. *The Lost Art of Walking: The History, Science, Philosophy, and Literature of Pedestrianism*. New York: Riverhead Books, 2008.
Nürnberger, Helmuth. "Einladung an den Hausarzt: Marie von Ebner-Eschenbach, 'Ein stummer Vorwurf.' " *Frankfurter Allgemeine Zeitung*, September 9, 2000, sec. Frankfurter Anthologie.
Oehme, Ursula, and Fritz Staude. "Leipzigs Aufstieg zur Großstadt." In *Neues Leipzigisches Geschicht-Buch*, edited by Klaus Sohl. Leipzig: Fachbuchverlag Leipzig, 1990. http://books.google.com/books?id=f1TjAAAAMAAJ.
Oppenheim, Janet. *"Shattered Nerves": Doctors, Patients, and Depression in Victorian England*. New York: Oxford University Press, 1991.
Otis, Laura. *Müller's Lab: The Story of Jakob Henle, Theodor Schwann, Emil Du Bois-Reymond, Hermann von Helmholtz, Rudolf Virchow, Robert Remak, Ernst Haeckel, and Their Brilliant, Tormented Advisor*. Oxford: Oxford University Press, 2007.
———. "The Metaphoric Circuit: Organic and Technological Communication in the Nineteenth Century." *Journal of the History of Ideas* 63, no. 1 (January 2002): 105–28.
———. "The Other End of the Wire: Uncertainties of Organic and Telegraphic Communication." *Configurations* 9, no. 2 (2001): 181–206. https://doi.org/10.1353/con.2001.0013.
Pappenheim, Bertha, and Dora Edinger. *Bertha Pappenheim: Freud's Anna O.* Highland Park, IL: Congregation Solel, 1968.
———. *Bertha Pappenheim: Leben und Schriften*. Edited by Dora Edinger. Frankfurt am Main: Ner-Tamid-Verlag, 1963.
Pearce, J. M. S. "A Note on Aphasia in Bilingual Patients: Pitres' and Ribot's Laws." *European Neurology* 54, no. 3 (2005): 127–31. https://doi.org/10.1159/000089083.
Pfeiffer, Peter C. *Marie von Ebner-Eschenbach: Tragödie, Erzählung, Heimatfilm*. Tübingen: Francke, 2008.
Pieper, Antje. *Music and the Making of Middle-Class Culture: A Comparative History of 19th-Century Leipzig and Birmingham*. BAsingstoke, Hampshire: Palgrave Macmillan, 2008.
Poellner, Peter. "Consciousness in the World: Husserlian Phenomenology and Externalism." In *The Oxford Handbook of Continental Philosophy*, edited by Brian Leiter and Michael Rosen, 407–60. Oxford: Oxford University Press, 2010.

Polheim, Karl Konrad. "Einleitung." In *Tagebücher*, by Marie von Ebner-Eschenbach, ix–xii. edited by Karl Konrad Polheim and Norbert Gabriel. Kritische Texte und Deutungen: Marie von Ebner-Eschenbach. Tübingen: Niemeyer, 1991.
Pollock, George H. "Bertha Pappenheim: Addenda to Her Case History." *Journal of the American Psychoanalytic Association* 21 (1973): 328–32.
———. "Bertha Pappenheim's Pathological Mourning: Possible Effects of Childhood Sibling Loss." *Journal of the American Psychoanalytic Association* 20 (1972): 476–93.
Polt-Heinzl, Evelyne. *Ringstraßenzeit und Wiener Moderne: Porträt einer literarischen Epoche des Übergangs*. Vienna: Sonderzahl, 2015.
Porter, Roy. "The Patient's View: Doing Medical History from Below." *Theory and Society* 14, no. 2 (1985): 175–98.
Rabinbach, Anson. *The Human Motor: Energy, Fatigue, and the Origins of Modernity*. New York: Basic Books, 1990.
Reidy, Michael S. "Mountaineering, Masculinity, and the Male Body in Mid-Victorian Britain." *Osiris* 30, "Scientific Masculinities" (2015): 158–81. https://doi.org/10.1086/682975.
Rheinberger, Hans-Jörg. *An Epistemology of the Concrete: Twentieth-Century Histories of Life*. Durham, NC: Duke University Press, 2010.
———. *On Historicizing Epistemology: An Essay*. Translated by David Fernbach. Stanford, CA: Stanford University Press, 2007.
———. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Stanford, CA: Stanford University Press, 1997.
Richards, Joan L. "In Search of the 'Sea-Something': Reason and Transcendence in the Frend/De Morgan Family." *Science in Context* 20, no. 3 (September 2007): 509–36. https://doi.org/10.1017/S0269889707001408.
Richardson, Robert D. *Henry Thoreau: A Life of the Mind*. Berkeley: University of California Press, 1986.
"Robert Gersuny." *Österreichisches Biographisches Lexikon 1815-1950* 1, no. 5 (1957): 431. https://doi.org/10.1553/0x00281 7a4.
Robinson, David K. "Fechner's 'Inner Psychophysics.' " *History of Psychology* 13, no. 4 (2010): 424–33. https://doi.org/10.1037/a0021641.
Roelcke, Volker. *Krankheit und Kulturkritik: Psychiatrische Gesellschaftsdeutungen im bürgerlichen Zeitalter (1790–1914)*. Frankfurt am Main: Campus, 1999.
Rosenbaum, Max, and Melvin Muroff, eds. *Anna O.: Fourteen Contemporary Reinterpretations*. New York: Free Press, 1984.
Rosenberg, Charles E. "The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth-Century America." *Perspectives in Biology and Medicine* 20, no. 4 (1977): 485–506. https://doi.org/10.1353/pbm.1977.0040.
Rosenzweig, Saul. "The Final Tribute of E. G. Boring to G. T. Fechner: Concerning the Date October 22, 1850." *American Psychologist* 42, no. 8 (August 1987): 787–90.

Rossbacher, Karlheinz. *Literatur und Bürgertum: fünf Wiener jüdische Familien von der liberalen Ära zum Fin de Siecle*. Literatur und Leben, Bd. 64. Wien: Böhlau, 2003.
———. *Literatur und Liberalismus: zur Kultur der Ringstrassenzeit in Wien*. Wien: J&V, 1992.
Salamon, Gayle. *The Life and Death of Latisha King: A Critical Phenomenology of Transphobia*. New York: New York University Press, 2018.
———. "What's Critical about Critical Phenomenology?" *Journal of Critical Phenomenology* 1, no. 1 (2018): 8. https://doi.org/10.31608/PJCP.v1i1.2.
Saul, Nicholas, Daniel Steuer, Frank Möbus, and Birgit Illner, eds. *Schwellen: Germanistische Erkundungen einer Metapher*. Würzburg: Königshausen und Neumann, 1999.
Schaffer, Simon. "Natural Philosophy and Public Spectacle in the Eighteenth Century." *History of Science* 21 (1983): 1–43.
———. "Self Evidence." *Critical Inquiry* 18, no. 2 (Winter 1992): 327–62.
Scharnowki, Susanne. "Wahrnehmungsschwellen: Krise des Sehens und Grenzens des Ich bei Eduard von Keyserling." In *Schwellen: Germanistische Erkundungen einer Metapher*, edited by Nicholas Saul, Daniel Steuer, Frank Möbus, and Birgit Illner. Würzburg: Königshausen und Neumann, 1999.
Scheerer, Eckart. "The Unknown Fechner." *Psychological Research* 49 (1987): 197–202.
Schilling, Derek. "Everyday Life and the Challenge to History in Postwar France: Braudel, Lefebvre, Certeau." *Diacritics* 33, no. 1 (2003): 23–40. https://doi.org/10.1353/dia.2005.0015.
Schivelbusch, Wolfgang. *The Railway Journey: The Industrialization of Time and Space in the 19th Century*. New ed. Berkeley: University of California Press, 2014.
Schmidgen, Henning. *Helmholtz Curves: Tracing Lost Time*. Translated by Nils F. Schott. New York: Fordham University Press, 2014.
———. "The Life of Concepts: Georges Canguilhem and the History of Science." *History and Philosophy of the Life Sciences* 36, no. 2 (October 2014): 232–53. https://doi.org/10.1007/s40656-014-0030-1.
Schmölders, Claudia, ed. *Die Kunst Des Gesprächs: Texte Zur Geschichte Der Europäischen Konversationstheorie*. Munich: Deutscher Taschenbuch (DTV), 1979.
Schmuck, Hilmar, and Willi Gorzny, eds. *Gesamtverzeichnis des deutschsprachigen Schrifttums (GV), 1700–1910*. Vol. 14, *Bero–Bibi*. Munich: Saur, 1980.
Schönle, Daniela M. "Theatrical Catharsis and Its Therapeutic Effect: Catharsis in Vienna at the Turn of the Century." *Skenè* 2, no. 1 (July 2016). https://doi.org/10.13136/sjtds.v2i1.47.
Schorske, Carl E. *Fin-de-Siècle Vienna: Politics and Culture*. New York: Vintage Books, 1981.
Schötz, Susanne, and Uwe John, eds. *Geschichte der Stadt Leipzig: Vom Wiener Kongress bis zum ersten Weltkrieg*. Vol. 3. 4 vols. Leipzig: Leipziger Universitätsverlag, 2018.

Schreier, Wolfgang. "Die Drei Brüder Weber Und Gustav Theodor Fechner: Untersuchungen Zur Medizinischen, Psycho- Und Technischen Phsyik." *NTM Zeitschrift Für Geschichte Der Wissenschaften, Technik Und Medizin*, 1993, 111–16.
Schwarz, Christopher. *Langeweile und Identität: Eine Studie zur Entstehung und Krise des romantischen Selbstgefühls*. Frankfurter Beiträge zur Germanistik 25. Heidelberg: Universitätsverlag C. Winter, 1993.
Schweighofer, Fritz. *Das Privattheater der Anna O.: Ein psychoanalytisches Lehrstück; ein Emanzipationsdrama*. Munich: E. Reinhardt, 1987.
Scott, Joan W. "The Evidence of Experience." *Critical Inquiry* 17, no. 4 (Summer 1991): 773–97.
Secord, James A. *Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of "Vestiges of the Natural History of Creation."* Chicago: University of Chicago Press, 2000.
Seiler, Thomas. " 'Gjemt [er ikke] glemt': Erinnern und Vergessen in H. C. Andersens Dingmärchen." *Anderseniana*, 2008, 5–24.
Sghirlanzoni, A., and D. Pareyson. " 'La Toccatina': Polyglottal Aphasia in Pirandello." *Italian Journal of Neurological Sciences* 18, no. 1 (1997): 55–57. https://doi.org/10.1007/BF02106233.
Shapin, Steven. "Lowering the Tone in the History of Science." In *Never Pure: Historical Studies of Science as If It Was Produced by People with Bodies, Situated in Time, Space, Culture, and Society, and Struggling for Credibility and Authority*. Baltimore: Johns Hopkins University Press, 2010.
———. *The Scientific Life: A Moral History of a Late Modern Vocation*. Chicago: University of Chicago Press, 2008.
Shaya, Gregory. "The *Flâneur*, the *Badaud*, and the Making of a Mass Public in France, circa 1860–1910." *American Historical Review* 109, no. 1 (February 1, 2004): 41–77. https://doi.org/10.1086/ahr/109.1.41.
Shorter, Edward. "Private Clinics in Central Europe, 1850–1933." *Social History of Medicine* 3, no. 2 (1990): 159–95. https://doi.org/10.1093/shm/3.2.159.
———. "What Was the Matter with 'Anna O.': A Definitive Diagnosis." In *Freud under Analysis: History, Theory, Practice; Essays in Honor of Paul Roazen*, edited by Todd Dufresne, 23–34. Northvale, NJ: Jason Aronson, 1997.
Showalter, Elaine. *The Female Malady: Women, Madness, and Culture in England, 1830–1980*. New York: Pantheon Books, 1986.
Skues, Richard A. *Sigmund Freud and the History of Anna O.: Reopening a Closed Case.* Basingstoke, Hampshire: Palgrave Macmillan, 2009.
Smith, Helmut Walser, ed. *Protestants, Catholics, and Jews in Germany, 1800–1914*. New York: Berg, 2001.
Smith, Justin E. H. *The Philosopher: A History in Six Types*. Princeton, NJ: Princeton University Press, 2017.

Smith, Roger. "Does Reflexivity Separate the Human Sciences from the Natural Sciences?" *History of the Human Sciences* 18, no. 4 (November 2005): 1–25. https://doi.org/10.1177/0952695105058468.
———. *Inhibition: History and Meaning in the Sciences of Mind and Brain*. Berkeley: University of California Press, 1992.
Sohl, Klaus, ed. *Neues Leipzigisches Geschicht-Buch*. Leipzig: Fachbuchverlag Leipzig, 1990. http://books.google.com/books?id=f1TjAAAAMAAJ.
Solnit, Rebecca. *Wanderlust: A History of Walking*. New York: Viking, 2000.
Spary, E. C. *Eating the Enlightenment: Food and the Sciences in Paris*. Chicago: University of Chicago Press, 2012.
Sperber, Jonathan. "*Bürger, Bürgertum, Bürgerlichkeit, Bürgerliche Gesellschaft*: Studies of the German (Upper) Middle Class and Its Sociocultural World." *Journal of Modern History* 69, no. 2 (June 1997): 271–97. https://doi.org/10.1086/245488.
Sprung, Lothar, and Helga Sprung. "Gustav Theodor Fechner—Wege und Abwege in der Begründung der Psychophysik." *Zeitschrift für Psychologie* 186, no. 4 (1978): 439–54.
Staley, Richard. "Sensory Studies, or When Physics Was *Psychophysics*: Ernst Mach and Physics between Physiology and Psychology, 1860–71." *History of Science*, July 10, 2018, 1–26. https://doi.org/10.1177/0073275318784104.
Steege, Paul, Andrew Stuart Bergerson, Maureen Healy, and Pamela E. Swett. "The History of Everyday Life: A Second Chapter." *Journal of Modern History* 80, no. 2 (2008): 358–78. https://doi.org/10.1086/588855.
Stigler, Stephen M. *The History of Statistics: The Measurement of Uncertainty before 1900*. Cambridge, MA: Belknap Press of Harvard University Press, 1986.
Straker, Gillian, and Jacqui Winship. *The Talking Cure: Normal People, Their Hidden Struggles and the Life-Changing Power of Therapy*. Sydney: Macmillan, 2019.
Straus, Erwin W. "The Upright Posture." *Psychiatric Quarterly* 26, no. 1 (1952): 529–61. https://doi.org/10.1007/BF01568490.
Strickland, Stuart. "The Ideology of Self-Knowledge and the Practice of Self-Experimentation." *Eighteenth-Century Studies* 31, no. 4 (1998): 453–71. https://doi.org/10.1353/ecs.1998.0042.
Strigl, Daniela. *Berühmt sein ist nichts: Marie von Ebner-Eschenbach—eine Biographie*. Salzburg: Residenz, 2016.
Sulloway, Frank J. *Freud, Biologist of the Mind: Beyond the Psychoanalytic Legend*. New York: Basic Books, 1979.
Swales, Peter J. "Anna O. in Ischl." *Werkblatt Zeitschrift für Psychoanalyse und Gesellschaftskritik* 5 (1988): 57–64.
———. "Freud, Breuer & the Blessed Virgin." Lecture privately circulated as a typescript. New York, 1986. Box 3, folder 31, Melinda Guttmann Collection, AR 25295. Leo Baeck Institute, New York. https://archives.cjh.org/repositories/5/archival_objects/954249.
———. "Freud, His Teacher, and the Birth of Psychoanalysis." In *Freud, Appraisals and Reappraisals: Contributions to Freud Studies*, 1:2–82. Hillsdale, NJ: Analytic Press, 1986.

Tanzer, Ulrike. " 'Ew. Gnaden Könnten Mir Auch Ein Mahl Wieder Schreiben, Wissen Sie Das?': The Correspondence between Marie von Ebner-Eschenbach and Josephine von Knorr." *Austrian Studies* 16 (2008): 172–87.
Taylor, Chloë. *The Culture of Confession from Augustine to Foucault: A Genealogy of the "Confessing Animal."* Studies in Philosophy. New York: Routledge, 2009.
Taylor, David. *Talking Cure: Mind and Method of the Tavistock Clinic*. London: Duckworth, 1999.
Teich, Mikuláš., Roy Porter, and Bo Gustafsson, eds. "Science, Society and Culture in the Romantic *Naturforschung* around 1800." In *Nature and Society in Historical Context*. New York: Cambridge University Press, 1997.
Temkin, Owsei. "Materialism in French and German Physiology of the Early Nineteenth Century." *Bulletin of the History of Medicine* 20 (January 1946): 322–27.
Thiele, Rüdiger. "Fechner und Zöllner: Die Einschränkung der realen Welt auf Mathematik und ihre Erweitung in eine Geisterwelt; ein Vergleich zweier Raumauffassungen." In *Fechner und die Folgen außerhalb der Naturwissenschaften: Interdisziplinäres Kolloquium zum 200. Geburtstag Gustav Theodor Fechners*, edited by Irene Altmann and Ulla Fix, 67–111. Tübingen: Niemeyer, 2003.
Thoreau, Henry David. *Walking with Thoreau: A Literary Guide to the Mountains of New England*. Boston: Beacon Press, 2001.
Toews, John E. "Intellectual History after the Linguistic Turn: The Autonomy of Meaning and the Irreducibility of Experience." *American Historical Review* 92, no. 4 (October 1987): 879–907. https://doi.org/10.2307/1863950.
Treitel, Corinna. *A Science for the Soul: Occultism and the Genesis of the German Modern*. Baltimore: Johns Hopkins University Press, 2004.
Trivellato, Francesca. "Is There a Future for Italian Microhistory in the Age of Global History?" *California Italian Studies* 2, no. 1 (2011).
———. "Microstoria/Microhistoire/Microhistory." *French Politics, Culture & Society* 33, no. 1 (2015): 122–34.
Turner, R. Steven. *In the Eye's Mind: Vision and the Helmholtz-Hering Controversy*. Princeton, NJ: Princeton University Press, 1994.
———. "The Great Transition and the Social Patterns of German Science." *Minerva* 25, no. 1/2 (1987): 56–76.
———. "The Growth of Professorial Research in Prussia, 1818 to 1848—Causes and Context." *Historical Studies in the Physical Sciences* 3 (1971): 137–82. https://doi.org/10.2307/27757317.
Turner, Steven, Edward Kerwin, and David Woolwine. "Careers and Creativity in Nineteenth-Century Physiology: Zloczower Redux." *Isis* 75, no. 3 (1984): 523–29. https://doi.org/10.1086/353570.
Van Cleve, James. "Mind—Dust or Magic? Panpsychism Versus Emergence." *Philosophical Perspectives* 4 (1990): 215–26. https://doi.org/10.2307/2214193.
Vaughan, Susan C. *The Talking Cure: The Science behind Psychotherapy*. New York: Henry Holt, 1998.

Verdenhalven, Fritz. *Alte Maße, Münzen und Gewichte aus dem deutschen Sprachgebiet*. Neustadt an der Aisch: Degener, 1969.
Vidal, Fernando, and Bernhard Kleeberg. "Introduction: Knowledge, Belief, and the Impulse to Natural Theology." *Science in Context* 20, no. 3 (September 2007): 381–400. https://doi.org/10.1017/S0269889707001354.
Vöhler, Martin. "The Pathological Interpretation of Catharsis." *Skenè* 2, no. 1 (July 2016). https://doi.org/10.13136/sjtds.v2i1.53.
Völker, Ludwig. *Langeweile: Untersuchungen zur Vorgeschichte eines literarischen Motivs*. München: Fink, 1975.
Warner, John Harley. *The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820–1885*. Princeton Legacy Library 371. Princeton, NJ: Princeton University Press, 1997. https://doi.org/10.1515/9781400864638.
Warner, Marina. *From the Beast to the Blonde: On Fairy Tales and Their Tellers*. London: Chatto & Windus, 1994.
Wegener, Mai. "Das psychophysische Unbewusste: Gustav Theodor Fechner und der Mond." *Psychoanalytische Perspectieven* 23, no. 2 (2005): 261–82.
Weir, Todd H. *Secularism and Religion in Nineteenth-Century Germany: The Rise of the Fourth Confession*. New York: Cambridge University Press, 2014.
Wellmann, Angelika. *Der Spaziergang: Stationen eines poetischen Codes*. Würzburg: Königshausen und Neumann, 1991.
Williams, Rosalind H. *Notes on the Underground: An Essay on Technology, Society, and the Imagination*. Cambridge, MA: MIT Press, 2008.
Winter, Alison. "A Calculus of Suffering: Ada Lovelace and the Bodily Constraints on Women's Knowledge in Early Victorian England." In *Science Incarnate: Historical Embodiments of Natural Knowledge*, edited by Christopher Lawrence and Steven Shapin, 202–39. Chicago: University of Chicago Press, 1998.
Wise, M. Norton. *Aesthetics, Industry, and Science: Hermann von Helmholtz and the Berlin Physical Society*. Chicago: University of Chicago Press, 2018.
Woodford, Charlotte. "Realism and Sentimentalism in Marie von Ebner-Eschenbach's 'Unsühnbar.'" *Modern Language Review* 101, no. 1 (2006): 151–66.
Woodward, W. R. "Fechner's Panpsychism: A Scientific Solution to the Mind-Body Problem." *Journal of the History of the Behavioral Sciences* 8 (October 1972): 367–86.
Woolfolk, Robert L. *The Value of Psychotherapy: The Talking Cure in an Age of Clinical Science*. New York: Guilford, 2015.
Worley, Linda Kraus. "Reading European Literature: Marie von Ebner-Eschenbach and Her Circle." *Oxford German Studies* 42, no. 2 (August 2013): 189–201. https://doi.org/10.1179/0078719113Z.00000000034.
Wulz, Monika. "Gedankenexperimente im ökonomischen Überschuss: Wissenschaft und Ökonomie bei Ernst Mach." *Berichte zur Wissenschaftsgeschichte* 38, no. 1 (March 2015): 59–76. https://doi.org/10.1002/bewi.201501703.
Yalom, Irvin D. *When Nietzsche Wept: A Novel of Obsession*. New York: Harper Perennial, 2010. Epub.

Yates, W. E. *Schnitzler, Hofmannsthal, and the Austrian Theatre*. New Haven: Yale University Press, 1992.
Young, Iris Marion. "Throwing Like a Girl: A Phenomenology of Feminine Body Comportment Motility and Spatiality." *Human Studies* 3, no. 2 (1980): 137–56.
Zammito, John H. "Reading 'Experience': The Debate in Intellectual History among Scott, Toews, and LaCapra." In *Reclaiming Identity: Realist Theory and the Predicament of Postmodernism*, edited by Paula M. L. Moya and Michael Roy Hames-Garcia, 279–311. Berkeley: University of California Press, 2000.
Zavatta, Benedetta. *Individuality and Beyond: Nietzsche Reads Emerson*. *Individuality and Beyond*. Oxford: Oxford University Press, 2019.
Zimmerman, Andrew. "Decolonizing Weber." *Postcolonial Studies* 9, no. 1 (March 2006): 53–79. https://doi.org/10.1080/13668250500488827.
Zipes, Jack. *Grimm Legacies: The Magic Spell of the Grimms' Folk and Fairy Tales*. Princeton, NJ: Princeton University Press, 2015.
———, ed. *The Oxford Companion to Fairy Tales [Online]*. Oxford: Oxford University Press, 2005. https://doi.org/10.1093/acref/9780198605096.001.0001.