Responding to Pain: Emotion, Medicine, and Culture between German Naturalism and Modernism

By

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Abstract

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This dissertation sets its sights on a group of writers and scientists who cultivated readers capable of responding to the pain of others with emotions ranging from sympathy and empathy to disgust and suspense. These emotions, I claim, shed new light on the significant terrain shared by the history of medicine and literary history between German realism and modernism. The writing on pain examined in this dissertation reveals not only how medicine imagined and ultimately won support for its institutions by relying on literary strategies, but also how literature—by developing its own knowledge of pain—pointed out new directions for medicine as an institution. In this sense, the dissertation maintains that pain became the basis for a culture common to both medicine and literature. The first two chapters locate this common culture by turning to the crucial role sympathy played in the formation of institutions such as public health, naturalist theater, and charitable organizations during the last half of the nineteenth century. Towards this end, I dedicate careful attention to texts such as Gerhart Hauptmann’s 1892 Die Weber, an 1844 report by a representative of an aid organization named Alexander Schneer, and a report on an 1848 typhus epidemic in Upper Silesia by the doctor Rudolf Virchow. The remaining chapters address the shifting stakes of pain that emerged in the first half of the twentieth century. Around this time, I argue, pain was no longer to be eliminated as a threat to public health, but rather to be embraced on its own terms. The third chapter outlines the parameters of this shift towards pain in the philosophical anthropology of Helmhut Plessner and F. J. J. Buytendijk. The fourth and fifth chapters, in turn, deal with the concrete ways in which this shift gave rise to new emotions and medical institutions that would cope with pain. These chapters focus, respectively, on disgust as a means of restoring emotion to medicine in the early poetry and prose of Gottfried Benn, and on suspense as a counterpart to sympathy for readers observing an epidemic unfold in Ernst Weiss’ novel Georg Letham: Arzt und Mörder.
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Introduction

An Introductory Example: Sublime Suffering

The philosopher Karl Rosenkranz, in his 1853 *Aesthetik des Häßlichen*, briefly outlined the criteria by which representations of disease should be judged in aesthetics. Disease, he noted, had a singular power to destroy organic form. Works of art and literature featuring disease, in turn, generated in viewers and readers a strong sense of disgust—a significant emotion in the new aesthetic territory Rosenkranz claimed to be exploring. Yet, Rosenkranz added a caveat to his reflections on disgust, disease, and art. “In einem Atlas der Anatomie und Pathologie zu wissenschaftlichen Zwecken ist natürlich auch das Scheußlichste gerechtfertigt,” he wrote, “für die Kunst hingegen wird die ekelhafte Krankheit nur unter der Bedingung darstellbar, daß ein Gegengewicht ethischer oder religiöser Ideen mitgesetzt wird.”¹ The disgust generated by representations of disease had to be counterbalanced by religion or ethics. Precisely this counterbalance determined whether a representation of disease belonged in a work of art or a medical atlas.

Among the artworks Rosenkranz enlisted in support of this claim was an illustration by Auguste Raffet that showed soldiers in the French army suffering from an outbreak of typhus in Mainz during the Napoleonic Wars (see figure 1).² Rosenkranz maintained that, in this illustration, “[d]er Anblick des massenhaften Sterbens allein […] würde uns niederdrücken, aber der Strahl des Lebens, der von der göttlichen Freiheit des Geistes ausgeht, läßt Siechthum und Todesqual überwinden” (318-319). The sight of the French army suffering from typhus threatened to overwhelm viewers of Raffet’s illustration. Yet, precisely this overwhelming suffering ultimately testified to the power of the ideals, such as the *Freiheit des Geistes*, for which the soldiers fought. Disgust, in the case of Raffet’s illustration, thus took on what Rosenkranz called a “schauerlich erhabenen Charakter” (318).

Without the sublime ideals and emotions on display in Raffet’s illustration, however, the horrors of disease had to be excluded from art and literature. To make this point, Rosenkranz singled out contemporaries of his such as Eugène Sue and Julie Burow. Sue and Burow had surrendered to the “Verirrungen einer Zeit, welche aus ihrem krankhaft pathologischen Interesse an der Corruption das Elend der Demoralisation für poetisch hält” (318). Both writers had produced novels containing, respectively, “eine ärztliche genaue Beschreibung von St. Lazare” and “die exacte Beschreibung der syphilitischen Station eines Lazareths” (318). Medically exact descriptions of disease, according to Rosenkranz, had no place in the novel. Such descriptions failed to teach readers to respond to disease with the proper emotion. Novels such as those by Sue and Burow were thus, by the criteria Rosenkranz established in his aesthetics, no more than medicine parading as literature.

¹ Rosenkranz, *Aesthetik des Häßlichen*, 317. Further quotes are in parentheses.
² For an account of this typhus outbreak, see Winkle, “Seuchengeschehen der Napoleonischen Feldzüge.”
Disease, then, became a fault-line along which Rosenkranz divided art and literature from medicine. A medical atlas, an illustration, or a novel might contain representations of disease. Only the viewers of an illustration or readers of a novel, however, would respond to these representations with a morally and emotionally inflected sense of disgust. Only these viewers or readers, or at least the viewers and readers engaging with the right kind of art and literature, would be trained to see metaphysical ideals in the pathologies of the body. Readers of the medical atlas or of an exact medical description, by contrast, lacked this training of the emotions. The medical atlas—and on occasion even the misguided novel—might record empirical knowledge about disease, but offered little insight into the role disease played in human society and culture. This knowledge was only available, via emotion, to the art and literature of
which Rosenkranz approved. Around 1850, emotion marked the boundaries separating medicine from art and literature.

**Overview of the Chapters**

Rosenkranz serves as a good point of entry into this dissertation. The dissertation will examine the shifting roles emotion has played in negotiating boundaries between medicine and literature from the mid-nineteenth to mid-twentieth century. Emotion has, I will claim, been the source of both common and contested ground for doctors, writers, and philosophers such as Rudolf Virchow, Gerhart Hauptmann, Gottfried Benn, Helmhuth Plessner, F. J. J. Buylendijk, and Ernst Weiss. In particular, my focus will be on the ways these doctors, writers, and philosophers have cultivated readers—whether of a drama, poem, novel, theoretical text, or report—who would respond to the pain of others with emotions ranging from disgust and sympathy to Spannung.

The pain with which readers of the texts examined in this dissertation were confronted included that of populations suffering from hunger and disease, cadavers bearing the traces of violent death, soldiers wounded in war, or test subjects in human experimentation. Close contact with these and other kinds of pain not only tested the boundaries of readers’ senses, but ultimately steered these readers towards particular institutional alliances—much in the way, for Rosenkranz, Raffet’s otherwise grim illustration led viewers to see a sublime devotion to the military and its ideals on the part of the soldiers suffering from typhus. Like Raffet’s viewers, readers of the texts examined in this dissertation welcomed institutions that would provide a stabilizing response to the overwhelming experience of witnessing suffering. Pain and the emotions of its observers in both literature and medicine thus, I am arguing, went hand in hand with the formation of institutions such as public health and charitable organizations, and of alternatives to the corporate and industrial sides of organized medicine.

This relationship between writing on pain, emotion, and the formation of institutions is best on display in the early career of the doctor Rudolf Virchow. Virchow—who is the focus of the second chapter—wrote vividly on the pain of others. In a report commissioned by the Prussian government in 1848, he described in detail the suffering he encountered on a visit to Upper Silesia to study a typhus epidemic in the region. Virchow’s report told not only of the overcrowded homes in which people and animals breathed in each other’s Ausdünstungen, but also of the effects typhus had on the sick and dying. By showing the spectacle of pain caused by typhus, Virchow aimed to win the support of readers for social reforms that would prevent future outbreaks of the epidemic—and ultimately for the fledgling institution of public health that would carry out these reforms.

Virchow’s report is a paradigmatic case for the overlap between medicine and literature explored in my dissertation. Virchow wrote vividly on pain in order to mobilize his readers as allies for the social reforms espoused by public health. This aim of

3 I explore these claims in greater depth in the section of chapter four titled “Disease between Medicine and Aesthetics.”
mobilizing readers or spectators was, however, not exclusive to the public health of Virchow’s time. Around this time, literary critics were asking similar questions about the power of tragedy to move its spectators to feel sympathy for a suffering protagonist. The second chapter thus explores how Virchow shared with critics of tragedy the task of shaping sympathetic observers of pain. My claim is that Virchow, with his report, wrote a tragedy like those conceptualized by critics of theater during his time. These critics, in turn, developed a blueprint for responding to the pain of others Virchow would ultimately follow in his public health.

Only a few years before Virchow, in 1844, Alexander Schneer had also written a report on the living conditions experienced by a population in Upper Silesia. This report, and a drama for which it later became source material, are the focus of the first chapter. Schneer had been sent to Upper Silesia by a Hilfsorganisation established to fight the hunger and poverty suffered by the weavers in the region. Like Virchow, he described this suffering in great detail. Schneer also reflected, however, on how visitors to Upper Silesia—as outsiders amongst a suspicious and withdrawn population—could actually come to know the poverty in which this population lived. Towards this end of knowing poverty, Schneer outlined how he built networks with other outsiders who had established good relationships with the weavers in the region, provided a rough topography of where the worst suffering was to be found, and described what he called the Merkmale by which any visitor to the region could distinguish between relative degrees of poverty.

Schneer’s report reads, in this sense, like a manual on observing poverty. Schneer’s report did not know poverty existed in regions such as Upper Silesia, let alone how to feel towards the populations suffering from it. The existence of poverty in Upper Silesia had largely been denied by the Prussian government, and this denial was a source of frustration for both Virchow and Schneer. Before Virchow could train his readers to feel sympathy for a population suffering from typhus in 1848, then, Schneer—in his 1844 report—had to train similar readers to see that such a population suffered at all.

This task of making a suffering population visible would be dramatized by Hauptmann in his 1892 Die Weber. The first chapter zeroes in on a key scene of Die Weber in which Hauptmann shows members of the local population correcting the misimpressions a traveler visiting Upper Silesia has about the degree of poverty suffered by the weavers in the region—misimpressions taken from, among other sources, government reports and resulting from his own observations. I argue that this scene, in particular, indicates the way in which Hauptmann encouraged his spectators to reflect on the nature of observation itself—and particularly on the observation of poverty. Hauptmann’s Die Weber thus ultimately overlapped in its aims with Schneer’s report. Spectators watching Die Weber would, if they followed the techniques of observation recommended to the misguided traveler, come to know poverty in Upper Silesia much in the same way as visitors to the region aided by the reflections on observation in Schneer’s report. Naturalist theater, it turned out, required spectators not unlike those Hilfsorganisationen hoped to train in the middle of the century.
The chapters on Virchow, Schneer, and Hauptmann make up the first part of the dissertation. The second part shifts terrain from the spectacle of pain dramatized by Virchow and Hauptmann during the last half of the nineteenth century to the poetry, prose, and philosophy of pain that arose in the first half of the twentieth century. During this time, I claim, writers, philosophers, and doctors no longer asked their readers to embrace institutions that would alleviate pain. These readers were instead encouraged to embrace pain on its own terms. Pain transformed from a public spectacle and a menace to public health into an occasion to reflect on the nature of the senses and social action. This shift led observers of pain to feel emotions other than sympathy—emotions such as disgust or Spannung. These emotions arose in lockstep with alternative conceptions of the medical institutions examined in the first part.

As a first step towards examining this shift in the emotional and institutional stakes of pain, the third chapter turns to the philosophical anthropology developed by Helmuth Plessner and F. J. J. Buytendijk between the 1920s and 1940s in texts such as "Die Deutung des mimischen Ausdrucks," Die Stufen des Organischen und der Mensch, Macht und menschliche Natur, Lachen und Weinen: Eine Untersuchung der Grenzen menschlichen Verhaltens, and Über den Schmerz. In these texts, Plessner and Buytendijk articulated a philosophy of pain based on what they saw as the uncertainty of human sense experience and action in the world. Relying on the biology of their time, they claimed that humans lacked the environmental cues available to animals. Institutions were born precisely to compensate for these missing cues by supplying norms to guide human conduct. This compensatory relationship was—especially for Buytendijk—nowhere more evident than in the immense capacity of pain to disorient the senses and disable action. He thus argued, in Über den Schmerz, that medicine as an institution had to develop strategies for coping with the experience of pain.

Buytendijk rebuked the medicine of his historical moment for failing to develop such strategies, and instead for displaying an obsession with eliminating pain. This obsession denied pain its rightful place in human nature, and in turn denied medicine its rightful institutional role. In this sense, Buytendijk—leaning on the philosophy developed by Plessner—undertook to reform what he saw as the shortcomings of a medical field such as the public health Virchow had played a crucial role in founding. A field such as public health, in Buytendijk’s eyes, had created the expectation that pain could be removed by external agency, and thus overlooked the intrinsic meaning in pain. Philosophy, for Plessner and Buytendijk, had to locate this meaning, and thus chart a new direction for medicine as an institution.

As I maintain in the fourth chapter, this interest in charting a new direction for medicine as an institution united Plessner and Buytendijk with Gottfried Benn—even if Benn used radically different means to accomplish such a task. Rather than articulate a philosophy of pain, Benn returned to the strategies deployed by Virchow: represent pain in graphic detail and thus elicit a strong emotional response to it. However, the emotional response to pain cultivated by Benn in his readers differed from that cultivated by Virchow, and this difference significantly reshaped the contours of the medical institution towards which readers could be steered. Rather than cultivate sympathy in his readers, Benn cultivated disgust. Disgust ultimately, I claim, gave Benn a way to introduce strong
emotion into a rationalized medicine that he—like Buytendijk—saw as having lost the capacity to deal in a meaningful way with human suffering.

Disgust might seem to be a strange emotion in this context. After all, disgusted readers would be expected to turn away from graphic representations of pain. Yet, as I claim in the fourth chapter, this impulse to turn away from representations of pain only followed an initial fascination with them. Before readers could turn their attention away from an object of disgust, their attention had to be drawn to this object. Disgust would thus, for Benn, suffice to teach readers how to respond to pain with a strong—even if ultimately negative—emotion. Benn could not teach readers feel such emotion in his professional role as a doctor, so he turned to literature and wrote poems such as the 1912 cycle titled *Morgue*. The fourth chapter examines early reviews of these poems, along with essays by Benn during the same decade, as evidence of how he modeled in literature the strong emotion he saw as necessary in medicine. In this way, I maintain, Benn capitalized on the potential of disgust already present—as suggested in this introduction—in Rosenkranz’s aesthetics.

The fifth, and final, chapter looks at another emotion that emerged at the boundaries between literature and medicine—namely, *Spannung*. The chapter examines the role *Spannung* played in a 1931 novel by Ernst Weiss titled *Georg Letham: Arzt und Mörder*. Like Benn, both Weiss and the eponymous hero of *Georg Letham* were doctors and writers. In Weiss’ novel, Georg Letham narrates how he murders his wife and is deported to a penal colony on a tropical island. On the island, he is assigned to a medical team researching an outbreak of yellow fever. After experimenting on human subjects, the team ultimately discovers how the disease is spread and implements a program to eliminate it. To an even greater extent than Virchow, the medical team in *Georg Letham* thus succeeds in carrying out the humanitarian mission of public health on a large scale.

The fight against yellow fever in *Georg Letham*, however, differs in a significant way from the fight against typhus in Virchow’s report. Rather than show the suffering caused by yellow fever in the island population, Weiss foregrounded the twists and turns of experiments conducted by his protagonists to locate the cause of yellow fever. These twists and turns, I argue, placed Weiss’ narrative of experimentation with yellow fever in close proximity to the *Kriminalroman*—precisely the genre whose conventions Weiss invoked when narrating how Letham murders his wife. By relying on readers trained in these conventions, Weiss thus reshaped—in a literary register—the emotions at stake for observers of disease in public health. These emotions were, in fact, already tilting towards *Spannung* from the side of medicine itself. This shift is especially evident, I claim, in texts written in the early 1920s on the unpredictability of experiment by Paul de Kruif, the bacteriologist and author whose 1926 book *Microbe Hunters* was the basis for much of Weiss’ yellow-fever story in *Georg Letham*.

Like sympathy and disgust, then, *Spannung* belonged neither exclusively to medicine nor to literature, but instead testified to the shared strategies deployed by writers and scientists to cultivate emotion in observers of pain. The role *Spannung* played in Weiss’ novel also testified to the plasticity of these emotions and the institutions such emotions helped form. The mere sight of the pain caused by disease might no longer, as was the case for Virchow, move observers to turn to public health in order to alleviate
this pain. Nonetheless, public health’s fight against disease could keep these observers in a state of Spannung. In this sense, Spannung represented precisely the strong emotional response to pain Benn and Buytendijk had called for in medicine.

Weiss located this strong emotional response to pain in existing medical institutions, rather than—like Benn and Buytendijk—call for a radical departure from these institutions. In both cases, however, Weiss, Benn, Buytendijk (and, by extension, Plessner) refashioned medicine by taking recourse to the means available in literature and philosophy. Emotions such as disgust and Spannung—and the poetry and prose capable of generating these emotions—served for Benn and Weiss, like philosophy for Buytendijk and Plessner, as a field in which to develop new knowledge of pain that would ultimately ground new medical institutions or lend new life to existing medical institutions.

This refashioning of medicine with the resources available to philosophy and literature is not entirely surprising, especially given the ways in which institutions such as public health and Hilfsorganisationen had already shared strategies with theater for writing about suffering. If Virchow could write a report in which public health was born from the spirit of tragedy, then Plessner, Buytendijk, Benn, and Weiss could write literature and philosophy that revived the dying spirit of medicine. Just as medicine had its own literary techniques, literature and philosophy had their own medical knowledge. These exchanges between knowledge and techniques of representation—as I maintain over the course of the dissertation—took place at precisely the moments when writers, philosophers, and doctors aimed to teach observers of pain emotions such as sympathy, disgust, and Spannung.

Methodology: From Two Cultures to a Common Culture

By examining the emotions cultivated in observers of pain across a range of literary and medical ways of knowing, representing, and acting, my dissertation aims to engage ongoing conversations in disciplines such as philosophy, history, and literature. Historians such as Lynn Hunt, Thomas Laqueur, and Bertrand Taithe, philosophers such as Richard Rorty, and literary critics such as Fritz Breithaupt and Elaine Scarry have set their sights on the relation between narratives of suffering, emotions such as empathy and sympathy, and social action. The work of these scholars, though rich in insight, often fails to give equal attention to both sides of the equation between narrative and social

4 See Hunt, “Torrents of Emotion”; Laqueur, “Bodies, Details, and the Humanitarian Narrative”; Laqueur, “Mourning, Pity, and the Work of Narrative”; Taithe, “Pity, Compassion, and Humanitarian Protocols”; Rorty, “Human Rights, Rationality, and Sentimentality”; Breithaupt, Kulturen der Empathie; Scarry, The Body in Pain; and Scarry, “Difficulty of Imagining Other Persons.” Beyond this scholarship, there is a broad body of work on pain in literature and culture. For good examples of such work, see Bourke, The Story of Pain; Frank, The Wounded Storyteller; and Morris, The Culture of Pain. A general perspective on the relationship between narrative and institutions can be found in Koschorke, “Narrative und Institutionen.”
action, or focuses exclusively on representations of pain rather than responses to these representations. My aim is to go beyond this existing scholarship and provide an account both of how readers interact with narratives of suffering and of how these interactions unfolded at concrete moments in history.

As the concrete historical moments examined in this dissertation indicate, readers responded to narratives of suffering with a greater range of emotions than the sympathy and empathy on which scholars often focus. The dissertation tracks how emotions including not only sympathy and empathy, but also disgust and Spannung have been—to borrow a phrase from the historian of emotions Ute Frevert—“lost and found” in history between 1848 and 1945. My interest is in how these emotions came into existence and passed away in forms of writing shared by medicine and literature, and in how such shifts in emotion opened and foreclosed particular kinds of knowledge about pain and possibilities for social action in response to pain. The story of these shifting responses has led me to divide the dissertation into two parts that deal, respectively, with alleviating and embracing pain.

This historical trajectory offers a new insight on ways to overcome to the two-cultures impasse anticipated by Rosenkranz in 1853 and formally diagnosed by C. P. Snow over half a century ago, an impasse that continues to plague debates about the relationship between the humanities and sciences today. As Snow declared in his famous 1959 Rede Lecture, the “two polar groups” represented by scientists and “literary intellectuals” were separated by “a gulf of mutual incomprehension.” To describe this gulf, he used the term two cultures—a term that, as Snow himself suggested, had an “anthropological sense” (10). His descriptions of the cultural divide between literature and science—a divide he saw emerging in “the entire West” (3)—were based largely on observations he had made over the course of thirty years as both a professional physicist at Cambridge and a writer circulating among groups of artists and critics.

Among his observations, Snow touched on the role emotion had played in maintaining the division between the two cultures of literature and science. He noted that scientists and literary intellectuals “have a curious distorted image of each other. Their

5 Frevert, Lost and Found. For a thorough presentation of ongoing research in the history of emotions, see Plamper, The History of Emotions. For the role of emotions in science, see Biess and Gross, Science and Emotions; and Jenssen and Morat, Rationalisierungen des Gefühls.

6 For efforts to overcome this impasse, see Biagioli, “Science Studies and the Humanities”; Davidson and Goldberg, “Engaging the Humanities”; Herrnstein Smith, “Humanities and Sciences.” See also the articles in Bono, “Literature and Science”; and Clayton et al., “Biocultures.”

7 Snow, Two Cultures, 4. Further quotes are in parentheses.

8 For the historical moment in which Snow’s diagnosis of the two cultures emerged, see Collini, introduction to The Two Cultures; and Ortolano, The Two Cultures Controversy. For a major systematic effort to distinguish between Naturwissenschaft and Geisteswissenschaft half a century before Snow, see Dilthey, Einleitung in die Geisteswissenschaften.
attitudes are so different that, even on the level of emotion, they can’t find much common ground” (4-5). “The non-scientists,” he continued, have a rooted impression that the scientists are shallowly optimistic, unaware of man’s condition. On the other hand, the scientists believe that the literary intellectuals are totally lacking in foresight, peculiarly unconcerned with their brother men, in a deep sense anti-intellectual, anxious to restrict both art and thought to the existential moment. (6)

Precisely this division between science’s optimism and what Snow called literature’s concern with the existential moment is reflected in the story of pain told over the two parts of this dissertation. This story progresses from optimistic projects such as public health—which, for Virchow, had the potential to eliminate pain—to the increasingly existential preoccupation with developing meaningful emotional responses to pain in the philosophy and literature of Plessner, Buytendijk, Benn, and Weiss.

Yet, the story of pain told in this dissertation inverts the relationship between the attitudes and corresponding emotions by which Snow divided science and literature. Optimism may have driven Virchow’s belief that public health could eliminate pain, but—as I maintain in the first part—Virchow shared such optimism with the literature and culture of the mid to late nineteenth century. He not only relied on literary strategies to shape sympathetic observers of pain for medicine, but anticipated similar strategies for observing pain in the naturalist literature of a writer such as Hauptmann. The first part of the dissertation, then, retells a significant episode in the history of science through the lens of literary history, while also expanding literary history to include the history of science. Virchow and the public health he played a significant role in founding, I claim, share a lineage with naturalism. This shared lineage is based on precisely an optimism about alleviating pain Snow would have relegated to science.

If the first part of the dissertation locates the ways literature readily lent itself to the optimism of science, the second part addresses the ways science could be built on the existential concerns of literature. As the range of texts examined in the second part suggest, these concerns were undoubtedly formulated in the domain of literature and philosophy. Yet, each of the writers and philosophers examined in the second part were trained scientists—Plessner in biology, Buytendijk in physiology, and Benn and Weiss in medicine. As such a biographical fact would suggest, the texts written by these writers and philosophers betray a serious interest in making fruitful for medicine the emotions produced in literature and reflected on in philosophy. Emotions such as disgust or Spannung might emerge in poetry or the novel, but medicine was the ultimate destination writers such as Benn and Weiss—like philosophers such as Plessner and Buytendijk—hoped these emotions would reach. Modernist literature and modern philosophy were, as I claim, born from an engagement with medicine. An unwritten history of medicine thus lies in precisely the existential concerns Snow assigned to literature.

Overall, then, the two parts of this dissertation not only trace how emotions were lost and found in history, but also how emotion can help both literature and science find large pieces of their own lost histories. On the one hand, the dissertation treats Virchow as a naturalist on par with Hauptmann, and on the other hand, views Benn as performing the true work of medicine better than medicine in its existing state. These kinds of
constellations can enrich both the history of science and literary history. Broadening the horizon of both fields is my ultimate goal in this dissertation. Towards this end, I have chosen the period between 1848 and 1945. This period witnessed emotions emerge at both extremes of the poles Snow saw separating science and literature, and thus offers a wealth of material for reconsidering the division between the two cultures.

Reconsidering the two cultures in this way also casts new light on the period between 1848 and 1945 itself. It is not simply the case that, during this time, an optimism born of rapid scientific progress and industrialization gave way—at the onset of two wars and an unstable democracy in the interim—to forms of irrationalism that subordinated science to their own ends. Optimism about the promise of scientific progress might, as the writing on pain examined in this dissertation suggests, give way to existential concerns bordering on the irrational. Yet, such existential concern could readily translate into legitimate forms of scientific organization, just as scientific organizations could take cues on how to gain support for their optimistic missions from literature. The work of responding to pain between 1848 and 1945 gave rise, in this sense, to a culture common to literature and science.

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9 For accounts of how science was subordinated to forms of irrationalism in culture and politics during the Weimar Republic and in Nazi Germany, see Forman, “Weimar Culture”; and Herf, Reactionary Modernism.
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In an 1893 review published in *Die Zukunft*, Maximilian Harden wrote of the “neue Form dramatischer Kunst” he saw emerge in Gerhart Hauptmann’s *Die Weber*.¹ Harden greeted this new artistic form with a mixture of admiration and reserve. He wondered whether “der weitaus größte Theil des Beifalls, den das Schauspiel des Herrn Hauptmann gefunden hat, den sozialen Instinkten und nicht künstlerischen Befriedigung entstammt” (468). *Die Weber*, Harden suspected, had greater value as a socialist tract than as a work of art. Yet, Harden claimed this relationship also went in reverse. By staging the 1844 uprising of the Silesian weavers, Hauptmann explored new territory for the drama as a literary form. As Harden noted, Hauptmann brought onto the stage a population that, starting with the poetics of Martin Opitz in the seventeenth century, had been considered unworthy of literary attention. In the “Zeit der atomisirten Massen,” according to Harden, Hauptmann had written the first “Tragödie des Proletariats” (470).

The socialist critic Franz Mehring echoed Harden by claiming that *Die Weber* represented a genuine artistic innovation precisely because it embraced a historical event that was difficult to stage. In a review of *Die Weber* published in the 1892-1893 volume of *Die Neue Zeit*, Mehring observed that Hauptmann “die Massen selbst in dramatische Bewegung setzen [müßte], und noch dazu in einer mit episodenhafter Breite sich langsam fortschiebenden Handlung, ohne die auf- und absteigende Bewegung um einen beherrschenden Mittelpunkt.”² As a disorganized mass rather than a coherent individual, the Silesian weavers challenged the traditional dramatic unities of space, time, and action. Hauptmann, according to Mehring, had shown his skill as a dramatist by finding a way to give “einer bunten Mosaik genrehafter Szenen dramatische Spannung” (773). *Die Weber* was not simply a “sozialistisches Tendenzstück” (772), but represented a genuine “Bruch mit aller bisherigen Bühnentechnik” (773). Hauptmann managed, with this drama, to stage a collective protagonist whose unwieldiness had previously kept it off the stage altogether.

Both Harden and Mehring commented in a particularly illuminating way on the relation between literary form and social organization at the center of this chapter. In their reviews of *Die Weber*, they noted that the social question could also be posed as an aesthetic question. In fact, these two questions were related. The 1844 uprisings made the Silesian weavers into an emblem for a broader population of poor and dislocated workers taking shape during what Werner Conze calls an “Übergangsperiode” between

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¹ Harden, “Die Weber,” 469. Further quotes from Harden’s review are in parentheses.
² Mehring, “Gerhart Hauptmann’s Weber,” 773. Further quotes are in parentheses.
“Standesgesellschaft” and “industriellen Gesellschaft.” Before the rise of parties that aimed to organize these dislocated workers into a coherent political actor, the task of integrating the uprooted poor into society fell to a wide range of Hilfsvereine. These organizations often clashed—particularly in written reports—with the Prussian government over the existence of a Notstand in the Silesian weaver districts. The Notstand in the weaver districts was a contested form of knowledge. It turned out that the Silesian weavers were not only difficult to represent as a collective protagonist in a drama, but also as a population in a dramatic state of poverty.

Hauptmann thus shared an important goal with observers who aimed to develop knowledge of the Silesian weavers in the 1840s: he had to make the weavers intelligible as a collective entity, and he had to perform this task in a particular written form. My argument is that this shared aim points to a fruitful exchange between ways of writing (and staging) and ways of knowing. More specifically, in Die Weber, Hauptmann carried out a program established in reports on the weavers in the 1840s—namely, a program of training observers to see the poverty in which the weavers lived. Just as writers of these reports had to make the poor weavers a convincing actor for observers in society, Hauptmann had to make these weavers a convincing actor for observers on the stage and of the stage.

Put in terms I will develop in the next section, Hauptmann and early commentators on the weavers—whether representatives of government or of Hilfsvereine—oscillate between literary and sociological roles, and thus produce documents in which literary form and knowledge of society shape each other. In the next section, I will sketch out these interfering roles by turning to the sociology of Georg Simmel and the sociologically-oriented literary criticism of Georg Lukács and Peter Szondi. I will then examine the ways in which sociological and literary roles interfere with each other in Hauptmann’s Die Weber and in a report written by Alexander Schneer, a Hilfsverein representative who visited the weavers in 1844.

Outsiders in Literature and Sociology

Hauptmann and early commentators on the weavers, I have claimed, oscillate between literary and sociological roles. To define these roles, I will rely on two related sources: the sociology of Georg Simmel, and the literary criticism of Peter Szondi and Georg Lukács. My interest is in a strange overlap that emerges in their accounts of modern society and modern drama—namely, in the way observation readily shifts between playing an aesthetic role in literature and an epistemological role in sociology. That is, the observers described by both sociologists and literary critics play the roles of meeting

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4 For more on socialist political parties, see Wehler, Das Deutsche Kaiserreich, 87-90, and Nipperdey, Deutsche Geschichte 1866-1918, 351-358. On Hilfsvereine and related organizations, see Nipperdey, Deutsche Geschichte 1800-1866, 243-244.
a formal need in modern literature and of creating knowledge about society. These roles, I am maintaining, were especially fluid. Not only could writers or characters in a written text act as observers of society, but observers of society followed protocols dictated by particular literary conventions.

These overlapping roles are especially evident in Szondi’s account of modern drama. Of all the theorists considered in this section, Szondi is the only one who writes directly on Hauptmann. In his Theorie des modernen Dramas, Szondi notes that Hauptmann’s dramas often feature Fremde—or, as I will translate the term, outsiders—who observe at a distance a population in a state of physical and moral decay. This claim is of particular interest because it identifies the aesthetic role sociological observation plays in Hauptmann’s dramas. Szondi best states this role in his analysis of the relation between the Krause family—a family plagued by incest and alcoholism—and the doctor Alfred Loth in Vor Sonnenaufgang. The Krause family, Szondi maintains, “gelangt zu dramatischer Darstellung, indem sie sich allmählich dem Besucher [Loth] enthüllt. Sie erscheint dem Leser oder Zuschauer in Loths Perspektive, als Forschungsobjekt des Wissenschaftlers.”

With this statement on the way Hauptmann conflates the perspective of reader and scientific observer, Szondi points to an interesting shift in the role Loth plays as a doctor who visits Silesia to study the miners living there. As Loth turns his attention from the miners to the scientific and social problem of alcoholism manifest in the Krause family, he also makes the the family a coherent actor in the drama. Without Loth, Szondi maintains, “[s]olche Menschen [the members of the Krause family] vermögen keine dramatische Handlung zu begründen” (65). An observer such as Loth preserves the dramatic texture of a social group that would otherwise not appear on stage. In this sense, Hauptmann introduces a scientific observer for a purpose specific to the drama. Szondi observes a similar dynamic in Die Weber. Before turning to Szondi’s analysis of Die Weber, however, I will take a moment to outline exactly why Szondi maintains characters such as the Krause family and the Silesian weavers who appear in Die Weber inherently lack dramatic qualities.

Szondi situates his readings of Hauptmann in a broader diagnosis of the modern drama in sociological terms. On this level, Szondi places himself in a line of literary critics that includes Georg Lukács. Theses developed by Lukács serve as key background for Szondi’s arguments. In particular, Szondi frequently refers to two early texts by Lukács: Theorie des Romans, first published in 1920, and a 1914 essay titled “Zur Soziologie des modernen Dramas.” In these texts, Lukács examines the ways in which literary forms such as drama and novel had changed in response to social developments at the turn of the twentieth century. The sociological bent of these texts is evident not only in the way they relate literary form to social organization, but also in the venues in which they were published. “Zur Soziologie des modernen Dramas” appeared in the Archiv für Sozialwissenschaft und Sozialpolitik, a journal edited—among others—by Max Weber and Werner Sombart. Lukács was in conversation with sociologists such as Weber and

6 Szondi, Theorie des modernen Dramas, 66. Further quotes are in parentheses.
7 Lukács, “Zur Soziologie des modernen Dramas.” Further quotes are in parentheses.
Sombart, as well as Georg Simmel, on the processes of rationalization that emerged with the rapid growth of modern capitalism and industry. These processes, he maintains, had called forth a new kind of drama.

The new drama, Lukács argues in “Zur Soziologie des modernen Dramas,” was the product of an “Intellektualisierungsprozeß” (311) manifested in phenomena such as “Eisenbahn an Stelle des alten Wagenverkehrs,” “Bureauratie,” and “maschinelle Industriearbeit” (665), as well as the use of quantitative methods in the human sciences (663). Lukács focuses on a characteristic common to many of these modern phenomena: “die Entpersönlichung, eine auf die Zurückführung der Qualitäts zur Quantitätsskategorie hinziehende Entwicklung” (666). Whether as a worker in a factory or office, or as a soldier in the military, the modern individual had become an interchangeable part in an abstract process. Personality had been replaced by the calculable “Gesetzmäßigkeiten” of rationally organized labor (666). Modern individuals were thus what Lukács calls “Schachfiguren” moved by “das ihnen ewig Fremde” (345)—that is, by the abstract forces coursing through their lives.

Against the background of these abstract forces, individualism became central to the modern drama. Precisely because what Lukács identifies as a process of intellectualization threatened to make the individual obsolete, simply asserting individuality became a struggle worthy of drama. The modern drama no longer staged “Kämpfen einzelner Menschen gegen einzelne” (324), but rather showed a passive hero resolved to an inward struggle against circumstance (343-344). Lukács claims that drama had once been “das Drama der großen Individuen,” but had become “das des Individualismus” (667). Modern drama focused on the individual, but only because “die Geltendmachung der Persönlichkeit, ihr Ausgedrückten im Leben” was no longer taken for granted (667). Individuality came to the foreground only at the moment it was endangered.

Transferring the struggle to assert individuality onto the stage was not an easy task. “Das Leben als Stoff ist nicht mehr dramatisch” (685), Lukács writes. The forces threatening the individual were too abstract to be represented on the concrete medium of the stage. This abstraction resulted not only in the fracturing of dialogue into a form of language that was “impressionistisch” (678), but also of the plot into events dispersed in time and place. The action of the drama disintegrated into what Lukács calls “Stimmungsatome, in durch lange Zeiträume voneinander getrennte [. . .] Schwingungen” (685). Broken up in this way, the drama was thus deprived of its “Sinnlichkeit,” and lost the immediate conflict produced by concentrated dialogue and action (685). Drama, as a literary form, experienced the strain of representing conflicts that could take place at a great physical and emotional distance. To a large extent, the individuals who collided either with each other or with their milieu in the modern drama could not understand the forces that drove them into conflict.

Szondi tacitly accepts many of these claims about the degree to which the modern drama was shaped by the abstract forces governing the relationships between individuals and their milieu. It is primarily for this reason that he sees the characters in Hauptmann’s dramas as inherently lacking the capacity to be dramatic. The Krause family needs an observer such as Loth in order to become dramatic precisely because, as Szondi claims,
members of this family are “machtlose Opfer” of “politisch-ökonomischen Verhältnisse.” The Silesian weavers in *Die Weber* experience a similar fate. Szondi maintains that, in *Die Weber*, dialogue gives way to an “Ausbruch von Verzweifelten, jenseits des Zwiegesprächs” (69), and the unity of time and place collapses in favor of diverse locations. These locations, in turn, are no longer occupied by a consistent “Zahl der Personen,” but by interchangeable “Gestalten” (71). The Silesian weavers thus need outsiders who play a role similar to that of Loth. Outsiders such as Moritz Jäger, the traveller who appears in the *Schenkstube*, and other townspeople or employees of Dreissiger, dramatize the weavers by describing, reporting on, or observing them in a number of scenes (69-70).

Outsiders in *Die Weber*, then, play a formal role demanded by what Szondi—relying on Lukács—identifies as the historical situation of the modern drama around the turn of the twentieth century. Szondi inserts these outsiders into a larger trajectory encompassing full-scale “Formexperimente” (80) such as interior monologue or montage, which began to emerge in other literary texts around the time Hauptmann was writing his dramas. In this context, the outsider has largely an aesthetic function—namely, the function of making modern individuals, at the mercy of their social and economic circumstances, into dramatic characters. However, as I am maintaining, Szondi leaves largely unexplored another role played by the outsider. He is interested in a scientific observer such as Loth primarily on an aesthetic level. The epistemological role of such an observer, on the other hand, only surfaces in the accounts of sociologists.

In the early decades of the twentieth century, sociologists such as Georg Simmel began reflecting on the relation between outsider and society. Along with Max Weber and Werner Sombart, Simmel wrote on this relation in texts that now form the core of what Rudolf Stichweh calls “die klassische Soziologie des Fremden.” This designation, as Stichweh notes, is an anachronism. Simmel, Sombart, and Weber dedicated small sections of much larger works to explicit discussion of *der Fremde*. Yet, even these small sections are particularly rich in insight for the relation between writing and knowledge examined in this chapter. Simmel, Sombart, and Weber largely used the figure of the outsider to describe a diverse range of historical actors in European society, including colonists, immigrants, and merchants. However, sociologists have adapted this figure to describe professional roles such as those played by judges or doctors.

My focus is largely on the way outsiders in such professional roles map out knowledge of the groups they are observing. The outsider who emerges in these sociological accounts is a particularly interesting counterpart to the literary outsider who appears in Szondi’s readings of Hauptmann. For this chapter, the most relevant account

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8 Szondi, *Theorie des modernen Dramas*, 75. Further quotes are in parentheses.
11 See especially the notion of “detached concern” Stichweh discusses in “Klassische Soziologie des Fremden,” 12-13.
of the outsider appears in Simmel’s *Soziologie*. Simmel devoted attention to the relation between the way outsiders observed their societies and the knowledge such observation produced. My comments will thus be limited, for the time being, to Simmel.

In Simmel’s *Soziologie*, the outsider occupies a unique position as an observer of society. Simmel uses the example of merchants who made a living selling only those products needed by otherwise self-sustaining societies. These merchants, as Simmel notes, often resided for a long time in the society to which they sold their goods, and thus occupied a strange position as “Supernumerarius” in a closed economic circle in which “die wirtschaftlichen Positionen schon besetzt sind.”

This position, according to Simmel, embodied the mixture of distance and closeness—of “Nähe und Entferntheit” (685)—with which the outsider relates to his society. Simmel is careful to distinguish between *der Wandernde* who “heute kommt und morgen geht,” and *der Fremde* who “heute kommt und morgen bleibt” (685). Only *der Fremde*, Simmel notes, “ist ein Element der Gruppe selbst [. . .] ein Element, dessen immanente Gliedstellung zugleich ein Ausserhalb und Gegenüber einschliesst” (686).

Precisely this relation to society prepares the outsider to be an an ideal sociological observer. The outsider has a mixture of familiarity with and distance to his society, and can thus observe this society with what Simmel calls “Objektivität” (688). Simmel carefully avoids defining objectivity as “Nicht-Teilnahme” (687). The objective observer is not a “passive tabula rasa” (688), but rather is free from the prejudices that would pervade the judgments of an observer too close to the situation under observation. As Simmel claims: “er [der Fremde] übersieht die Verhältnisse vorurteilsloser, misst sie an allgemeineren, objektiveren Idealen und ist in seiner Aktion nicht durch Gewöhnung, Pietät, Antezedentien gebunden” (688). The outsider of Simmel’s sociology can play the role of objective observer because he has a thorough familiarity with his society, but at the same time, takes the degree of distance required to evaluate this society without prejudice.

The outsider in Simmel’s sociology thus provides an interesting counterpart to the outsider in Szondi’s literary criticism. In both cases, these outsiders change the shape of the collective they observe. On the one hand, Szondi’s outsider makes a collective protagonist dramatic. On the other hand, Simmel’s outsider judges a collective better than the collective can judge itself, and thus creates new knowledge about this collective. Whether from a literary or sociological perspective, outsiders reshape the populations they observe into intelligible actors. Without these observers, the populations under observation would either remain undramatic or unknown to themselves. In the case of the Silesian weavers, these two states overlap. For observers of the Silesian weavers, knowing the degree of poverty the weavers suffered also meant representing this poverty in a dramatic way.

I have focused on the sociology of Simmel and the literary criticism of Szondi precisely because their accounts of the outsider cast a new light on the relation between these two kinds of written text. The outsiders described by Szondi and Simmel point to an affinity between a drama about the Silesian weavers and written reports on them. In these

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12 Simmel, *Soziologie*, 686. Further quotes are in parentheses.
two kinds of written document, the sociological and literary observer cross paths. My focus, in the remainder of this chapter, will be on the ways in which they do so. In the next section, I will examine the way in which an early commentator reflects on his sociological role as an outsider in his report on the weavers. Then, I will turn to the way in which Hauptmann stages this figure of the outsider in Die Weber.

Training Observers I: Alexander Schneer among the Weavers

By the time Hauptmann published Die Weber in 1892, a good deal had already been written on the uprising of the Silesian weavers—especially by contemporaries of the weavers themselves. Newspaper reports and other accounts detailed the misery in the weaver districts and the subsequent uprising. Critics have identified a number of sources from which Hauptmann borrowed material for Die Weber. For example, in his review of Die Weber, Mehring devoted painstaking philological attention to passages Hauptmann had adapted from “dem Text eines unverfälschten Sozialdemokraten”—namely, from an account of the uprising Wilhelm Wolff had published in the Deutsches Bürgerbuch für 1845. More recently, Hans Schwab-Felisch has pointed out that Hauptmann reproduced “eine ganze Reihe von Wendungen wörtlich” from a report by Alexander Schneer published shortly before the weaver uprising. Of all these sources, Schneer’s report is particularly relevant to the focus of this chapter.

Schneer was, I am claiming, not only source material for Hauptmann, but also a counterpart in a similar enterprise. Schneer and Hauptmann share a methodology that spans both writing a report and a drama. My focus will thus be directed not towards the philological relation between Schneer and Hauptmann, but instead towards the methodological relation between them. In his report, Schneer explicitly reflected on the way in which, as a Fremder sent by a Hilfsverein, he should interact with the weaver population he was visiting. Over fifty years later, Hauptmann staged a similar kind of interaction between Fremder and population in Die Weber. More interesting than the passages Hauptmann borrows from Schneer is the way both conceive of the relation between outsider and society.

As secretary of the Breslauer Verein zur Abhilfe der Noth unter den Webern, Schneer visited the weaver districts in Silesia in the month leading up to the June 1844 uprising. Only a few months before Schneer’s trip, local representatives of the Prussian government had sent a report to Berlin denying the existence of a Notstand in the weaver districts. In his role as representative of a Hilfsverein, Schneer would thus register a dissenting view of the conditions in which the weavers lived. Nonetheless, as he indicates

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13 A good selection of these documents can be found in the edition of Die Weber edited by Hans Schwab-Felisch and Wolf Jobst Siedler. See the bibliography.
14 See Mehring, “Gerhart Hauptmann’s Weber,” 769. For the text to which Mehring refers, see Wolff, “Das Elend und der Aufruhr in Schlesien.”
in his report, Schneer worked closely with both local governments and other Hilfsvereine in the weaver districts. Only in this way was he able to ensure completing the Herculean task he had undertaken: an investigation that included visits to over a thousand families in fifty districts in roughly ten days. Schneer was a one-man statistical bureau responsible for mapping out a diverse sector of the weaver population. He was convinced, in turn, that his thorough data yielded “eine richtige Anschauung der bestehenden Verhältnisse” (30).

Schneer conducted an investigation with a scope that, implicitly, the Prussian government should have followed. In fact, sections of Schneer’s report read like an instruction manual on how to be a good observer of the weavers. Schneer was careful to describe his methods for establishing the degree of poverty among the weavers, precisely, as he wrote, “[u]m Rechenschaft darüber zu geben, wie ich mir die Ueberzeugung von den thatsächlichen Zuständen verschafft habe” (28). Ultimately, these “thatsächlichen Zuständen” took the form of narratives on the “Jammerhöhlen” (54) in which individual weaver families lived. However, these narratives did not speak for themselves, but were only persuasive because Schneer prefaced them with “einen kurzen Bericht über den Weg, auf welchem ich [die thatsächlichen Zuständen] kennen gelernt habe” (28). For Schneer, establishing knowledge of the poverty in which the weaver population lived required a blend of methodological rigor and dramatic flair. He not only had to show the weavers in the drama of their misery, but guarantee that his decision to stage a drama was in fact sound.

The network of allies Schneer built in government and Hilfsvereine proved especially helpful in accomplishing this goal. Schneer recognized that he had to find a way past the “Befangenheit [. . .], die sonst sich immer zwischen den Fremden und die armen Gebirgs-Bewohner als Hinderniß freierer Mittheilung einstellt” (29). As a Fremder in the weaver districts, Schneer faced unique challenges to getting the information he needed. These districts were typically visited, Schneer maintained, by “niemand aus den besseren Ständen” (29). The only visitors to appear occasionally in the weaver districts were priests administering final rites and government administrators collecting taxes. Outsiders had the stigma of being associated with unwelcome interventions by either death or the state. The weavers, in turn, greeted outsiders with what Schneer called an “allgemeine Scheu” (29). For this reason, Schneer made sure to visit the weavers with “im Orte besonders beliebten Personen,” such as the “empfohlene Ortsbehörden” or members of local Hilfsvereine (29).

Schneer was sensitive to the way his position as Fremder among the weavers could jeopardize his research. In response to this potential risk, he allied himself with other outsiders who—though not weavers themselves—had a regular presence in the weaver districts. By proxy, Schneer aimed to have the same closeness to and distance from the weavers as local authorities and organizers. In this sense, Schneer positioned himself to be an ideal objective observer in terms similar to those outlined by Simmel.

17 Schneer, Noth, 28-29.
18 Schneer, Noth, 29-30. Further quotes are in parentheses.
19 For the individual narratives on the weaver families, see Schneer, Noth, 45-54.
Befriending local authorities and organizers would give him access to knowledge of the weavers hidden from outsiders at too great a distance. Schneer relied on precisely this degree of proximity to the weavers as a way of creating authority for his report. The report offered new knowledge because it was written by an outsider who had an up-close view of the weavers, but was nonetheless at a great enough distance to observe them without prejudice.

The report, however, not only presented Schneer’s observations as authoritative knowledge, but also modeled techniques other outsiders could use to become knowledgeable observers. Schneer offered “Sätze und Regeln” for use by any visitor who “bei flüchtiger Fahrt einen Ueberblick über den Nothstand in den betreffenden Districten zu verschaffen wünscht” (36). The poverty in the weaver districts had developed its own “Physiognomie” (36). “Der Character der Noth hat beinahe in jedem Orte sein eigentümliches Gepräge, seine besonder äußern Merkmale,” wrote Schneer (36). For this reason, he maintained, “der geübtere Blick [kann] schon aus dem Außern der Wohnung auf den Wohlstand des Einwohners einen ziemlich richtigen Schluß ziehen” (36). Schneer had developed this trained eye, and in turn instructed his readers on how to interpret the physiognomy of poverty in the weaver districts.

The signs of poverty to which Schneer alerted his readers were diverse. For example, the presence of “Specerei-oder Materialwaaren-Handlungen” in a town was a sign of relative wealth (36), as were the presence of a dung heap, stall, barn, or doghouse in front of a home (37). All of these signs pointed to a relative degree of economic surplus, either in the town as a whole or at least in individual families. On the other hand, the surest signs of extreme poverty included “Schornsteinen von Holz” in homes (37), or the absence of children playing in the streets of a town on a nice day (38). The first sign testified to the extreme poverty that prevented a family from building a home with proper ventilation, while the second sign suggested that poverty had compelled weaver families to use their children as additional labor. Signs such as these, meaningless to the untrained eye, prepared Schneer’s readers to recognize the varying degrees of poverty they—as observers in training—might one day encounter in the weaver districts.

Before deploying such training, however, a potential observer had to know where to look. Schneer not only trained his readers to be physiognomists who could identify gradations of poverty on the ground, but also topographers who could map out “ein ohngefähr richtiges Bild von der Vertheilung der Noth und ihrer Intensität” (32). He wrote of a “Topographie der Noth” in the following terms:

So denke man sich von dem flachen Lande nach der Riesenkoppe, der Eule und der Heuscheuer überall hin Linien gezogen; je mehr sich diese Linien den Spitzen nähern, um desto gedränger erscheint die Zahl der Elenden und um desto härter das Loos der Nothleidenden. (32)

Schneer chose not to give his readers an actual map, but instead asked them to imagine a map that traced the poverty of the weaver districts by altitude. Readers simply had to follow the lines that led from flat land to mountaintop in order to locate the regions in the greatest poverty. The “Häuser der Dorfstraße am Bach” showed a much different level of poverty than the “Schwalbennestern” perched in the mountains (36). Only armed with this topographical knowledge could an observer locate the regions in particular need of
investigation.

Few outsiders who observed the weavers understood the Topographie der Noth of which Schneer wrote. Even outsiders from the government lacked knowledge of this topography. Schneer reported of “ein erfahrner Bauer” who had recently observed “einen höheren Beamten” visit a weaver district (32). The Beamter had declared there to be “keine Noth” (32) in the district precisely because he failed to understand the topography of the region. Rather than take the difficult path to the “höher gelegenen Häuser,” the Beamter instead “durchstrich die Dorfstraße in ihren besten Theilen” (32). The Bauer was aware that the Beamter’s reluctance to explore the region had devastating consequences: “darum wissen Wenige wie unsere Armuth aussieht,” he told Schneer (33). Topographical knowledge translated directly into knowledge about the poverty of the weavers. The Beamter failed to see a poor population of weavers because he did not know where to look.

The Beamter who appeared in Schneer’s report thus acted as the model of a bad observer—precisely the kind of observer who had to be trained to see the weavers with the techniques Schneer outlined in his report. The physiognomy and topography of Not described by Schneer were not simply ways of conveying knowledge, but also of shaping a particular kind of knowledgeable observer. This observer would do what the untrained Beamter in Schneer’s report had failed to do—namely, recognize the poverty of the weavers. In order to make the poverty of the weavers visible, Schneer had to train an observer who could see this poverty. Whether the weavers became the protagonist in a drama of social misery depended on the audience. Observers such as the Beamter saw little more than an attractive landscape, while observers such as those Schneer hoped to train would see the drama of the weavers’ poverty in full force.

The language I am borrowing from theater to describe the role of observation in Schneer’s report is not entirely metaphorical. In Die Weber, Hauptmann actually placed observers not unlike those in Schneer’s report on stage. Die Weber included a scene in which Hauptmann contrasted trained observers to untrained observers—on the one hand, a traveler and Beamter who failed to see the poverty of the weavers, and on the other hand, local residents who had gained a different kind of knowledge by spending years in the region. These characters allow Hauptmann to work out a question that had also pervaded Schneer’s report: how to shape an observer who could recognize the poverty in the weavers’ situation? If Schneer posed this question to observers of society, Hauptmann posed it to observers of the drama.

It turns out—and this is the crux of my argument—that these two ways of posing the question have a good deal in common. Schneer fashioned himself and his readers into the figure of an ideal objective observer later identified by Simmel. When Hauptmann put this figure on stage, it played a role similar to that of the many other outsiders who, as Szondi notes, inhabit Hauptmann’s plays. Like these outsiders, the versions of Schneer’s ideal objective observer who appear in Hauptmann’s drama set in motion—to borrow a phrase from Mehring’s 1892 review—the unwieldy mass of weavers as a coherent protagonist. In this role, as Szondi argues, the versions of Schneer’s objective observer fill a formal need of Hauptmann’s drama.

Yet, Schneer was already trying to turn this unwieldy mass of weavers into a
coherent protagonist in his report. Moreover, as Schneer maintained, the weavers could only take shape as such a protagonist in the eyes of a trained observer. In this sense, Hauptmann not only filled a formal need of the modern drama by adopting a figure who appeared in Schneer’s report, but also continued in an aesthetic register the program of training knowledgeable observers initiated by Schneer. In *Die Weber*, Hauptmann explored the potential of the modern drama to shape knowledgeable observers of society—observers much like those Schneer hoped to train. In the final sections, I will thus reverse Szondi’s argument and ask not only how observers shape the weavers into a coherent protagonist, but also how *Die Weber* aims to shape a particular kind of observer.

**Training Observers II: Gerhart Hauptmann among the Weavers**

In an article titled “Gerhart Hauptmann unter den schlesischen Webern,” published in 1905 in the *Sozialistische Monatshefte*, Max Baginski recalled greeting a visitor to the weavers in Langenbielau in 1891. Baginski was working in Langenbielau as an editor for the journal *Proletariat*, and received word of a “hochgewachsener, schwarzgekleideter Herr” who planned to call on him in the region. “Der Name des Fremden,” Baginski wrote, “war Gerhart Hauptmann.”

Almost fifty years after Schneer wrote his report, and only a short time before *Die Weber* appeared in print and on stage, Hauptmann visited the weavers in the role of outsider. In fact, as Baginski noted, a local *Wirt* believed the “fremder Herr im Weberdistrikt” was “irgendein Regierungsbeamter, [. . .] entsandt, den Notstand der Weber zu untersuchen” (151). Researching a drama was, as the *Wirt’s* comment indicates, by all appearances the same as researching a report for the Prussian government.

Hans Schwab-Felisch elaborates on the way in which the conditions in Langenbielau and surrounding districts around 1891 would have invited the *Wirt* to see Hauptmann as a *Regierungsbeamter*. Schwab-Felisch provides a particularly revealing synopsis of the conditions prevailing in the weaver districts around the time of Hauptmann’s visit:


Hauptmann could be seen as a *Regierungsbeamter* in large part because the conditions in the weaver districts had not changed between 1844 and 1891. The weavers in Silesia were frozen in time, suffering under conditions similar to those that prevailed in 1844.

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20 Baginski, “Gerhart Hauptmann unter den schlesischen Webern,” 150. Further quotes are in parentheses.

Likewise, the government—in an almost comically mechanical way—aimed to ameliorate these conditions by resorting to the same kinds of halfhearted Untersuchungskommissionen. Even if he was researching a drama, Hauptmann occupied a position, as “soignierter Fremder,” that could easily be filled by a Prussian administrator either in 1844 or 1891.

Yet, Hauptmann was different than the bad Beamter who appeared in Schneer’s report. Unlike Schneer’s Beamter, Hauptmann sought out the locations in which he could find the worst suffering. Though on a smaller scale, Hauptmann used techniques similar to those Schneer had recommended in his report. Hauptmann relied on outsiders familiar with what Schneer had called the Topographie der Noth in the weaver districts—outsiders such as Baginski or August Kühn, who had become Abgeordneter for the Kreis Reichenbach-Neurode at the time Baginski wrote his report.22 These outsiders arranged what Baginski called “Streifzüge” (151) for Hauptmann in a handful of weaver homes located in areas hit hard by poverty. By relying on observers of the weavers in this way, Hauptmann gained knowledge to which he would not otherwise have had access.

Moreover, Hauptmann had an intuitive grasp of the balance between distance and closeness with which, according to both Simmel and Schneer, an outsider should relate to the weavers. Baginski approvingly noted the way in which Hauptmann entered the weaver homes “weder als ein kühler Beobachter noch als ein Samariter” (151). By avoiding what Baginski called these two “Wegen des konventionellen Verkehrs” (151), Hauptmann penetrated the defenses the weavers typically maintained against outsiders. Baginski narrated, for example, a scene in which the weavers opened up to Hauptmann about their impressions of the 1844 uprising in a way not common “im Verkehr zwischen Mitgliedern der oberen und unteren Gesellschaftsschicht” (155; emphasis in original). In addition to relying on knowledgeable outsiders such as Baginski or Kühn, Hauptmann proved to be skilled at turning the weavers themselves into a source of knowledge.

These skills at observation and interaction led Baginski to suspect Hauptmann visited the weaver district in more than the capacity of writer. Baginski wrote that Hauptmann’s “Fahrten und Fußwanderungen in der Webergegend galten nicht dem Baumaterial zu dem Werke [den Webern], sie galten den Details der Ortschlichkeiten, Landschaften, Wege” (153). In Baginski’s eyes, Hauptmann traveled to the weaver district to receive a particular kind of training. Hauptmann aimed, with this trip, to orient himself in a Topographie der Noth not unlike that described by Schneer almost half a century earlier. By visiting the weavers, Hauptmann trained himself to become an observer in the mold envisioned by Schneer—a training that ultimately, I am claiming, casts light on the role played by observers who appear in Die Weber.

Observers on Stage

Hauptmann took the time and effort to train himself as an observer who understood how to navigate the landscape that would open misery of the weavers to view. Like Schneer,

22 Baginski, “Gerhart Hauptmann unter den schlesischen Webern,” 150. Further quotes are in parentheses.
he valued the methodology that had produced representations of misery, rather than the representations themselves. Given this emphasis on methodology, a particular scene in *Die Weber* takes on an unexpected degree of importance. In this scene, Hauptmann introduces four characters who, to varying degrees, play the role of outsider in relation to the weavers. By staging interactions between these four characters, I am arguing, Hauptmann carries out a training program he had started on himself when he visited the weaver districts. Hauptmann stages these four characters in order to outline the proper methodology for observing the weavers. He thus utilizes the stage to cultivate practices of observation that, for Schneer, were designed to shape knowledge.

The four characters on whom I will focus appear at a crucial moment in the drama, a moment in which the weavers approach the degree of despair that will lead to the uprisings of the fourth and fifth acts. In the first and second acts, Hauptmann introduces the weavers on both a large and small scale. The opening act shows a large group of weavers desperately asking the manufacturer Dreissiger to receive extra pay for their wares, but instead discovering he plans to reduce it. The next act stages a domestic scene in which Hauptmann shows the anxieties of a weaver family suffering from hunger and poverty. Mother Baumert worries not only about feeding her children, but about the consequences should her husband—the weaver Old Baumert—lose his physical health. Towards the end of the scene, Old Baumert—whose stomach has become unaccustomed to meat—throws up a dog he has just cooked for and eaten with his family. As the third act begins, then, Hauptmann has established a degree of momentum directed towards the uprising. He shows not only the difficult economic conditions the weavers face, but also the physical toll of these conditions.

The third act, however, takes a degree of distance from the weavers. This act is set in a *Schenkstube* in which a wide cross-section of characters meet. These characters represent professions including *Bauer, Tischler, Polizeiverwalter*, and *Förster*, in addition to the *Gastwirt* and a few weavers. By staging a wide range of professions, Hauptmann also introduces a diverse group of perspectives on the weavers. In the third act, observers of the weavers—rather than the weavers themselves—take center stage. Many of the characters who appear in the *Schenkstube* remark, in an ongoing conversation whose interlocutors regularly shift, on the situation of the weavers with varying degrees of sympathy and disdain. These varying perspectives reveal differences between the kinds of knowledge to which observers of the weavers are privileged—differences that are nowhere more clear than in the exchanges between the four characters on whom I will focus: the traveler, the *Lumpensammler* Hornig, the *Tischler* Wiegand, and a *Beamter* from the Berlin government.

The traveler is the first of these characters to appear on stage. At the moment he appears, the traveler is clearly out of place in the weaver district. As the stage directions indicate, “er trägt sich modern.” Though Hauptmann fails to flesh out this adjective with particular qualities, it nonetheless sets the traveler at odds with the pre-modern, pre-industrialized weavers. Later in the third act, Hauptmann exaggerates this contrast to the point of placing the traveler in the role of an observer visiting a primitive population.

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Caught staring at the unshaven weaver Ansorge, the traveler remarks: “Solche urkräftige Naturmenschen sind heutzutage sehr selten. Wir sind von der Kultur so beleckt. . . aber ich hab’ noch Freude an der Urwüchsigkeit. Buschige Augenbrauen! So’n wilder Bart” (33). Hornig, in his capacity as Lumpensammler, knows the weavers well enough to deflate this romantic notion of the Naturmensch. He corrects the traveler by noting a much more mundane cause for Ansorge’s physical appearance: “Nu sehn S’ ock, werter Herr, ich wer Ihn amal was sag’n: bei da Leuten da lanjt ni uf a Balbier, und a Rasiermesser kenn se sich schonn lange ni derschwingen. Was wächst, wächst” (33).

This exchange between the traveler and Hornig encapsulates many of the ways in which Hauptmann trains observers on stage to see the poverty of the weavers. As an outsider, the traveler fails to see the signs of poverty written on the bodies of the weavers themselves. Instead, he attributes the wild growth of hair he sees on the face of a weaver such as Ansorge to an inflated sense of cultural otherness. Hornig, who has spent much more time among the weavers, reduces this sense of cultural otherness to bare economic terms: the weavers are not, by nature, different than civilized people such as the traveler, but instead simply do not have the money to afford a razor. Like Schneer’s trained observer, Hornig recognizes the Physiognomie der Noth in the weaver district. When Hornig attempts to sensitize the traveler to this Physiognomie, then, he takes part in a process of instruction Schneer initiated with his report.

The errors of observation made by the traveler, however, are not limited to cultural stereotypes such as that of the Naturmensch. The traveler privileges, in broader terms, his direct observations of the weavers over the information relayed in written media such as the newspaper. He remarks:


The traveler contrasts reports on the “Webernot” available in “irgend’ne Zeitung” with the funeral procession he has just witnessed. The funeral procession suggests to the traveler a degree of wealth incompatible with “die schauerlichsten Geschichten” reported in the newspapers. In this sense, Hauptmann draws attention to the pitfalls facing an untrained observer such as the traveler. The traveler allows himself to be easily seduced into believing what he sees with his own eyes is more true than what he reads. Yet, he fails to recognize that—as Schneer emphasizes—a good observer also has to learn to read what he sees.

Just as Hornig corrects the traveler’s misimpression of the weavers as Naturmensch, the Tischler Wiegand quickly revises the traveler’s misreading of the funeral. Wiegand explains that the funeral procession is the product of an “Unverständlichkeit unter der hiesigen armen Bevölkerungsklasse” (31). He attributes this misunderstanding to “so’ne iebertriebliche Vorstellung von wegen der schuldigen Ehrfurcht und pflichtmäßigen Schuldigkeit gegen selig entschlafene Hinterbliebene”
(32)—a state of mind that repeatedly leads the weavers to go into debt for extravagant funerals. By identifying this harmful custom, Wiegand reinforces what the audience has seen of the weavers through the third act. The funeral procession simply hides the poverty of the weavers, a poverty Wiegand—unlike the traveler—has been able to observe.

Wiegand thus has a trained eye that discerns the poverty behind the funeral procession, while the traveler—with his untrained eye—confuses the pomp of this procession for a display of genuine wealth. In large part, Wiegand can play the role of trained observer because his profession brings him into close contact with the weavers. As a Tischler, he builds the coffins in which the weavers are buried. In fact, the traveler comments on the funeral procession only after hearing Wiegand remark on “a klee numpern Sargl, a so a rasnich klee, winzig Dingl” (31) he recently built for the emaciated corpse of a weaver. This economic relationship to the weavers borders on exploitation. As Hornig states to Wiegand: “Je mehr daß uf de Hobelspäne schlafen gehen, um desto besser fer dich” (34). Nonetheless, Wiegand displays a degree of sympathy for the weavers in his remarks to the traveler. Unlike the traveler, Wiegand makes sense of the apparent nonsense represented by the funeral procession. He understands that the procession masks real suffering.

In his professional role, then, Wiegand displays the combination of distance and closeness that, according to Simmel, characterizes the objective observer. On the one hand, Wiegand relates to the weavers from the detached standpoint of a professional who provides a specific service—a service dangerously close to exploitation. This professional role, however, places him in a position to understand a custom such as the funeral procession in the way an untrained observer such as the traveler cannot. By correcting the traveler’s misunderstandings, Wiegand acts as a model observer—an observer detached enough to maintain a profitable economic relationship even to a suffering population, but close enough to view the customs of this population with insight and sympathy.

While Wiegand corrects the errors of observation made by the traveler, Hornig corrects a misimpression the traveler develops based on the observations of another character: a Beamter sent by the Berlin government to observe the weavers. The traveler overhears Hornig talking of “was hie fir ’ne Not is,” and takes it upon himself to respond in a “milde verweisendem Ton” that “[ü]ber die Not im Gebirge sind doch die Ansichten recht verschieden, wenn Sie lesen können. . .” (37). After Hornig interrupts to assert he can read, and to contrast what he has read with what he has seen, the traveler continues unfazed: “Wenn Sie lesen können, müssen Sie doch auch wissen, daß die Regierung genaue Nachforschungen hat anstell’n lassen” (37). The traveler suggests that knowledge of the Notstand in the weaver districts is contested. Perspectives on this Notstand can range from the grim observations made by Hornig to the implicitly more optimistic account available in the reports written by representatives of the Prussian government.

To question the misery Hornig has observed in the weaver population, the traveler thus refers to a specific kind of written text and to the observations of a specific figure who produced this text: namely, the reports written by outsiders such as Schneer, and—in the eyes of the Silesian Wirt fifty years later—also by Hauptmann. However, unlike the
texts written by Schneer and Hauptmann, the government reports to which the traveler refers overlook the misery in which the weavers live. As the traveler begins to recount what these reports say about the weavers, Hornig interrupts him:

Das kennt man, das kennt man: da kommt so a Herr von der Regierung, der alles schon besser weß, wie wenn a’s gesehn hätte. Der geht aso a bissel im Dorfe rum, wo de Bache ausfließt und de scheensten Häuser sein. De scheen’n blanken Schuhe, die will a sich weiter ni beschmutzen. Da denkt a halt, ’s wird wollieberall aso scheen aussehn, und steigt in de Kutsche und fährt wieder heem. Und da schreibt a nach Berlin, ’s wär und wär eemal keene Not nich. (37)

The Beamter who appears in Hornig’s narrative—much like the Beamter who appears in Schneer’s report—lacks the trained eye required to see the poverty in the weaver districts. Hornig’s Beamter performs only a cursory inspection of the best-kept homes in the district, and writes a report claiming he has found no evidence of Not. He overlooks both the Physiognomie and Topographie der Noth that, for Schneer, should be visible to the trained eye.

More interesting than the question of whether Hauptmann based this Beamter on the one who appears in Schneer’s report, however, is the question of what role the Beamter plays in Die Weber. The Beamter who appears in Hornig’s account is dangerous not only because he reinforces the Berlin government’s claim that there is no Notstand in the weaver districts, but also because he fails to see the drama Hauptmann is staging. Like the traveler, Hornig’s Beamter believes he sees an idyll. By failing to gather extensive knowledge about the weavers, the Beamter also denies them the role of protagonist in Hauptmann’s drama. The Beamter who appears in Die Weber thus testifies to the way in which knowledge and drama shape each other. As an untrained observer, he simultaneously fails to see the poverty of the weavers on the ground and to see the weavers as the protagonist in a drama.

Hornig, on the other hand, knows he is watching—and eventually helping to write—a drama. He refuses to give credence to the oversights in the government reports which be traveler refers. In response to the traveler, Hornig not only tells his story of the bad Beamter, but also describes scenes of misery he has observed—scenes that include children sifting through manure, and the many dead weavers who lie naked “uf a Fliesen im Hause” (37). Like Wiegand, Hornig makes the weavers intelligible as a collective character in the drama. He puts into narrative form the scenes of misery Hauptmann has shown on stage in the first two acts, and thus reinforces the dramatic quality of the weavers. Hornig, unlike both the traveler and the bad Beamter, sees a drama unfolding in the weaver districts.

It is thus not surprising that Hornig, in his role as an observer who recognizes the drama in the weavers’ situation, readily claims he can be a better Beamter than those sent by the Prussian government. Hornig elaborates in the subjunctive on what his bad Beamter should have done while visiting the weavers:

Wenn a aber und hätte a bissel Geduld gehabt und wär in da Derfern nufgestiegen, bis wo de Bache eintritt, und ieber de Bache nieber uf de kleene Seite oder gar abseit, wo de klee’n enzeln Klitschen stehn, die alten Schaubennester an a Bergen, die de manchmal aso schwarz und hinfällig sein, daß s’ ’n Streichhelzl ni
verlohnt, um aso a Ding anzustecken, da w’r a woll andersch hab’n nach Berlin bericht’t. Zu mir hätten se soll’n kommen, de Herrn von d’r Regierung, die’s nich haben glooben wollen, daß hier ’ne Not wär. Ich hätt’an amal was ufgezeicht. Ich wollt’an amal de Augen ufkneppen in allen den Hungernestern hier nein. (37)

In this critique of the bad Beamter, Hornig outlines a methodology for observing the weavers that is, in many respects, similar to the methodology of Schneer. Hornig knows the Topographie der Noth in the weaver districts, and can thus pinpoint exactly where the worst “Hungernestern” are located—precisely, as Schneer had observed, in the “Schaubennester an a Bergen.” This knowledge, Hornig claims, makes him especially well suited to be the kind of observer the bad Beamter fails to be—and to train others to become this kind of observer as well. As Hornig emphasizes towards the end of his critique, he can write a report that will open the eyes of the government in Berlin to the sufferings of the weavers.

As is the case for Wiegand, Hornig has developed his knowledge of the weavers largely in his professional (or semi-professional) role. Hornig maintains that his years of gathering rags in the weaver districts have given him the knowledge necessary to write a good report for the Prussian government. Unlike both the traveler who has just arrived in town, and the bad Beamter who leaves town too quickly after arriving, Hornig has spent a long time observing the weavers. He asserts that his “vierzig Jahr uf’n Puckel” (37) have given him privileged access to the Silesian terrain and its inhabitants. Hornig lacks the respectable position of Tischler held by Wiegand, but nonetheless has a marginalized profession that gives him an up-close perspective on the daily lives of the weavers.

In the marginal position of Lumpensammler, Hornig subsists by gathering fabrics from both the weavers and other people in the town. When he first appears in the third act, he offers Anna—the daughter of the publican Welzel—“scheene Zopfbändl, Hemdbändl, Strumpfbändl, [. . .] scheene Stecknadeln, Haarnadeln, Häkel und Esel” for “a paar Lumpen” (32). Later in the scene the weavers Ansorge and old Baumert, “jeder mit einem Pack,” sit together with Hornig to exchange fabrics (33). His regular interactions with the weavers also give him privileged access to knowledge about them. In the same conversation in which Hornig accuses Wiegand of profiting from the frequent deaths of weavers in the district, Wiegand returns the favor and accuses Hornig of accepting bribes to hide from the police a knowledge of “wo de Nipper sitzen unter a Webern” (34). Wiegand maintains that some weavers “jede Woche a hibsch Neegl Spul’n iebrig machen” and give Hornig “a Feifl Schußgarn” to stay quiet about their activities (34).

Hornig thus profits, to a degree, from the knowledge he gains in up-close interactions with the weavers—knowledge more accurate than that available even to the police. In his semi-professional role as Lumpensammler, Hornig has access to commodities other than rags. His regular interactions with the weavers also generate knowledge he can instrumentalize for financial gain. Like Simmel’s objective observer, then, Hornig takes a sufficient degree of distance to enjoy a profitable economic relationship to the weavers, but at the same time displays a degree of sensitivity to the sufferings of the weavers in his conversation with the traveler. The relation Hornig has to the weavers in his semi-professional role thus makes him, from the standpoint of a sociologist such as Simmel, ideally suited to understand the inner workings of the weaver
districts.

As I am claiming, however, this semi-professional role extends beyond sociology and also makes Hornig ideally suited to be a model observer of Hauptmann’s drama. Precisely because Hornig is in a position to map out the specific Topographie der Noth occupied by the weavers, he can in turn see them as a unified character fit to be the protagonist in Hauptmann’s drama. The way in which Hornig occupies this dual role becomes especially evident in contrast to the misimpressions held by the bad Beamter. The bad Beamter sees only an idyll in the living conditions of the weavers. To revise the bad Beamter’s report, and convince the government it is watching a drama, Hornig thus has to play the role of an objective observer who can locate the suffering weavers hidden in their “Hungernestern” (37). Only by outlining the topography of these locations does Hornig make the weavers cohere as a dramatic character.

Hornig and Wiegand, on the one hand, and the traveler and bad Beamter, on the other, model contrasting ideals of the trained and untrained observer. The professional roles occupied by Wiegand and Hornig give them not only the combination of distance and closeness Simmel attributed to an ideal objective observer, but also access to both the Topographie and Physiognomie der Noth Schneer viewed as the crucial means of gaining knowledge about poverty in the weaver districts. By contrast, the traveler and bad Beamter occupy a position at too great a distance to read the signs of poverty in the weaver districts, and thus fail to take an objective stance on the weavers in the sense described by Simmel. The extent to which Hauptmann develops these contrasts between trained and untrained observers indicates that he shared a major aim with sociologists such as Simmel and organizers such as Schneer.

Hauptmann’s aim in staging these contrasts between trained and untrained observers, however, was not simply didactic. Wiegand and Hornig not only exemplify the good observer shaped in a mold between that described by Schneer and Simmel, but also play a crucial role in the drama. Like the many outsiders to whom Szondi draws attention in his reading of Hauptmann’s dramas, Wiegand and Hornig turn the weavers into a convincing protagonist. Wiegand and Hornig see a drama in the economic conditions of the weavers, while observers such as the traveler and Beamter see nothing more than a lavish funeral procession or idyllic street scene. Szondi overlooks an interesting implication in this contrast between trained and untrained observers: Hauptmann includes outsiders who fail to dramatize the weavers. In contrast to Wiegand and Hornig, outsiders such as the traveler and the Beamter threaten to disrupt the drama precisely because they misread the Physiognomie and Topographie der Noth that was, as Schneer emphasized, only available to trained observers.

By placing the traveler and Beamter in this potentially disruptive role, Hauptmann finds a way not only to stage models of observation, but also to model the interdependence of stage, observer, and knowledge. A drama such as Die Weber depends for its existence on observers such as Wiegand or Hornig, but faces the constant threat of observers such as the traveler or Beamter. The task of the dramatist, as Hauptmann suggests, is to train observers like the traveler and Beamter to become observers like Wiegand and Hornig. Only Wiegand and Hornig have the trained eye to see, simultaneously, the poverty and drama of the weavers. The contrast between Wiegand or
Hornig, on the one hand, and the traveler or Beamter, on the other, thus makes especially clear that an effective observer of a drama such as Die Weber should also have knowledge similar to the kind Schneer outlined in his report or Simmel described in his sociology. Schneer and Simmel offered, it turns out, not only a model of observation for visitors to the weavers on the ground, but also for dramatists who wanted to put the weavers on stage.

My claim in this chapter has been that by staging these model observers, Hauptmann creates an especially productive feedback loop between knowledge and drama. The observer armed with knowledge of the weavers—knowledge gained from techniques such as reading the Physiognomie and Topographie der Noth Schneer described in his report, or from taking the combination of distance and closeness Simmel outlined in his sociology—was also an ideal observer of the Die Weber. Without observers who fit this mold, a drama such as Die Weber could not exist. However, these observers did not come preformed to the drama. Instead, as Hauptmann suggested by staging interactions between Hornig, Wiegand, the traveler, and the Beamter, the dramatist had to show his audience how to see the weavers—and thus the drama—in the right way.

To be clear: I am not suggesting Hauptmann entirely appropriates a program such as that described by Schneer for aesthetic ends. Instead, I am maintaining that—though separated by almost fifty years—Hauptmann’s drama and Schneer’s report follow a complementary logic in which observers readily switch between two roles. On the one hand, the audience attending Hauptmann’s drama watched observers such as Wiegand or Hornig and learned, by proxy, the lessons Schneer hoped visitors would learn on their flüchtige Fahrt to the weaver districts. On the other hand, as versions of the observers Schneer hoped to train, characters such as Wiegand and Hornig modeled for Hauptmann’s audience the right way to see a drama. The stage proved capable of training observers, and thus of continuing Schneer’s program by other means. Precisely these trained observers, however, also proved necessary to the continued existence of the stage.
Chapter 2
Rudolf Virchow and the Tragedy of Typhus: Sympathy in Theory and in Action

In his “Mittheilungen über die in Oberschlesien herrschende Typhus-Epidemie,” a report published in an 1849 volume of the *Archiv für pathologische Anatomie und Physiologie*, Rudolf Virchow targeted a bureaucracy similar to that which appeared in Gerhart Hauptmann’s *Die Weber*. In 1848, Virchow had been sent to investigate an outbreak of typhus in Upper Silesia. In his report on this visit, he critiqued the Prussian administration as out of touch with the realities on the ground. Administrators in the Prussian state, according to Virchow, only took modest measures against poverty and disease, even in the wake of newspaper reports detailing “die unglaublichen, unerträglichen Dinge [. . .], welche in Oberschlesien vorgingen.”¹ The administrators Virchow critiqued in his report were, like the *Beamter* and the traveler Hauptmann placed on stage, bad observers of society.

In response to the indifference of these bad observers in the Prussian administration, Virchow advocated radical social action. The typhus epidemic, he claimed, had largely been caused by the poor living conditions in Upper Silesia. Changing these living conditions thus offered the best way to avoid typhus in the future. “Die Medicin” Virchow wrote, “hat uns unmerklich in das sociale Gebiet geführt und uns in die Lage gebracht, jetzt selbst an die grossen Fragen unserer Zeit zu stossen” (309). In this spirit of treating medical questions as social questions—a spirit central to the public health advocated in his report—Virchow claimed only “volle und unumschränkte Demokratie” (303) would prevent future outbreaks of typhus in Upper Silesia.² The living conditions required for good health in the region, he maintained, could only be established by a population capable of governing itself democratically.

In his report, then, Virchow faced a task similar to that faced forty years later by Gerhart Hauptmann. Like Hauptmann, Virchow had to make visible the struggles of a population suffering from poverty and disease. This population had to become a collective protagonist engaged in a dramatic struggle against the Prussian state. Virchow, of course, did not think of his report as a drama, or as a literary text in any sense. Yet, as I will argue in this chapter, the report shared many strategies with a drama such as Hauptmann’s *Die Weber*. Hauptmann may have invented, as Maximilian Harden claimed, the *Tragödie des Proletariats* around the end of the nineteenth century.³ However, this kind of tragedy had a long prehistory in forms of writing that were not strictly literary—a prehistory to which I pointed in the first chapter by arguing that Hauptmann and a representative of a *Hilfsorganisation* such as Alexander Schneer shared a program of training observers to see the sufferings of the weavers in Upper Silesia.

Virchow belongs in this constellation. Like Hauptmann and Schneer, he aimed to

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¹ Virchow, “Mittheilungen,” 293. Further quotes are in parentheses.
² For the role Virchow’s report played in the early history of public health in Germany, see Goschler, *Rudolf Virchow*, 58-64; and Hamlin, “Public Health,” 414-416.
³ See the opening paragraph of the first chapter.
train his readers to see the sufferings of a population overlooked by the Prussian government. In fact, Virchow trained his readers to see this suffering according to a blueprint established by critics of tragedy writing in his own time. Well before Harden called Hauptmann’s *Die Weber a Tragödie des Proletariats*, social conflict had been conceptualized by critics of drama as a feature central to tragedy. These critics claimed, moreover, that tragedy steered the sympathy of its spectators towards a party on one side of the conflict it staged. In his report, Virchow accomplished precisely this task. He not only highlighted the population suffering in Upper Silesia, but also targeted the enemy who had caused this suffering. Like a tragedian, Virchow directed the sympathy of his readers towards the population in Upper Silesia, and in turn generated hostility against the Prussian state on the part of these readers.

My claim will be that the partisan logic at work in Virchow’s report points to a strange proximity between tragedy, medicine, and ultimately aesthetics around 1850. This proximity is located in the sympathetic observer of society critics writing on tragedy and a doctor such as Virchow aimed to cultivate. Tragedy may be the place in which critics most clearly formulated how this observer was driven to feel *Mitleid* and thus take sides in a social conflict. However, the public health Virchow advocated in his typhus report was the place in which, ironically, the sympathetic observer described by critics of tragedy was most dramatically staged. Virchow, in this sense, wrote the tragedy conceptualized by critics of theater during his time. These same critics, in turn, outlined a program for training observers to see the suffering populations targeted by the public health that emerged in Virchow’s typhus report.

Virchow’s typhus report and writings by critics of tragedy around 1850 thus belong to the genealogy of the sympathetic observer I began to trace in the first chapter and will continue to trace in this chapter. In order to accomplish this aim, I will dedicate the first two sections to examining how critics and academics in Virchow’s time wrote on *Mitleid* in tragedy and the related concept of *Einfühlung* in aesthetics. The final section will then examine how the observer at the heart of concepts such as *Mitleid* and *Einfühlung* implicitly took shape in Virchow’s report on typhus. My starting point will thus not be the typhus report Virchow wrote in 1848, but rather a lecture on typhus he gave twenty years later. In this lecture, he described a way of feeling that was closely related to *Mitleid*.

**Personifying Disease and Nature**

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4 My thesis owes a debt to the work of two scholars. On the one hand, Fritz Breithaupt’s insight that empathy inevitably entails partisanship is crucial to my reconstruction of the way critics around 1850 understood tragedy. On the other hand, I have relied on Jean-Pierre Vernant’s claim that tragedy is not simply a literary genre, but also “involved the creation of a ‘subject,’ a tragic consciousness.” This tragic subject was also being cultivated outside of tragedy—a fact particularly evident, I am claiming, in Virchow’s medicine. See Breithaupt, *Kulturen der Empathie*, 114-193; and Vernant, “The Tragic Subject,” 240.
In 1868, Virchow gave a lecture titled “Ueber den Hungertyphus und einige verwandte Krankheitsformen.” By this point in his career, he had established an impressive resumé of firsthand experience with typhus—a resumé based largely on the several weeks he spent in Upper Silesia in 1848, as well as on other visits to regions in which the specter of typhus loomed large. In contrast to Virchow’s 1848 report on typhus, the 1868 lecture was fairly tame. Rather than call for a democratic revolution to cure typhus, Virchow recounted the evolving understanding of the disease in history. This shift in genre produced a shift in tone from visceral immediacy to distant reflection. The 1848 outbreak of typhus—and Virchow’s report on this outbreak—took their place in a history of disease and writing about disease that included ancient Greece and the Middle Ages.

While giving this historical account of typhus, Virchow touched on an example that pointed to the gulf separating ancient and modern medicine. He contrasted the modern view that the causes of typhus could be found in environmental factors such as impure air or water to the ancient view that diseases were the work of a god. “Die alte Welt,” he wrote, “bezog jede ungewöhnliche Erscheinung auf besondere göttliche Einwirkungen. Glaubte man an viele Götter, so war es einer derselben, welcher die Krankheit sendete; glaubte man an Einen Gott, so nahm man an, dass sie seine Schickung sei. Die eigentliche Forschung war mit dieser Annahme zu Ende.” Also at an end, by all appearances, was Virchow’s engagement with the ancient world. The ancients made a brief entrance in his typhus lecture primarily to highlight the way in which modern medicine aimed to understand the causes of disease rather than attribute disease to a force beyond human control.

However, this example of personification in the ancient world testified to a strange proximity between the medicine espoused by Virchow and the aesthetics of his time. Around the same time Virchow gave his lecture on typhus, the philosopher Friedrich Theodor Vischer began to formulate a train of thought that would lead him twenty years later to develop a theory of Einfühlung. Einfühlung, for Vischer, described a phenomenon in which an observer literally “felt into” nature by personifying it. Virchow and Vischer had a similar interest in personification. For both, it was the key to understanding how ancient cultures made sense of a world that included the beauty of nature and the horror of disease.

Vischer’s theory of Einfühlung, in turn, makes it especially clear that personification was also key to understanding a particular technique of observation in which self merged with other. As the next section will address in detail, this technique of observation placed Vischer in close proximity to critics writing on tragedy around 1850. The observer who merged with a nonhuman other in nature could readily become a spectator who merged with a human other in tragedy. Virchow thus, like Vischer, moved in the close orbit of tragedy when he reflected on the personification of disease. The observer of nature Virchow conceptualized in this context, I am arguing, ultimately has strong affinities to the observer of society at center stage in his 1848 typhus report.

5 For a visit Virchow made to a region threatened by typhus shortly after 1848, see his Die Noth im Spessart.
These affinities only begin to be evident in Virchow’s 1868 typhus lecture. A few years earlier, in an 1862 lecture titled “Das Fieber,” Virchow had examined at length the logic at work in ancient personifications of disease. In a vein similar to that of the 1868 typhus lecture, Virchow claimed that the ancient Greeks made sense of disease by attributing it to a god—specifically, to the god Apollo. This claim was based largely on an 1832 essay by the philologist and archaeologist F. G. Welcker titled “Seuchen von Apollon.” Welcker had gathered sources from Greek myth, drama, and history in order to show that, as he argued, “[u]nter den Griechen der älteren Zeit herrschte nicht anders wie bei den anderen älteren Völkern der Glaube, daß die Krankheiten Schickungen eines Gottes seyen [. . .].” Following Welcker’s thesis, Virchow claimed that Apollo was a “doppelte Erscheinung” who, for the ancient Greeks, simultaneously brought “Gesundheit” and “Sorge, Krankheit und Tod.” As evidence of the belief that Apollo could bring death and disease, Virchow referred to what Welcker had called a “glänzende Beispiel einer dichterischen Seuche.”

Jedermann kennt die schöne Stelle im Anfange der Ilias,” wrote Virchow, “wo Phöbos Apollon, erzürnt über die Beleidigung seines Priesters durch Agamemnon, Bogen und Köcher ergreift, um die im Schiffslager vor Troja versammelten Griechen zu strafen.” This punishment, Virchow continued, took the form of a plague lasting nine days.

As would be the case in his 1868 typhus lecture, Virchow dismissed in his 1862 fever lecture the belief that a god such as Apollo could cause a plague. He maintained that “[i]n der Wissenschaft haben solche Versuche, das tief innerliche Ahnen religiöse Strebens in die Deutung der Naturvorgänge hineinzutragen und das Dogma auch zu einer äußerlichen Gewalt, ja zur wirklichen Herrschaft über die Erfahrung zu bringen, keine Hoffnung mehr.” The age had passed in which “Wissen und Glauben eins waren” (120). Modern science, for Virchow, had abandoned “Symbolik” in order to search for the “wirklich erkennbaren Kräften” at work in nature (120-121). This contrast was particularly evident in the way techniques for observing fever had shifted in modern science. “[D]as persönliche Einwirken übernatürlicher Gewalten,” Virchow noted, “bringt durchaus fremdartige Motive in die Betrachtung der Naturvorgänge” (122). The recent development of the thermometer had finally eliminated these fremdartige Motive. The thermometer made visible changes in the body not available to the senses alone (122-123). Technology replaced imagination as a way of compensating for sensory limitations.

Yet, Virchow did not entirely dismiss the techniques of imagination preceding the technology of the thermometer. In his lecture, he took an interest not only in Apollo as a personification of disease, but also in the observer for whom Apollo played this role. “Wie himmelweit verschieden von uns ist der Mensch,” he wrote,

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7 Welcker “Seuchen von Apollon,” 33. For Virchow’s citation of Welcker, see “Das Fieber,” 113.
11 Virchow, “Das Fieber,” 120. Further quotes are in parentheses.
welcher sich von dem freien Leben in der Natur noch wenig entfernt hat! Er ist zunächst von der Witterung abhängig; der Wechsel der Jahres- und Tageszeiten bestimmt die Act seines Lebens und seines Krankseins; die Erde und das Gewässer bringen ihm bald Segnungen, bald Gefahren, je nachdem der lichte oder umwölkte Himmel ihm günstig oder ungünstig sind. Die Sonne und die Wolke, die Erde und das Meer sind für ihn nicht bloß vier Elemente, wie für den Naturphilosophen; ihm sind es persönliche Erscheinungen, Wesenheiten, mit denen er in ein persönliches Verhältniß tritt, Gottheiten, deren Gnade und Ungnade sich persönlich über ihn ausgießt. (114-115)

Virchow staged a scene of observation in which disenchanted modern observers (his audience) imagined observers in ancient Greece entering a persönliches Verhältniß with nature. Modern observers entered the minds and bodies of ancient observers, while ancient observers in turn attributed a mind and body to nature by personifying it. Personification may have belonged, for Virchow, to a history of error preceding the true knowledge that gradually arose with modern medicine. However, in order to relegate personification to this position, Virchow had to understand it as a way of observing nature. Personification, in this sense, occupied a place not only in a genealogy of medical knowledge, but also in a genealogy of observation.

This genealogy of observation spanned medicine and aesthetics. The philosopher Friedrich Theodor Vischer had been grappling with precisely the question that drove Virchow’s understanding of disease in ancient Greece—namely, the question of how ancient religions personified the forces at work in nature. With the answer he gave to this question, Vischer explored in depth the psychological dynamic Virchow had started to address in his lecture on typhus. In an 1866 essay titled “Kritik meiner Aesthetik,” Vischer assigned personification a crucial role in the way cultures such as those of ancient Greece understood the world—particularly in the form of belief he identified as myth. In myth, Vischer wrote, “die Weltkräfte werden personificirt; aber das Bewußtsein weiß nicht, das es nur personificirt, es glaubt an die Götter als an wirkliche Wesen.”

However, Vischer did not limit the scope of personification to this claim. Historically, it might be the case that ancient cultures believed in the gods created by the human mind. Yet, as Vischer maintained, “[d]er Glaube, daß solche Wesen existiren, ist unfrei und liegt außerhalb des rein ästhetischen Gebiets” (139).

By turning to aesthetics, Vischer hoped to show that personifying nature did not necessarily entail believing in the personifications themselves. He gave an account of a self-reflexive observer who recognized his or her role in creating such personifications. The observer who appeared in Vischer’s account did not actually believe in the gods who represented the workings of nature. Nonetheless, Vischer acknowledged the psychological necessity of personification. “Dieser Act,” he wrote, wodurch wir in dem Unbeseelten unserem Seelenleben zu begegnen glauben, ruht an sich ganz einfach auf einem Vergleichen. [. . .] [D]as Vergleichen geht aber so unbewußt und unwillkürlich vor sich, daß wir, weit entfernt, an ein bloßes “Gleichwie” zu denken, geradezu die Seelenstimmung als Prädicat dem

Vischer, “Kritik meiner Aesthetik,” 139. Further quotes are in parentheses.
According to Vischer, the observer who personified nature had a degree of agency. This observer personified nature not in order to explain it, but rather in order to experience it in a particular way. Personification, then, represented not simply a rudimentary way of knowing about the world, but rather a way of interacting with it as an aesthetic object. In this capacity, nature served as a laboratory in which an observer could experiment with his or her senses.

In an 1887 essay titled “Das Symbol,” Vischer described the workings of this experiment with the senses as “den Akt, durch welchen sich der Beschauer in das Unbeseelte so hineinversetzt, als ob er mit seiner Lebenskraft und Seele selbst darin, sich bewege, hebe, auf und nieder schwingen, ins Weite dehne.” The observer of nature, on Vischer’s account, cultivated a near hypersensitivity to the object under observation—to the extent of testing new possibilities for physical movement and inhabiting space. As Vischer claimed, this observer experienced a “Lüftung seiner Schranken” (445). “Licht, Feuer, Luft, Wasser, Erde, Pflanze, Tier,” he wrote, “leihen ihm ihre Eigenschaften, ihre Kräfte, ihre Bildungen” (445). The elements and organic forms residing in nature offered a kaleidoscopic array of new sensations to the human observer—sensations that only arose for an observer who actually imagined him- or herself to be an object in nature. Vischer called the sensitivity to this array of sensations *Einfühlung* (435).

Virchow, of course, did not view personification in exactly the same way as Vischer. Personification was, for Virchow, largely an act of attributing human qualities to nature. Moreover, Virchow saw personification as a naïve worldview espoused by cultures that actually believed in their gods. The idea that personification could either be self-referential or offer new possibilities for sensory experience was largely foreign to Virchow. These ideas were mainly refinements added by Vischer when he conceived of personification as an aesthetic phenomenon. Yet, in his 1862 lecture on fever, Virchow had nonetheless already pinpointed the insight at the core of this aesthetic phenomenon: namely, personification represented a means of cultivating an observer who was strongly attuned to nature. The observer described by both Virchow and Vischer displayed a particular sensitivity to the forms of existence outside the self—whether these forms of existence were represented by a pantheon of gods who embodied the elements at work in nature or by the possibility of actually becoming those elements and related organic forms.

The forms of existence to which the observer described by Virchow and Vischer was particularly sensitive, however, were not limited to nature. The observer of nature who emerged at the intersection of Virchow’s medicine and Vischer’s aesthetics had a double in the observer of society who emerged in another domain: namely, in tragedy. While the observer described by Virchow and Vischer—as the term *Einfühlung* 13

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13 Vischer, “Das Symbol,” 437. Further quotes are in parentheses.
suggested—“felt into” nature, the observer of tragedy “felt with” the sufferings of others. To capture this “feeling with,” theorists of tragedy used the term *Mitleid*. Though *Mitleid* had a lineage that traversed the poetics of Aristotle and Lessing, it remained a central concept in theories of tragedy written around the time Virchow and Vischer were outlining their understanding of personification. The role *Mitleid* played in these theories of tragedy, particularly as the social equivalent of *Einfühlung*, will be the focus of the next section.\(^\text{14}\)

### The Sympathetic Observer

Friedrich Theodor Vischer acknowledged that the term *Einfühlung* was not his invention. In “*Das Symbol*”—the 1887 essay in which he first called the psychological phenomenon he had been examining for decades *Einfühlung*—Vischer noted that the term had already been used by his son Robert in an 1873 book titled *Das optische Formgefühl*.\(^\text{15}\) Robert Vischer, in turn, credited his father’s work in the 1860s with the “Anregung” for this book.\(^\text{16}\) Father and son exchanged terms and concepts in an intertextual collaboration that spanned decades and ultimately yielded a theory of observation in which the self fused with object under observation. However, what Robert Vischer called a “merkwürdige Verschmelzung von Subjekt und Objekt” (28) was not—as had largely been the case for his father—limited to the observation of nature. According to Robert Vischer, the fusion of subject and object that played out in *Einfühlung* mirrored the fusion between subject and subject at the heart of social interaction. His focus on this intersubjective side of *Einfühlung* provides a key point of entry into the brief history of the sympathetic observer in tragedy I will outline in this section.

For Robert Vischer, *Einfühlung* was only possible because a person projected onto an inanimate object an emotional bond already cultivated in interaction with other people. *Einfühlung* was nothing less than an extension to the entire cosmos of a love for the human species. “Die Naturliebe zur Gattung,” Vischer claimed, “ist es allein welche mir eine vollkommene geistige Versetzung ermöglicht; bei ihr fühle ich nicht nur mich selbst, ich fühle zugleich auch das Gefühl eines andern Wesens” (18-19). This capacity to feel the emotions of another did not stop with human beings, but ultimately included inanimate objects in nature. Why else, asked Vischer, would the strange desire to lend life to inanimate nature even exist? “Wir vermissen dieses rothblühige Leben,” he wrote, “und eben weil wir es vermissen, stellen wir uns die todt Form wie etwas Lebendiges vor” (20). The impulse to recognize the self in an other was equally evident, for Vischer, in a form of interaction among human beings and in a form of interaction between human and nature.

In this sense, Robert Vischer pointed to an intersubjective side of *Einfühlung* only

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\(^{14}\) For another genealogy that notes the proximity of *Mitleid* and *Einfühlung*, see the entry “Einfühlung/Empathie/Identifikation” by Martin Fontius in *Aesthetische Grundbegriffe*.

\(^{15}\) See the long reconstruction of Robert Vischer’s *Das optische Formgefühl* in Friedrich Theodor Vischer, “*Das Symbol*,” 438-446.

\(^{16}\) Robert Vischer, *Das optische Formgefühl*, iii. Further quotes are in parentheses.
latent in the accounts of personification given by his father and by Virchow. A phenomenon such as personification—of which Einfühlung was, Robert Vischer wrote, “die natürliche Mutter” (22)—went beyond the human observer isolated in nature. The extreme attunement Friedrich Theodor Vischer and Rudolf Virchow saw emerge in the relation between observer and nature also held together human bonds. The observer who personified nature was capable not only of feeling a strong bond with inanimate objects, but also with other people. This bond, for Robert Vischer, only arose when the self recognized it was an “untergeordneten Theil eines untrennbaren Ganzen” (29)—a whole that could be represented equally by cosmos or species. These wholes ultimately became the criteria according to which self fused with other. “Ich fühle mich selbst in mir oder in einem andern Ich,” wrote Vischer, “aber nur als einen würdigen Repräsentanten der ganzen Gattung” (29). Only when mediated by a universal such as species did a strong bond between self and other take shape.

Though ostensibly mediated by a universal, the bonds that took shape between self and other in Einfühlung turned out to be selective. The act of migrating, as Vischer wrote, “über die eigene Haut hinaus” (28) presupposed a category such as species that would screen acceptable destinations to which the self could move. Species was not the only of these categories. Vischer identified a scale that began with the biology of “Geschlechts- und Familienliebe” and culminated in the “Pathos des Staatsbewusstseins” (29). The logic governing Einfühlung was, in this sense, ultimately partisan. The self formed strong bonds with others, but only based on criteria predetermined by an identifiable category. Anyone who failed this test became the object of hostility. The self that “felt into” others distributed both the human and nonhuman populations inhabiting the world into the camps of friend and enemy. Vischer claimed that, once seen as a representative of a universal category with the absolute moral worth of the state or of humanity, “[d]er Freundliche erscheint mir nun überhaupt brav und edel, der Gehässige überhaupt verworfen und teuflisch” (29).

The partisan logic driving Einfühlung is where Robert Vischer entered the realm of tragedy. Like the observer who “felt into” nature or another human being, the spectators of a tragedy had to be persuaded to “feel with”—that is, to experience Mitleid for—the sufferings of another. For critics writing around 1850, the spectator of a tragedy had to decide the suffering he or she observed in the protagonist was the suffering of an ally. Moreover, this suffering typically arose when the protagonist of a tragedy collided with an enemy represented by the existing social order. Only a conflict of this scale generated the extreme affects that would compel an observer of tragedy to take sides. The remainder of this section will be dedicated to examining how Mitleid arose in this cauldron of social conflict.

The concept of Mitleid has a long history dating to the poetics of Aristotle.17 Towards the end of the eighteenth century, Gotthold Ephraim Lessing drew renewed attention to Mitleid in his dramaturgy—attention that would be sustained well into the nineteenth century.18 Even by the middle of the nineteenth century, many dramaturgists

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17 See Aristotle, Poetics.
18 See Lessing, Hamburgische Dramaturgie.
continued to refer to Aristotle and Lessing when discussing *Mitleid*. Among the most prominent of these dramaturgists was Gustav Freytag, whose 1863 *Die Technik des Dramas* offers an understanding of *Mitleid* typical for his time. For Freytag, the observer of a tragedy “Gedanken, Leiden und Schicksale der Helden mit einer Lebendigkeit nachempfindet, als ob sie seine eigenen wären.”\(^{19}\) By trading places with the protagonist in this way, the observer of tragedy experienced suffering on a raw physiological level. “Weit leichter als im wirklichen Leben,” wrote Freytag, “rollt die Träne, zuckt der Mund” (77). However, he noted that this pain was counteracted by a pleasure the observer experienced in ultimately recognizing the secure position from which he observed the tragedy unfold. Taken together, this alternation of *Mitleid* with and distance from the sufferings of a protagonist had an effect that, for Freytag, “der Katharsis des Aristoteles entspricht” (78).

Crucial to Freytag’s understanding of *Mitleid* and the role it played in catharsis was a fusion between self and other similar to that which Friedrich Theodor Vischer and Robert Vischer placed at the heart of *Einfühlung*. The observer of a tragedy may, in the end, have taken distance from the sufferings of the protagonist. Yet, this act of taking distance followed an intense act of suffering with another—an act that ultimately made the pleasure of separation from this other all the more intense. Indeed, the pleasure of catharsis that followed intense *Mitleid* had other sources for other interpreters of tragedy writing around the same time as Freytag.

For example, in his *Dramaturgie, oder Theorie und Geschichte der dramatischen Kunst*—published in 1848—Theodor Mundt had already taken up the question of “[d]as lebhafe Interesse, welches wir den leidenden Personen in der Tragödie widmen.”\(^{20}\) For Mundt, this pleasure could not simply be attributed to a comfortable distance between observer and protagonist. Instead, he maintained that “die tragische Person zugleich in unserm eigenen Interesse mitleidet, indem sie für uns menschliche Probleme löst, die auch unsere eigene Existenz gefahrdrohend ergreifen können” (359). Tragedy offered a testing ground on which the tragic hero showed spectators how to negotiate potential existential threats. The spectator of a tragedy did not take egotistical pleasure at watching an act of sacrifice by another, but instead was forced by this act of sacrifice to broaden his or her horizon. “Das Mitleid,” Mundt claimed, “welches ihn [der Zuschauer der Tragödie] bei dem in der Tragödie vorgestellten Unglück erfüllt, muß aber eben durch diese dramatische Wirkung seinen sonst gewohnten engen und einseitigen Kreis verlassen und sich zu einem allgemeinen menschlichen Mitleid, zu jener universalen Menschheitstrauer veredeln und erheben [. . .]” (360-361).

*Mitleid*, for Mundt, ultimately had the same purpose *Einfühlung* had for Robert Vischer—namely, to train observers in new ways of feeling and interacting with both the natural and social world. The tragic observer who felt *Mitleid* for a tragic hero experienced the same “geistige Enttäusserung und Verflüchtigung des Selbstgefühls” Robert Vischer would later describe as the result of *Einfühlung*.\(^{21}\) By shedding this

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\(^{19}\) Freytag, *Die Technik des Dramas*, 77. Further quotes are in parentheses.

\(^{20}\) Mundt, *Dramaturgie*, 358. Further quotes are in parentheses.

\(^{21}\) Vischer, *Das optische Formgefühl*, 29. Further quotes are in parentheses.
Selbstgefühl, the observer became open to what both Mundt and Vischer conceived of as a universal sense of humanity. As Mundt argued, watching the sufferings of another taught the tragic observer to feel a universale Menschheitsstraue.

Robert Vischer would, in fact, use a language of universal humanity similar to that of Mundt. Vischer described a scenario in which an observer experienced “Mitgefühl [. . .] mit einem verwundeten Soldaten” (29). This Mitgefühl elevated the “mitleidende[s] Ich” to an “allgemeine[s] Menschen-Ich” (29). “Die Barbarei der Feindseligkeit, die Ohnmacht des Einzelnen,” Vischer wrote, “all’ dies resignirte Zusammenbrechen, Hinnasseln unter dem Ueberschwall des Lebensgetümmels, wie es auf diesem Antlitze geschrieben steht, es wird wiederholt und die ganze Menschheit muss es gleichsam wiederholen und miterleben” (29-30). The logic common to both Vischer and Mundt was that acts such as Mitleid and Einfühlung made suffering accessible by universalizing it. As was especially clear in Vischer’s example, it was not simply the case that a particular soldier suffered, but that this soldier suffered in a way any observer could imagine.

The act of imagining suffering as common to humanity had a particular implication for the tragic observer. Tragedy offered a safe setting in which the tragic observer could experiment with dangerous situations. As Vischer’s example suggested, an observer could feel the pain of a soldier without actually having to suffer a wound in battle. This pain became universal; it was the property of all and at the same time of none. However, as Mundt claimed, tragedy did not derive its power by ultimately relying on the secure distance between observer and hero. Instead, the scenarios of suffering that played out in a tragedy represented real possibilities. Tragedy universalized pain for an observer, but nonetheless remained tied to particular observers. An observer relied on tragedy to explore specific kinds of pain that would emerge in concrete situations he or she might one day face.

Mundt limited his reference to these situations to the general notion of existential threat. Rudolf Gottschall, however, pointed to a specific situation in which such existential threats arose. Like Mundt and Robert Vischer, Gottschall argued that tragedy elevated the particular to the universal. “[D]as Einzelschicksal,” he wrote in the 1870 edition of his Poetik: Die Dichtkunst und ihre Technik, “das uns vorgeführt wird, erweitert sich zum Schicksal der Welt; die Kraft des ringenden Helden wird zur Kraft des Menschen überhaupt, die wir im eigenen Busen fühlen [. . .].”22 For Gottschall, observers of tragedy not only experienced the pain of the tragic hero by proxy, but also felt the Kraft this hero displayed in his or her struggle. The tragic hero was caught up in “einer sittlichen Kollision” between “auf der einen Seite die heilige und nothwendige Autorität des Bestehenden, auf der andern die begeisternde Idee des Fortschrittes” (223). The task of tragedy was to train observers to take sides with the hero in this conflict.

Ultimately, then, Mitleid had a social purpose in tragedy. The tragedy generated Mitleid by convincing its audience the struggle of its tragic hero against the existing social order was worthy of a common humanity. Overwhelmed by the spectacle on stage, the observer of tragedy felt willing to participate in the struggle he or she observed. Yet, precisely the sense of shared humanity driving this allegiance between tragic observer

22 Gottschall, Poetik, 226. Further quotes are in parentheses.
and tragic hero could never be truly universal. This sense of shared humanity emerged, as a critic such as Gottschall made particularly clear, only in the cauldron of conflict. In order to direct Mitleid towards the tragic hero, the tragedy had to direct an equal degree of hostility against this hero’s enemies. These enemies represented the boundaries at which humanity, as a universal concept regulating Mitleid, ceased to exist.

Einfühlung, as I have suggested, followed a similar logic—a logic particularly evident in Robert Vischer’s example of the observer who universalized the pain of a soldier. The soldier, often at the forefront of social conflict, had to have an enemy in order to make sense as a social identity. By choosing this example, Vischer revealed the affinity of Einfühlung to Mitleid. The self who cultivated both ways of relating to an other followed not only a logic of inclusion but also of exclusion. Feeling with or for another also meant feeling against the enemies of this other. To a large extent, these complementary logics of inclusion and exclusion were already formulated in the understanding critics such as Gottschall had of tragedy. Gottschall did not hesitate to refer to the “ewiger Kampf zwischen dem Bestehenden und einem Prinzip des Fortschrittes, das sich oft in gewaltsamer Weise Bahn bricht” (223). Struggle was in tragedy’s genes. The harmony of Mitleid was only possible because preceded by the disharmony of Leid.

Disharmony, however, is more difficult to locate if the relation between self and other conceptualized in a term such as Mitleid is restricted to nature rather than society—as was the case for Friedrich Theodor Vischer and Rudolf Virchow. What role could conflict play for an observer of nature, particularly for an observer who saw nature as an aesthetic object? Virchow, however, pointed to the potential disharmony faced by observers of nature. His nature, unlike that of Friedrich Theodor Vischer, could become a hostile force. As a doctor narrating the history of typhus, Virchow recognized that nature was not only beautiful, but also a formidable opponent—an opponent capable of bringing about disease and death. In fact, in his 1868 typhus lecture, Virchow had noted that the history of medicine—a history in which disease and death played a prominent role—was nothing more than a record of “die schmerzlichen Leiden der Menschheit.”

If the history of medicine truly was, as Virchow claimed, a history of human suffering, then the doctor stood in close proximity to the observer of tragedy. The doctor, like the observer of tragedy, was confronted by an intense human suffering caused by nature, society, or both. Virchow had seen precisely such suffering when he traveled to Upper Silesia in 1848 to examine an outbreak of typhus in the region. In the report he wrote on this visit—a report that represented a key document in the origin of public health in Germany—he staged a tragedy of typhus. In his report, Virchow put on display a particularly illuminating case of Mitleid in action. He performed precisely the kind of observation that became the conceptual focus of critics writing on aesthetics and tragedy around the middle of the nineteenth century—a focus reflected in terms such as Mitleid, Einfühlung, and the related phenomenon of personification.

Virchow had contributed to these theoretical reflections, as his discussions of personification in his 1868 typhus lecture and in his 1862 fever lecture indicate. His

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interest in personification in these lectures, however, does not simply place him on the margins of a broader investigation taking place in largely humanistic fields. Rather, the techniques of observation at work in a phenomenon such as personification informed Virchow’s writings on disease in a deeper way—a way that ultimately points to a fruitful exchange between medicine and drama. In the next section, I will examine this exchange in Virchow’s 1848 typhus report.

The Tragedy of Typhus

The spectator at a tragedy around 1850, as I suggested in the previous section, would be expected to feel Mitteid with the sufferings of the tragic hero. In order to produce this sympathy, the tragedy had to stage these sufferings at a high degree of intensity. A simple toothache was not enough for tragedy. The sufferings of a tragic protagonist had to emerge in a life and death struggle. A spectator trained by tragedy, then, would certainly find in Rudolf Virchow’s 1848 typhus report ample material to exercise his or her capacity for Mitteid. In his report, Virchow staged the sufferings of the population in Upper Silesia in graphic detail. He described homes overcrowded with people and animals breathing in each other’s “Ausdünstungen.” These homes, he reported, were often filled with “schmelzende Schneewasser,” and were so damp that “zahlreiche Pilze“ grew on the walls (163). The bodies of the population in Upper Silesia were in equally bad shape. Virchow wrote that “der Oberschlesier” rarely bathed, and as a result, “Ungeziefer aller Art, insbesondere Läuse, sind fast stehende Gäste auf seinem Körper” (151). In addition to these unsanitary bodies, Virchow showed the grim effects of typhus on sick bodies in both the Krankengeschichten and the Sektionsberichte he included in his report. The scenes Virchow encountered in Upper Silesia were, as he declared, “grauenhaft jammervoll” (167).

Descriptions of suffering alone, however, did not make Virchow’s report tragic. In fact, contemporaries of Virchow emphasized that only a particular kind of suffering was worthy of tragedy. In his 1852 Das moderne Drama—a dramaturgy written in the revolutionary spirit also manifest in Virchow’s typhus report—Hermann Hettner wrote:


24 Virchow, “Mittheilungen,” 163. Further quotes are in parentheses.
25 For the Krankengeschichten, see Virchow, “Mittheilungen,” 202-212. For the Sektionsberichte, see Virchow, “Mittheilungen,” 214-223.
26 Hettner, Das moderne Drama, 93-94.
A tragedy, for Hettner, had to stage a protagonist who refused to suffer passively. This protagonist, whether collective or individual, fought the cause of its Elend—a cause that arose in the existing social order. Anything less than this willingness to fight against suffering was worthy only of prose.

Hettner thus outlined a poetics of suffering that ultimately depended on the orientation of the tragic hero towards society. Tragedy only arose after this hero had taken a stance towards his or her suffering. The tragic hero was, for Hettner, also an observer—an observer who played a particularly important role in constituting the tragedy as an aesthetic form. Only when this hero observed his or her (or its, in the case of collective protagonists such as Hauptmann’s weavers or Virchow’s population in Upper Silesia) suffering and acted against the cause of this suffering did tragedy come into existence. Tragedy did not simply reflect on an already existing state of affairs in society, but emerged in the effect of a social actor. The first tragic observer—the observer who, as it were, gave birth to tragedy—was not the spectator in the audience, but the social actor who felt Mitleid for his or her (or its) own suffering and hostility towards the cause of this suffering.

Hettner’s account of tragedy is particularly interesting because it outlined a program Virchow had already aimed to follow in his typhus report. The population visited by Virchow in Upper Silesia had yet to become a tragic hero capable of reacting to its suffering, but instead suffered passively. The task Virchow faced in his typhus report, then, was precisely the task described by Hettner: to transform passive suffering into active suffering. Virchow did not see tragedy simply in the fact that the population in Upper Silesia suffered. Instead, he considered tragic what this suffering revealed about the relation of the population in Upper Silesia to the Prussian state governing this population. The tragedy of typhus, for Virchow, was precisely that typhus had not yet become tragic in the sense later formulated by Hettner. The population in Upper Silesia had not yet taken, like Hettner’s tragic hero, a partisan stance towards the cause of its sufferings—that is, towards the Prussian state.

In his report, Virchow would do everything in his power to change this state of affairs. He recognized the tragedy lying dormant in Upper Silesia, and dedicated his report to setting the stage on which this tragedy would emerge. Since the population in Upper Silesia was not prepared to assume the role of tragic hero, Virchow would direct his energies towards the other crucial player in tragedy—namely, towards the tragic observer. Virchow transformed his readers into spectators observing a tragedy unfold in Upper Silesia. He cultivated in these readers not only extreme Mitleid for the population suffering in Upper Silesia, but also extreme hostility against the Prussian administration that had caused these sufferings. In the eyes of readers trained to be tragic observers, the population in Upper Silesia transformed into a tragic hero—a role this population could not assume on its own.

In order to convince his readers that the population in Upper Silesia was a tragic hero, Virchow had to identify the conflict in which this hero should be engaged. This conflict was largely with the Prussian state. For Virchow, the Prussian state—along with the church and the aristocracy—had for centuries deprived the population in Upper Silesia of the autonomy ultimately necessary for both physical and mental well-being. On
the Prussian administration’s watch, Virchow maintained, the population in Upper Silesia had been poorly educated, forced to serve the economic interests of others, and promised the false comforts of religion rather than the true healing power of medicine.\(^27\) It was thus, for Virchow, no surprise that while other hungering populations had risen “mit gewaffneter und ungewaffneter Hand” against their governments, the population in Upper Silesia “verhungerte schweigend.”\(^28\) For Virchow, this population “ahnte nicht, dass die geistige und materielle Verarmung, in welche man es hatte versinken lassen, zum grossen Theil die Ursachen des Hungers und der Krankheit waren [. . .]” (307).

Because largely responsible for this state of *geistige und materielle Verarmung*, the Prussian administration—according to Virchow’s reasoning—also deserved blame for the outbreak of typhus in Upper Silesia. The population in Upper Silesia may have created the living conditions in which typhus arose, but the Prussian government had created this population. The disease Virchow witnessed on the ground in Upper Silesia ultimately had its cause in the social disorder over which the Prussian government presided. Virchow thus judged the Prussian state in particularly harsh terms. He wrote, in reference to the typhus epidemic: “Nie hatte man während des 33jährigen Friedens in Deutschland etwas auch nur entfernt Aehnliches erlebt; niemand hätte dergleichen in einem Staate, der so grosses Gewicht auf die Vortrefflichkeit seiner Einrichtungen legte, wie Preussen, für möglich gehalten” (303). The sufferings of the population in Upper Silesia testified to the shameful ineffectiveness of a government that failed to protect this population from disease.

Though Virchow blamed the Prussian state for the outbreak of typhus in Upper Silesia, representatives of the state remained largely absent from his report. The *Beamten* of the Prussian state might ultimately be responsible for the suffering of the population in Upper Silesia, but these *Beamten* remained in the background. The typhus epidemic itself, however, took center stage. Virchow not only described in graphic detail the effects of typhus on the population in Upper Silesia, but also emphasized that typhus could lay claim to any outsider who joined this population. “[J]eder, der von ausserhalb hinzukommt, jeder Fremde, der unter die endemischen Bedingungen [in Upper Silesia] gebracht wird,” he claimed, “geräth in die Lage zu erkranken” (255). Outsiders, it turned out, were not exempt from typhus, and quickly fell into a condition similar to that of the population they were observing. These outsiders could come from any walk of life. Typhus might arise largely in poor areas, but, as Virchow cautioned, nonetheless took the life of any outsider who came to those areas (229-231).

Virchow thus identified a struggle that played out on two levels. This struggle was between the population in Upper Silesia and the Prussian state, on the one hand, and between the population in Upper Silesia and the typhus epidemic on the ground, on the other. Though not identical, these two closely related struggles had a particular impact on the way in which Virchow staged the action of his report. Since the abstract failures of the Prussian administration had caused typhus in Upper Silesia, typhus—by extension—

\(^{27}\) For these and other accusations, see especially the final section of Virchow’s report, titled “Die Sorge für die Zukunft,” 307-322.

\(^{28}\) Virchow, “Mittheilungen,” 306. Further quotes are in parentheses.
came to be the face of this administration on the ground in the region. Typhus was, according to Virchow’s logic, a public servant gone mad. The bad Beamten who overlooked the poverty of the population in Upper Silesia were followed, it turned out, by an even worse kind of public servant—a public servant who actively pursued and killed large numbers of this population.

The concrete role typhus played in the action of Virchow’s report is, I am maintaining, ultimately what made this report a tragedy. In large parts of his report, Virchow recorded his firsthand experience with typhus. The life-and-death stakes of this experience made visible the existential struggle between the Prussian state and the population in Upper Silesia. The population in Upper Silesia paid with its life for mismanagement by the Prussian state—a price Virchow recorded in dramatic detail by describing the poor living conditions and suffering bodies he encountered on his visit. Moreover, outsiders—potentially including Virchow himself—might pay with their lives for getting too close to the scenes of suffering he staged. In this sense, typhus ultimately gave Virchow the means of dramatizing the conflict in Upper Silesia, and of shaping his readers into tragic observers who would see this conflict.

Most readers of Virchow’s report were, of course, at a safe distance from typhus and the conflict it made visible. Though not in the same physical position, Virchow’s readers were nonetheless—as outsiders—in a position structurally analogous to observers on the ground in Upper Silesia. As Hauptmann would do over forty years later on stage, Virchow highlighted this structural similarity between actual observers and observers in the world of his report. Like Hauptmann, Virchow trained his readers to see the suffering in Upper Silesia by staging scenes of observation. Hauptmann would accomplish this task by showing his audience bad observers (such as the traveler and Beamter) who failed to see the suffering of the weavers. Virchow, however, showed his readers good observers who were willing to sacrifice health and life for the population they were observing. These observers took the logic of Mitleid to its extreme. They not only—like observers in a tragedy—imagined themselves to be in the place of another, but also quite literally came to occupy this place along with all of its dangers.

The way in which Virchow placed good observers on stage was nowhere more evident than in his description of the relation between doctors and the sick population in Upper Silesia. In his report, Virchow frequently referred to cases of doctors who had caught typhus in Upper Silesia, and included in his Sektionsberichte an autopsy he had conducted on a doctor who had died of the disease. Moreover, he reported a personal feeling of “Schauder oder Ekel” at “das Gefühl, angesteckt zu sein” while in close contact with typhus patients—a feeling that had almost been confirmed by “mehrere Tage lebhafte gastrische Beschwerden, Kopfweh, etc.” (258). These allusions to sick or dead doctors and to his own fear of death emphasized the risks Virchow and other doctors faced in Upper Silesia. These doctors could easily become one of the sick or dead they was observing among the population in the region.

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29 For descriptions of doctors who became sick or died in Upper Silesia, see Virchow, “Mittheilungen,” 181-182, 199, 201-202. For the autopsy of a doctor, see Virchow, “Mittheilungen,” 218.
Doctors, however, were not the only outsiders observing events in Upper Silesia. Representatives of other aid groups—including the church and *Hilfsorganisationen* similar to those represented by Schneer—also visited the region. Like the doctors in Upper Silesia, these other outsiders faced a common danger of contracting typhus. “Nun ist es eine That­sache,” Virchow wrote, “dass insbesondere viel Aerzte, Geistliche und bar­mer­zige Brüder in der Ausübung ihrer Berufspflicht in Oberschlesien erkrankt sind” (255). To highlight the common danger faced by all of these groups, Virchow relied on both statistical and narrative evidence. He listed the doctors who had died of typhus, and also included in this list a delegate of a *Hilfsorganisation* (255-256). Moreover, he narrated “Beispiele” of doctors and priests who had died at their posts in Upper Silesia (256-257). Both lists and narratives were meant—like the “Lorbeer­­en des Kriegers” (205)—to commemorate the great sacrifices of “Gesundheit” and “Leben” made by doctors, priests, and members of *Hilfsorganisationen* in the battle against typhus (255).

As this grouping of doctors (including Virchow himself), priests, and members of *Hilfsorganisationen* suggests, the task of fighting typhus in Upper Silesia created strange bedfellows. Virchow understandably shared many aims with the *Hilfsorganisationen* bringing aid to the native population in Upper Silesia—even if he saw “ihre Erfolge” as “nur vorübergehende” directed at individuals rather than the epidemic as a whole (294). However, the Catholic Church was, for Virchow, an enemy equal to if not worse than the Prussian state. Along with “Bureaunkratie und Aristokratie,” Virchow included “Hierarchie” (a term he used for the church) as the “Kram” the population in Upper Silesia had to throw “aus seinen Tempeln” (305). The church had let this population sink into the state of “Unwis­sensein, Aberglauben und Faulheit” (155) Virchow pinpointed as setting the stage for typhus to emerge. Moreover, the church posed a direct challenge to the authority of doctors during the typhus outbreak. “Wurde jemand krank,” claimed Virchow in frustration, “so suchte er nicht den Arzt, sondern den Priester” (153-154). The priest, unlike the doctor, could offer “himmlische Freude” in place of “einem so elenden Leben” on earth (153).

Given his criticism of the church, it is all the more striking that Virchow praised in the same breath the sacrifices of priests and doctors in the struggle against typhus. This common praise points to a strange allegiance underlying the surface conflicts among the social groups and institutions Virchow targeted in his report. Representatives of the church, like those of the aristocracy (the single member of a *Hilfsorganisation* Virchow listed with the doctors who had died of typhus had the aristocratic name Prinz Biron von Curland), were just as vulnerable on the ground as members of the medical profession or the population in Silesia to a disease that drew no distinctions as to whose lives it claimed. The partisan lines between these social classes and institutions were thus redrawn in the immediate presence of typhus.

In his report, then, Virchow invited his readers to recognize a common humanity in the way outsiders in Upper Silesia were willing to take *Mitleid* to the extreme of self-sacrifice. This common humanity took shape according to a logic not unlike that described both by academics writing on *Einfühlung* and critics of drama writing on *Mitleid* only decades after Virchow wrote his report. As was the case for Robert Vischer, Rudolf Gottschall, Theodor Mundt, and others, the common humanity Virchow saw in
his sympathetic observers of society relied on a partisan logic. Only when faced with the immediate existential threat posed by typhus did the diverse group of observers in Upper Silesia become worthy of a common humanity. Virchow thus not only showed how this diverse group of observers put Mitleid into action, but also asked his readers to cultivate a sense of universal humanity on which such Mitleid was preconditioned.

The scenes of observation Virchow staged in his report became, in this way, a site for training readers to become good observers of suffering—observers whose sense of Mitleid depended precisely on a common sense of struggle. This common sense of struggle took its most dramatic form in the immediate threat typhus represented to any observer on the ground in Upper Silesia. However, as I have claimed, Virchow equated typhus with the social disorder that reigned under the Prussian administration. Typhus, in his report, simply gave concrete shape to this disorder. By cultivating readers who—along with the observers he staged in his report—saw typhus as a common enemy, Virchow thus also indirectly cultivated a broad coalition against the Prussian administration that had caused the typhus epidemic in Upper Silesia.

Paradoxically, this coalition against typhus included members Virchow had claimed were responsible for typhus. Members of an institution such as the church—an institution Virchow saw as sharing responsibility with the state for the condition of the population in Upper Silesia—could at least temporarily join a group of observers united in their struggle against typhus. Yet, this temporary shift in allegiances testifies precisely to the power Virchow gained by staging typhus in Upper Silesia rather than by simply stating the Prussian administration was the cause of this suffering. Typhus had such dramatic force that it could temporarily transform even the most staunch enemies into allies.

Ultimately, Virchow directed this dramatic force towards a more permanent end—namely, towards reforming the government that had given rise to the poor living conditions in Upper Silesia. In a concluding section that followed his up-close examination of typhus on the ground, Virchow returned to the existing partisan divisions of his historical moment. He no longer staged scenes in which an unexpectedly diverse group of observers became allies against typhus. Instead, he directed the reader trained in this crucible of immediate existential threat towards a less immediate but equally dangerous conflict. When Virchow called for democracy towards the end of his report, the church—like the bureaucracy—again became enemies of the population in Upper Silesia.

By making this call for reform at the end of his report, however, Virchow presupposed the existence of a reader who had been shaped by the tragedy he had already staged. Readers of Virchow’s report had already been confronted with graphic scenes of suffering on the ground in Upper Silesia, and had been shown model observers who felt Mitleid for this suffering. Moreover, these readers had been asked to cultivate a sense of common humanity across traditional partisan lines. It was precisely this sense of universal humanity to which Virchow appealed when he wrote, towards the end of his report:

Lehre man die grossen Gesetze der Natur, zeige man ihre ewige Gültigkeit in der Vergangenheit und Gegenwart an der Entwicklungsgeschichte der Weltkörper
und der belebten Wesen, insonderheit der Menschheit, und man wird damit jene praktische und obwohl materielle, so doch wahrhaft erhebende und sittlich bildende Anschauung erzeugen, welche allein geeignet ist, die Gesellschaft in ihren privaten, bürgerlichen und staatlichen Beziehungen zu den festen und vernünftigen Principien zu leiten, welche das Wohl Aller durch die Begründung des Wohles jeder Einzelnen möglich machen. (314-315)

Virchow based his appeal for democracy in Upper Silesia on a faith in what he called “die allgemeinen Grundsätze [. . .] der Humanität” (315). Put into practice in government, these universal principles of humanity would establish the basis for health and prosperity in Upper Silesia.

The appeal to a universal humanity on which Virchow based his call for democracy was not, I am claiming, exclusive to his medicine—or to the liberal politics that were, as many commentators have noted, inseparable from this medicine.  

By reading Virchow’s report as a tragedy, my aim has been to point towards the intersection between medicine, aesthetics, and drama at which notions such as universal humanity—and related notions such as Mitleid— took shape. The universal sense of humanity Virchow explicitly formulated in his call for democracy was already at work in the way he staged not only the suffering in Upper Silesia, but also the visits by outsiders to this population. The scenes he staged in his report made sense only to a particular kind of observer—an observer trained to recognize the humanity of those suffering from typhus, and to direct an equal degree of hostility towards the Prussian state as the cause of this suffering. Precisely this observer would take shape in the aesthetics of Friedrich Theodor Vischer and Robert Vischer, as well as in the theories of tragedy formulated by critics of drama around 1850.

In this sense, Virchow shared significant territory with the drama and aesthetics of his time. In fact Virchow’s report points to a broad way in which aesthetics, drama, and science switched traditional roles. Virchow relied on the drama of the typhus epidemic in Upper Silesia to make visible to his readers an otherwise largely abstract conflict between the population in the region and the Prussian state. To establish medicine as a significant force in society, Virchow ultimately had to stage suffering in the way critics later noted was at work in tragedy. In turn, Virchow’s stagecraft suggests that tragedy never exclusively belonged in the theater. Critics such as Gottschall and Hettner were not simply writing about representations of society on stage, or about the ways spectators in the theater reacted to such representations. Rather, these critics were reflecting on a form of sympathetic observation already expected—as Virchow’s report indicates—of readers in society at large. Even outside the theater, observers of society were being trained in the art of Mitleid.

The sympathetic observer who emerged around 1850 thus did not originate exclusively in science, drama, or aesthetics. The provenance of this observer depends, instead, on which point of view a scholar in the present takes towards these fields. On the one hand, the observer Virchow cultivated in his report would later be explicitly

conceptualized by critics of tragedy and academics writing on aesthetics. From this perspective, such critics and academics initiated an alternate line of reception for Virchow’s public health outside the history of science. On the other hand, the observer formulated in conceptual terms by critics of tragedy and academics writing on aesthetics already existed in Virchow’s report. From this perspective, the history of science contains a history of tragedy and aesthetics. In the first case, medicine belongs to a genealogy that spans tragedy and aesthetics. In the second case, tragedy and aesthetics belong to a genealogy that spans medicine and society. The sympathetic observer is only at home in precisely these competing genealogies.
Part II
Embracing Pain (1900-1945)

Chapter 3
Solidarity in Suffering: Helmut Plessner and F. J. J. Buytendijk on the Senses and Society

Around 1850, as became clear in the previous chapter, a doctor such as Rudolf Virchow could write a report in which he called for social reforms to alleviate the suffering caused by typhus in Upper Silesia. Virchow’s call to alleviate pain could, in turn, draw a large part of its force from graphic representations of the suffering endured by the population in Upper Silesia at the hands of typhus—suffering Virchow had witnessed himself on his visit to the region. Upper Silesia offered, in Virchow’s eyes, an ideal site of intervention for modern medicine. Only modern medicine, coupled with modern democracy, could fight an enemy as formidable as the typhus epidemic raging in the region, and the Prussian administration whose negligence had caused this epidemic. Precisely because untouched by modern medicine, Upper Silesia presented a test case for its efficacy in fighting suffering.

Around 1940, the physiologist F. J. J. Buytendijk wrote of a drastically different way to imagine the regions untouched by modern medicine. For Virchow, such regions confronted visitors with a nightmare of suffering. Buytendijk, however, saw a chance to escape the nightmare of a modern medicine that had, in itself, become oppressive. In Über den Schmerz—a book first published in Dutch in 1943—he wrote: “Wer jemals in eine Gegend kam, die so gut wie ganz von ärztlicher Hilfe abgeschnitten ist, weiß, daß Ergebung ins Schicksal, Mut und Vertrauen innerlich froher machen als die Möglichkeit, zu jeder Stunde des Tages den Arzt zu rufen.”¹ A visitor to the regions untouched by modern medicine would not encounter inhabitants in the grip of death and disease, but rather inhabitants whose equanimity starkly contrasted with the “neue Ängste” created by modern medicine—anxieties created “wenn der Apparat, zu dem die Medizin geworden ist, nicht reibungslos funktioniert” (14).

The contrast between these two accounts of visits to regions untouched by modern medicine around 1850 and around 1940 offers a snapshot of the shifts examined in the second part of this dissertation. As Buytendijk’s idyll of a population happily embracing its premodern living conditions suggests, modern medicine was not purely friend of humanity and enemy of human suffering. A population lacking access to modern medicine could, for Buytendijk, display great composure in the face of suffering. The promise of eliminating suffering, in fact, only created new anxieties when this promise could not be carried out. Between Virchow’s report and Buytendijk’s book, suffering had become more than a social ill to be eliminated at all costs. Suffering had, in fact, become the indicator of a strange social harmony to be located only in the ways of life Buytendijk

¹ Buytendijk, Über den Schmerz, 14. Further quotes are in parentheses.
saw in the premodern regions to which he transported his readers.

This chapter and the next two chapters will examine the shifting stances towards suffering registered in an exemplary way by the gap between Virchow and Buytendijk. My focus will be on the ways in which suffering transformed from a target for the social engineering underlying Virchow’s public health into a crucial element of social organization and sensory experience—a transformation that took place between roughly 1920 and 1940 in fields ranging from philosophy and medicine to literature. The current chapter is largely dedicated to a particular kind of philosophy, and to the sciences with which this philosophy was in conversation. The protagonists of this chapter are Buytendijk as well as a collaborator and translator of his: the biologist and philosopher Helmuth Plessner.² Taken together, I claim, the writings Buytendijk and Plessner produced in collaboration and on their own between 1925 and 1948 constituted an at times overt and at times covert philosophy of pain, and a closely related philosophy of organization.

My aim, in this chapter, is to unpack these philosophies of pain and organization. To accomplish this aim, I will address the role Plessner and Buytendijk assigned to suffering as the basis for solidarity—and the corresponding way in which they embraced a notion of the human being as, by nature, deficient. The human being, for Plessner and Buytendijk, lacked a secure way of sensing and acting in its surroundings, and thus had to compensate for this natural deficiency by building institutions. My argument is that, by relating the formation of institutions and human deficiency in this way, Plessner and Buytendijk inverted the key assumptions at work in the nineteenth-century world examined in the first part of this dissertation. Institutions might—as was the case for the public health espoused by Virchow—aim to engineer a perfect human being, but nonetheless owed their existence to human imperfection. This imperfection, most visible for Plessner and Buytendijk in human suffering, shaped the bonds that held together institutions.

Plessner and Buytendijk did not refer to particular institutions or—for that matter—to particular human beings. However, the philosophies of pain and of organization they developed over the course of twenty years speak not only to institutions such as public health, theater, and the Hilfsverein examined in the first part of this dissertation, but also to the alternatives to these institutions I will examine in the fourth and fifth chapters. In this sense, my engagement with Plessner and Buytendijk represents a philosophical interlude in a dissertation otherwise largely oriented towards concrete ways of writing about pain. This philosophical interlude will be the occasion to examine the anthropological parameters underlying not only the forms of empathetic and sympathetic observation at work in the first part, but also the new forms of observing pain at work in the second part. At stake in both of these parts are the shifting ways in which—between the middle of the nineteenth century and the middle of the twentieth century—writings on the pain of others interacted with the senses of readers, and in turn

² For background on the personal and professional relationship between Plessner and Buytendijk, see Fischer, Philosophische Anthropologie; and Dietze, Nachgeholtes Leben.
steered readers to form social bonds.  

The contrast between the anthropological parameters underlying these shifting ways of writing about pain began to crystallize in a critique of empathy carried out by Plessner and Buytendijk in a 1925 essay titled “Die Deutung des mimischen Ausdrucks.” Before examining the writings in which Plessner and Buytendijk worked out a full-fledged philosophy of pain—writings that included *Die Stufen des Organischen und der Mensch, Macht und menschliche Natur, Lachen und Weinen: Eine Untersuchung der Grenzen menschlichen Verhaltens*, and *Über den Schmerz*—I will first turn to “Die Deutung des mimischen Ausdrucks.” This essay indicates the extent to which the philosophy of pain formulated by Plessner and Buytendijk had its origins in a rejection of the empathetic observer who, to this point, has occupied a central position in my dissertation.

**An Alternative to Empathy**

Empathy played, as I argued in the previous chapter, a significant role in the aesthetics and dramaturgy of the nineteenth century. Philosophers such as Friedrich Theodor Vischer and Robert Vischer, as well as a range of dramaturgists writing on tragedy, saw notions such as empathy and sympathy as crucial to explaining how an observer felt his or her way not only into nature, but also felt with others in a community. However, empathy did not remain exclusive to aesthetics and dramaturgy. The cognitive stakes of empathy—that is, of an emotion that allowed the self to experience the sensory world of others—attracted academics in a range of fields. By the twentieth century, empathy had migrated into fields including the psychoanalysis of Sigmund Freud and Sándor Ferenczi and the psychology of Theodor Lipps. As empathy spread into such fields, it also became a target of critique. This section will focus on a particular instance of such critique: a 1925 essay in which Plessner and Buytendijk aimed to replace empathy with an alternative theory of how the self came to know the emotions of others.

My interest, in this section, is in the way Plessner and Buytendijk reshaped over the course of their 1925 essay not only the act of observing the emotions of others, but also the observer who performed this act. The observer cultivated by Plessner and Buytendijk—in contrast to the observer of previous chapters—no longer had to enter the

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3 In this sense, I am following Joachim Fischer’s call for an “Anthropologie der Sinne” that articulates the “vor-soziologischen Prämissen über die Sinne” at stake in the way societies take shape. See Fischer, “Soziologie der Sinne,” 13. See also Korte, “Anthropologie und Soziologie der Sinne.”


5 Interesting in connection with the alternative to empathy formulated by Plessner and Buytendijk is Viktor von Weizsäcker’s notion of a *transjektives Verstehen*. See Weizsäcker, “Der Arzt und der Kranke,” 80-81. Weizsäcker developed this notion of *transjektives Verstehen* under the rubric of what he called *medizinische Anthropologie* in the 1920s.
skin of others via Einfühlung, but rather came to know the thoughts and feelings of others as purely external behavior. This shift from inside to outside was based on an understanding of the human as an embodied being, an understanding on which Plessner would further elaborate only two years later in his 1928 Die Stufen des Organischen und der Mensch. Before turning to Plessner’s understanding of the human being in the next section, however, I will devote attention to the way this understanding began as a critique of empathy in Plessner and Buytendijk’s 1925 essay.

Plessner and Buytendijk began this essay, titled “Die Deutung des mimischen Ausdrucks,” by reporting on an experiment that could have been inspired by Friedrich Theodor Vischer. In this experiment inanimate objects in nature came to life for an observer. The observer introduced by Plessner and Buytendijk was a turtle that tried to eat inorganic objects in its surroundings after being given food with a shape similar to those objects. For example, the turtle tried to eat matches after being fed a worm, and moss after being fed a spider. This response led Plessner and Buytendijk to claim: “Die toten Gegenständen machen also einen Bedeutungswandel durch” (71). Dead objects took on a life of their own for the turtle much in the way they did for the observer who, in the accounts given by Rudolf Virchow and Friedrich Theodor Vischer, personified disease and nature.

Precisely the question of how self came to know other underlying Virchow and Vischer’s understandings of personification was also at stake in the way the turtle saw matches as worms and moss as spiders. This phenomenon demonstrated, for Plessner and Buytendijk, that the turtle experienced a qualitative shift in the way it related to its environment. The turtle had not simply been conditioned to see matches and moss as food. These objects had only taken on the quality of food after the turtle had been fed objects with similar “Gestaltcharaktere” (73)—that is, the worms and spiders. This capacity to perceive similar shapes testified to a complex relation between the turtle and objects in its environment. These objects did not simply act as stimuli that predetermined the actions of the turtle, but took on shifting meanings as part of the turtle’s environment.

The interaction between the turtle and its environment was, of course, not the same as projection. The turtle did not imagine itself to be any of the objects on which it conferred temporary life, as would have been the case for Rudolf Virchow or Friedrich Theodor Vischer. However, Plessner and Buytendijk used the experiment with the turtle as a point of entry into a phenomenon that was closely related to projection—namely, to what they called both “die Wahrnehmung des mimischen Ausdrucks des anderen Menschen” and “die Deutung des menschlichen Ausdrucks” (76). Around the time Plessner and Buytendijk published their essay, terms such as menschlicher Ausdruck and mimischer Ausdruck referred to the physical expression of emotion in both human and

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6 Plessner and Buytendijk, “Deutung des mimischen Ausdrucks,” 71. Further quotes are in parentheses.

7 See the section titled “Personifying Disease and Nature” in chapter 2.
animal. Building on a growing body of literature that studied this phenomenon, Plessner and Buytendijk set out to examine how one individual came to know the thoughts and emotions of another. Underlying these studies in human and animal expression was another form of engagement with the question—also at stake in theories of projection and Einfühlung—of how the self left its own skin and entered the skin of others.

Plessner and Buytendijk, however, answered this question in a radically different way than philosophers such as Friedrich Theodor Vischer and Robert Vischer. Following Max Scheler, who had dedicated an appendix of his 1913 book Zur Phänomenologie der Sympathiegefühle to what he called the problem of the “fremdes Ich,” Plessner and Buytendijk ruled out Einfühlung as an overly narrow description of the process by which self merged with other. Scheler had rightly critiqued, Plessner and Buytendijk maintained, a group of related approaches to the “Lehre von der Wahrnehmung des Fremdeelischen”—including the concept of Einfühlung. “Alle diese Lehren,” Plessner and Buytendijk wrote,


For Scheler, as for Plessner and Buytendijk, existing theories of how self came to know other—theories that included Einfühlung—ultimately had the opposite of their intended effect. These theories did not merge self and other, but instead reinforced the distance between them. In order to “feel into” the emotional states of an other, the self first had to

8 Seminal for this growing body of literature was Charles Darwin’s 1872 book The Expression of Emotion in Man and Animals, which was translated into German during the same year. See the entry on Darwin in the bibliography.
9 For Plessner and Buytendijk’s engagement with the theories of human and animal expression developed by Darwin and others, see “Die Deutung des mimischen Ausdrucks,” 94-109.
10 For Scheler’s critique of Einfühlung, see Scheler, Sympathiegefühle, 118-148. Though beyond the scope of this dissertation, it would also be worth exploring the relations between philosophical anthropology and theories of empathy or sympathy. In addition to Plessner, and Scheler, Arnold Gehlen wrote on sympathy, often in the context of humanitarianism. See Gehlen, Moral und Hypermoral. See also Haffner, Der ‘Humanitarismus.’
11 Plessner and Buytendijk, “Deutung des mimischen Ausdrucks,” 117. Further quotes are in parentheses.
put a mask on this other—a mask that ultimately obscured the “direkte Wahrnehmbarkeit des Psychischen” (118).

By drawing attention to this possibility of direct psychic access, Scheler had—according to Plessner and Buytendijk—pointed to a “verständnistheoretische Lösung” to the problem of how self came to know other (119). Though Plessner and Buytendijk differed from Scheler on the details of this solution, they shared his reservations about Einfühlung. Scheler had made clear that, in order truly to understand the thoughts and feelings of another, the self had to do more than simply project its own inner world onto the screen offered by this other. To go beyond this limited form of projection, Plessner and Buytendijk maintained, the self had to view the other much in the way the turtle of their experiment saw matchsticks and moss—that is, as Gestalten rather than as Bilder or Masken. For Plessner and Buytendijk, both human and animal behavior emerged as a holistic interaction between organism and environment. This interaction had to be taken into account by any theory that aimed to understand the relation between self and other at stake in the expression of emotion.

To emphasize this point, Plessner and Buytendijk asked their readers to imagine, among other examples, a dog searching for an object without the setting in which the dog searched. “Der Hund mit vorgestrecktem am Boden gehaltenen Kopf,” they wrote, “der unruhig hin und her läuft, bald hier, bald dort plötzlich stehenbleibt, schnüffelt, dann wieder zu seinem Ausgangsort zurückkehrt, hastig, stark in Absätzen den Bewegungsfluß akzentuiert, bietet uns das typische Bild des Suchens” (79). If the dog was isolated from its surroundings, however, an observer could not assign a meaning such as Suchen to its movements. The meaningful act of Suchen transformed into a kind of absurdist theater in which the dog was reduced to “bloß ein lebendiger Körper in Bewegung, dessen Verhalten objektiv eine ‘eigentlich unverständliche’ Kette von Ortsveränderungen zeigt” (79). The zigzag movements of the dog only had meaning for an observer because, as Plessner and Buytendijk claimed, these movements were grounded in the “Umweltintentionalität des Leibes” (79). The dog had, as it were, two bodies: a Körper restricted to purely physiological movement, and a Leib constantly interacting with its environment.

This distinction between Leib and Körper, Plessner and Buytendijk maintained, was crucial to understanding why existing theories of the “Wahrnehmung des fremden Ichs” had missed the mark (122). Existing studies of this phenomenon had created a damaging asymmetry between self and other—an asymmetry in which the self believed, Plessner and Buytendijk wrote, “ich bin mir als Leib, der andere ist mir nur als Körper gegenwärtig” (121). The flaw of these existing studies was that they reduced the other to a Körper disconnected from its environment—a Körper like that of the dog torn from its surroundings and zigzagging for no apparent reason. Reducing the other to a Körper in this way had led to psychologizations that asked “[w]as einer hinter seiner Stirn für Gedanken, Vorstellungen, Gefühle und Wünsche hat” (123). The other became nothing more, in such psychologizations, than a “Gefäß der seelischen Erlebnisse” (125) that had to be split open to become accessible to the observing self.

In order to overcome this reductive point of view, the self had to give up trying to crack open the skull of the other, and shift from seeing the other as Körper to seeing the
other as Leib—a shift that meant restoring physical expressions of thought and emotion to the environment in which these expressions emerged. A physical expression of emotion such as “schmaler Lidspalt,” wrote Plessner and Buytendijk, “kann Lauern, Schläfrigkeit, sinnliche Erregung, Nachdenken, Blasiertheit, Geringschätzung ausdrücken [. . .]” (126). The true “Ausdrucksbedeutung” of this physical movement, they claimed, “ergibt sich bei ersten der Situation und ihrem zweckhaft, zielmäßig oder in welchen Intentionen immer begründeten Sinn” (126). Without what Plessner and Buytendijk called “die Einheit der Situation zwischen dem betrachteten Leib und seiner Umgebung” (123), an observer could not gain access to the emotional state of an other.

This relation between Leib and Umgebung, then, offered a new basis for knowing the feelings of others. The self no longer—as had been the case for Einfühlung—had to enter the skin of others, precisely because feeling was not contained in the boundary delimited by the skin. Instead, feeling only became evident in interactions that took place outside this boundary. Plessner and Buytendijk wrote:

Wenn man sagt: ich sehe ihm an, daß er sich schämt, daß er bereut, wütend ist, sich grämt, so heißt das nicht, daß mir das Sein und die Weise seines Scham-, Reue-, Zorn-, Gramerlebens gegeben ist, sondern nur, daß die spielenden Formen seines Verhaltens gegeben sind, die in bezug zur Umgebung eine bestimmte Haltung festlegen. (123)

Emotion was not a private experience (Erleben) that belonged exclusively to an individual psyche, but a behavior (Verhalten) on display as an interaction between individual and environment.

By developing an alternative to empathy, Plessner and Buytendijk not only reconfigured the relation between self and other, but also the relation between self and environment. Emotion became external behavior rather than inner experience only to an observer who first recognized, as Plessner and Buytendijk wrote, “wie man sich selbst gegeben sei” (120). Self, like other, was not simply “ein von innen her erlebtes Außen” (120), but rather took shape at the porous boundaries between inside and outside—that is, between the senses and the environment with which the senses constantly interacted. “So gewiß jeder sich selbst als Körperleib die Weise des Verhaltens zur Umwelt beimißt,” wrote Plessner and Buytendijk, “so gewiß muß er anderen Körpern diese Existenzweise ebenfalls, und zwar nicht bloß in seinen Gedanken, sondern anschauungsfähig zubilligen” (121). Self came to know the emotions of other precisely because the expression of these emotions testified to a relation between human and environment occupied by both.

The gaze from self to other at work in “Die Deutung des mimischen Ausdrucks” followed, in this sense, a dynamic similar to that of empathy. However, the alternative to empathy developed by Plessner and Buytendijk required an observer to broaden his or her horizons. Rather than first look to his or her own inner life as a model for the inner life of an other, the observer cultivated by Plessner and Buytendijk took a greater interest in, as it were, the outer life of self and other—an outer life constituted by the exchange between senses and world. The critique of empathy Plessner and Buytendijk undertook in “Die Deutung des mimischen Ausdrucks” was thus ultimately a critique of the empathetic observer. Plessner and Buytendijk not only refashioned the way self came to know other, but also the way self and other were constituted as embodied beings.
The alternative to empathy Plessner and Buytendijk developed in “Die Deutung des mimischen Ausdrucks,” then, was rooted in a new understanding of the human being. This understanding was no longer based on the assumption that the human being was split into “Physis und Psyche” (120), an assumption dominating—as Plessner and Buytendijk saw it—psychology through the early decades of the twentieth century. Only two years after publishing “Die Deutung des mimischen Ausdrucks,” Plessner offered a formal alternative to this kind of psychology: what he called philosophical anthropology. In his 1928 book *Die Stufen des Organischen und der Mensch*, Plessner developed this philosophical anthropology by fleshing out the relation between human and environment introduced in “Die Deutung des mimischen Ausdrucks.”

*Die Stufen des Organischen und der Mensch* represents the next stage in Plessner’s refashioning of the empathetic and sympathetic observers featured in the first two chapters of this dissertation. Taken together with another book Plessner published in 1931, *Die Stufen des Organischen und der Mensch* highlights the way in which he fundamentally reshaped these closely related observers while simultaneously engaging the same constellation of sense experience, conflict, and partisanship at stake for the writers, doctors, and administrators examined in the first two chapters. Precisely the way these shifts in the fortunes of the empathetic and sympathetic observer played out in Plessner’s philosophical anthropology will be the focus of the next section.

**The Senses under Strain**

As Plessner and Buytendijk’s critique of empathy in “Die Deutung des mimischen Ausdrucks” suggests, the empathetic observer—an observer at the heart of the first two chapters—came under severe scrutiny in the early decades of the twentieth century. For precisely this reason, I have started not only this chapter, but also the second part of this dissertation by dedicating attention to “Die Deutung des mimischen Ausdrucks.” In this 1925 essay, Plessner and Buytendijk located the boundaries of empathy at the boundaries of the empathetic observer. Empathy was a way of allowing an observer temporarily to escape the prison of his or her own body in order to enter the body of an other, and to feel what this body felt. For Plessner and Buytendijk, however, the body was not a prison but rather a part in a larger whole encompassing the senses and environment of an individual. Ways of accessing the feelings of others had to change accordingly.

This refashioning of the empathetic observer by Plessner and Buytendijk undermines, in significant ways, the premises on which the aesthetics and politics of writings on pain examined in the first two chapters were based. These writings either, as was the case for Virchow, aimed to disorient the senses of readers by staging graphic scenes of suffering, or, as was the case for Hauptmann and Schneer, modeled for readers ways of responding to such suffering. In both cases, the observer who witnessed the suffering of others temporarily left behind both his or her cognitive boundaries (the *Gefäß* critiqued by Plessner and Buytendijk) and his or her social boundaries. The predominantly middle-class observer targeted by Virchow, Hauptmann, and Schneer, gained access both to the sensory experience of pain and to the unknown world of poverty that had caused this pain. The sight of suffering, in turn, created middle-class
readers ready to take political action against poverty and the pain it caused.

What happened, however, when the cognitive boundaries separating self from other opened up in the way suggested by Plessner and Buytendijk? That is, what happened when the observer regarding the pain of others was no longer a container whose secure cognitive boundaries could be shaken by the sight of pain, but was instead—as it were—a sieve who experienced the boundaries between self, other, and surrounding environment as porous? The act of witnessing pain could no longer play the role of breaking down cognitive and, in turn, social boundaries, as had been the case for the observer cultivated by Virchow, Hauptmann, and their interlocutors. Instead, the shifting cognitive boundaries of the observer cultivated by Plessner relegated pain, and the political alliances shaped by representations of pain, to a new role.

The task of this section is to identify how these shifting cognitive and political boundaries emerged as Plessner continued the project of reconceptualizing human nature he began in his 1925 essay with Buytendijk. The books Plessner published in the late 1920s and early 1930s made clear why he and Buytendijk could dispense with empathy in this essay. The boundaries separating observer from world—boundaries Plessner explored at length in both his 1928 Die Stufen des Organischen und der Mensch and his 1931 Macht und menschliche Natur—had become a contested site, a site that itself produced new ways of experiencing pain and shaping political alliances. The observer cultivated by Plessner did not have to be shocked—like the empathetic and sympathetic observers—from the slumber of a cognitive and social world largely immune to pain and conflict. Rather, pain and conflict were a natural result of the way in which, for Plessner, the human being was put together.

Plessner took a major step towards formulating this notion of human nature in Die Stufen des Organischen und der Mensch. In this book, he extended the investigations into the relation between human and environment at stake in “Die Deutung des mimischen Ausdrucks” to the large-scale realm of culture and history. To undertake this investigation, Plessner combined the human and life sciences of his time in order to build a concept of the human between nature and culture. Though universal, this concept of the human was radically anti-essentialist. For Plessner, human nature was not characterized by a single feature such as reason. The only universal characterizing the human was an unfixed relation to the world—a relation that ultimately produced historical and cultural difference. In large part, Plessner developed this view on history in conversation with the philosopher Wilhelm Dilthey; history was, for both, a way of understanding past cultures despite their otherness to the present observer. Radical differences in the cultures that had come and gone in history testified, for Plessner, to a restlessness underlying human activity.\(^\text{12}\)

Plessner located the origins of this restlessness in the way organisms drew boundaries between themselves and their environment. The cultures that came and went on a grand scale in history, he claimed, began at the moment an organism separated itself from its surroundings. Plessner intervened in arguments by vitalists and mechanists in the 1920s about the reducibility of life to physico-chemical explanation, and claimed that the

\(^{12}\) For the full scope of this argument, see Plessner, Stufen, chap. 1.
irreducibility of living beings to physico-chemical processes was based on a
“Seinsunterschied, d.h. [. . .] kein für sich, sondern nur in seinen Konsequenzen oder
seiner Erscheinung erfahrbarer Unterschied.”13 This qualitative difference, he maintained,
appeared only in the way living and nonliving systems created boundaries with their
environments. The boundary between nonliving systems and environment was a “leeres
Zwischen” (155). Only living systems, Plessner argued, formed autonomous boundaries
with their environment.14

Living beings ranging from sea urchins to primates, all of which Plessner
subsumed under the term Tier, had this capacity to form boundaries. Animals formed
boundaries with their environment, Plessner argued, because they had an organic
structure made up of what he—following the Umweltlehre of Jakob von Uexküll—identified as sensory and motor organs directing perception and action (314-316).15
However rudimentary, these organs gave animals a “Zentrum” consisting of “eigener
Leib” against which an “Umfeld” emerged (306). This “Relation des Gegenüber” made
animals “bewußt.” An animal, Plessner wrote, “merkt ihm Entgegenstehendes und
reagiert aus dem Zentrum heraus” (306). However, Plessner maintained that animals
never became aware of their role in mediating their environment. Though mediated, this
environment remained immediate to animals, which could not take distance from
themselves, and thus could not—like the human being—establish “zwischen sich und
heraus, in seine Mitte herein, aber es lebt nicht als Mitte” (361).

The human being, for Plessner, differed from the animal on this way of relating to
its environment. As a “lebendiges Ding” (363), the human being was constrained by
organic structure in a way similar to the animal. For this reason, the human being had an
immediate relation to its environment. However, the human being was also aware of the
way in which its relationship to its environment was determined by organic structure, and
thus was conscious of the “Indirektheit” of this relationship (401). In this way, the human
being lived in what Plessner called a state of vermittelte Unmittelbarkeit, a state in which
it was both immersed in the immediate demands of the senses and motor organs, and at
the same time aware of the mediating role these organs played in shaping experience of
the world.16

The state of vermittelte Unmittelbarkeit in which the human being lived had an
effect Plessner described in dramatic terms: “Dann ist es [the human being as lebendiges
Ding] diesseits und jenseits der Kluft, gebunden im Körper, gebunden in der Seele und
zugleich nirgends, ortlos außer aller Bindung in Raum und Zeit” (363). Unlike animals,
the human being experienced a “Sein innerhalb des eigenen Leibes” and a “Sein

13 Plessner, Stufen, 157-158. Further quotes are in parentheses.
14 For the full scope of this argument, see Plessner, Stufen, chap. 3.4-3.5.
15 For background on Uexküll, see Harrington, Reenchanted Science, 34-71. An overview
of recent approaches in the humanities to Uexküll can be found in Winthrop-Young,
“Bubbles and Webs.” For an early elaboration of the Umweltheorie, see Uexküll,
Innenwelt und Umwelt der Tiere.
16 For more on vermittelte Unmittelbarkeit, see Plessner, Stufen, chap. 7.4.
außerhalb des Leibes” (365). Though not able to escape the constraints of organic structure, and thus “ohne die Zentrierung durchbrechen zu können,” the human being was nonetheless “aus ihr heraus, exzentrisch” (364).

According to Plessner, this eccentric relation to itself led the human being to perceive and act in the world in a way fundamentally different than animals. In fact, Plessner put this difference in even stronger terms: action in the world, in the form of conduct, only became a question because the human being existed in a state of what Plessner called “Exzentrizität” (364). Animals experienced a relation of certainty to their environment. The actions of even the most complexly organized animals were determined by organic structure. Only when this mode of relating to the environment became less certain did conduct arise as a question. As Plessner wrote: “Was soll ich tun, wie soll ich leben, wie komme ich mit dieser Existenz zu Rande—, bedeutet den (bei aller historischen Bedingtheit) wesenotypischen Ausdruck der Gebrochenheit oder Exzentrizität” (383). Conduct became a source of philosophical and scientific inquiry because the human being drew boundaries between itself and its environment in a fundamentally different way than the animal.

This relation to the environment, according to Plessner, was where human creations such as culture and history had their origin. Human beings had to create on their own the secure environment provided automatically to animals by organic structure. Human conduct thus aimed to replicate the security animals enjoyed in relation to their environment. For this reason, Plessner claimed, the human being was “von Natur, aus Gründen seiner Existenzform künstlich” (385). Artifice restored equilibrium to the relation between human and environment. The human being, “mit Hilfe der außernatürliche Dinge” of its own making, reached “die Ruhelage in einer zweiten Naivität” (385). These außernatürliche Dinge included both history and culture. Culture arose because the human being—unlike the animal—lacked a constant relationship to its environment, and thus had to construct norms that stabilized ways of acting in and perceiving the world (392). History, in turn, arose because this lack of a constant relationship to the environment also meant the human being never constructed permanent norms for acting in and perceiving the world. These norms, instead, changed over time (416).

Both history and culture, then, ultimately testified to the precarious relation between human and environment. These large-scale collective phenomena only arose to compensate for an original instability of the human senses. As Plessner wrote: “Der Mensch will heraus aus der unerträglichen Exzentrizität seines Wesens, er will die Hälftenhaftigkeit der eigenen Lebensform kompensieren und das kann er nur mit Dingen erreichen, die schwer genug sind, um dem Gewicht seiner Existenz die Waage zu halten” (385). The human being created a world whose weight—and thus stability—was only matched by the instability of the senses. The impulse to create this world was compensatory. Heavy things such as culture and the institutions it produced counterbalanced the minimal weight of human existence and thus—at least temporarily—protected the senses from the overload to which they were exposed by an original lack of
harmony with their surroundings.\(^{17}\)

My claim is that this precarious equilibrium between the instability of the senses and the stability of culture and institutions is where Plessner shifted the terrain on which it was possible to observe the pain of others in the early decades of the twentieth century. Plessner did not contrast the secure cognitive and social worlds of an observer with the disorienting pain of others. Observing pain—for Plessner in contrast to Virchow, Hauptmann, and their interlocutors—would neither disorient the senses of the observer nor disrupt the stable social order in which this observer moved. Pain and the conflicts that produced pain were not foreign to this observer, who always already lived in a state of sensory and social disorientation.

This shift in relation between observer, pain, and social conflict is subtle but important. Pain and the conflicts that created pain were—for Plessner—not an external ill to be removed or contained at all costs, but rather were part of human nature. Gone in this conception of the human being was the humanism and liberalism espoused by a doctor such as Virchow. For Plessner, no measure of moral and intellectual Bildung would produce a permanently harmonious social order. Order of any kind was, instead, the rare island in a sea of political chaos. Social conflict and revolution were regular events for Plessner, events rooted in the easily disrupted stability of the human senses. The pathos of tragedy driving Virchow’s report and Hauptmann’s *Die Weber* had no special place in this universe. Tragic conflict was not only latent in scenes of radical social inequality, but pervaded politics as such.

In his 1931 book *Macht und menschliche Natur*, Plessner made clear the extent to which he viewed social conflict as a necessary correlate to the instability of the human senses he addressed in *Die Stufen des Organischen und der Mensch*. A central question of *Macht und menschliche Natur* was, Plessner wrote, “ob die politische Sphäre als solche, die mit der urwüchsigen Lebensbeziehung von Freund und Feind gegeben ist (C. Schmitt), zur Bestimmung des Menschen oder nur zu seiner zufälligen, seinem Wesen äußerlichen physischen Daseinslage gehört.”\(^{18}\) Plessner dedicated *Macht und menschliche Natur* to answering this question as to whether the political was based inescapably on conflict between friend and enemy, and as to whether conflict between friend and enemy was inevitably part of human nature.

The investigations on the relation between the political and human nature Plessner carried out in *Macht und menschliche Natur* owed, as his reliance on the distinction between friend and enemy suggests, a debt to the legal scholar Carl Schmitt. Indeed, the distinction between friend and enemy on which Plessner focused was, for Schmitt, at the heart of the political. Schmitt maintained, in his 1927 *Der Begriff des Politischen*, that the political was simply the decision of a given group to draw a line between friend and enemy.

\(^{17}\) It would be interesting to compare this notion of weightlessness to the weightlessness Elaine Scarry discusses in relation particularly to John Rawls. See Scarry, “Difficulty Imagining Other Persons,” 291-302.

enemy.\textsuperscript{19} Only this decision, and the corresponding “reale Möglichkeit” that the enemy could be killed in war, constituted the political for Schmitt (33). In a spirit similar—though not identical—to Schmitt, Plessner viewed the political as more than simply the unpleasant tasks best left to “den Geschäftsmachern und Streithammeln.”\textsuperscript{20} The political was, for Plessner, a “menschliche Notwendigkeit” that could only have its proper formulation in a philosophy of the human being (142).

This philosophy Plessner had already provided in Die Stufen des Organischen und der Mensch. In Macht und menschliche Natur, he thus recast the instability of the human senses in explicitly political terms. The uncertainty the human experienced in a position of Exzentrität also became, Plessner maintained, a chance for “Macht” (188). Because the human being was what Plessner now called an “offene Frage” (188)—that is, a being fundamentally lacking the secure environment by nature available to animals—human culture and history represented a constant site of intervention. Plessner claimed that, just as “die Entdeckung der Naturbedingungen” had led to gradual human mastery over nature, a similar discovery of “Geschichtsbedingungen” would give the human being “unvorhersehbare Macht, mit der er über sein bisheriges Geschichtsniveau sich erheben wird” (190). History on Plessner’s view, it turned out, was not only a way of understanding but also of engineering the Exzentrität underlying human nature.

This possibility of engineering human nature emerged, for Plessner, precisely because the observer of history could not take distance from the historical cultures under observation. The observer of history, armed with the knowledge of Exzentrität, saw in the human need for a secure environment a common bond between his or her own culture and the cultures that emerged in history. Despite—or perhaps better said, precisely because of—the differences between past and present cultures, the historical observer recognized he or she had a “rückwirkende, geschichtsschöpferische Gewalt” (184), since the past could be shaped by “die Entscheidungen der je um ihre Gegenwart ringenden Generationen” (184). Observing history also meant, Plessner argued, shaping it.

The observer of history described by Plessner in Macht und menschliche Natur was always already part of the situation under observation. In fact, even the conflict over history was a conflict over the present. Plessner did not fail to observe the implications of his argument. He, like Schmitt, placed conflict at the heart of human unity:

Eine andere Garantie dafür, daß sich einander heterogene Kulturen auf einer gemeinsamen Basis der Menschlichkeit begegnen können, gibt es nicht und darf es nicht geben, wenn das Leben und tun der Menschen den Sinn haben soll—den


\textsuperscript{20} Plessner, \textit{Macht und menschliche Natur}, 196. Further quotes are in parentheses.
Sinn der Geschichte—diese Basis immer neu zu erobern, um ihrer sicher zu sein [...]. (191)

The *Sinn der Geschichte* of which Plessner wrote had a broader political meaning: the common ground for *Menschlichkeit* emerged only in perpetual struggle. History taught its observers that humanity was not a given, but had to be constantly established. Precisely this struggle to establish humanity, Plessner maintained, had given birth to a plurality of human cultures. This lesson, in turn, had a practical corollary for the present observer of history. This observer should not hope for a safe distance from which to witness the struggles of historical cultures, but had to recognize he or she took part in the same struggle in the present.

It was only a short leap from this interpretation of history to Schmitt’s concept of the political. Plessner argued that the “Unergründlichkeit” of the human on display in history brought to light “die ersten Umrisse der menschlichen Lebenssituation” (191). “Der Mensch,” he continued, “steht als Macht notwendig im Kampf um sie [die Lebenssituation], d. h. in dem Gegensatz von Vertrautheit und Fremdheit, von Freund und Feind” (191). The distinction between friend and enemy was a natural outgrowth of the perpetual conflict Plessner’s observer saw in history. Culture and its institutions only emerged against the backdrop of what they excluded—whether a past generation, another present culture, or the chaos of historical contingency. For Plessner, the human secured “sein Eigenes” only against “ein Fremdes” (196).

The relation between familiar and foreign or friend and enemy, however, was not simply of binary opposition or mutual exclusion. By virtue of its *Exzentrizität*, the human being existed first in a foreign setting. This foreign setting took primacy because the human lacked a secure environment given to animals. Only out of this foreign setting was the familiar born. Yet, the secure environment that came to represent the familiar was temporary. Plessner emphasized that each historical culture and each observer of history had to forge this secure environment again. In this sense, the clash between foreign and familiar never ceased. These opposing forces took shape along what Plessner called a “schwankende Frontlinie” (197). He wrote:

In beständigen Umbrüchen erobert so der Mensch zwischen Umwelt und Welt, zwischen der heimischen Zone vertrauter Verweisungen und Bedeutungsbezüge, die ‘immer schon’ verstanden worden sind, und der unheimlichen Wirklichkeit der bodenlosen Welt seine Umwelt aus der Welt. An der Verschränkung zeigt er sich als Meister. (197-198)

The dynamic governing the relation between foreign and familiar was not binary opposition, but *Verschränkung*. The human reduced the foreign and unmanageable *Welt* to a manageable and familiar *Umwelt*—that is, to the secure environment Plessner described by using a term borrowed from Uexküll.21

This ultimate reformulation by Plessner of the distinction between friend and enemy in terms of *Welt* and *Umwelt* epitomizes the way in which he differed from the writers, doctors, and administrators examined in the first two chapters. The conversion of

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21 By the time of *Macht und menschliche Natur*, Plessner had engaged with Uexküll’s *Umweltlehre* to the point at which he could simply leave Uexküll uncited.
the chaotic Welt into a secure Umwelt was, for Plessner, at best a temporary guarantee of order. The schwankende Frontlinie between social order and chaos would never entirely disappear. The chaos of social conflict was no longer—as was especially the case for Virchow—a way station in the march towards order. Order would, instead, always sink back into chaos. In fact, as the intimate relation between Welt and Umwelt suggested, order required the background of chaos to make sense as a stable entity in the first place.

The stance Plessner took towards the vulnerability of human culture and its institutions—and of the human senses to which these institutions lent temporary stability—was, of course, not entirely unrelated to his own position as an observer of history and society. A world war and the revolutions in its wake, as well as a republic constantly on the brink of extinction, had taught Plessner that social conflict would not ultimately give way to an elevated humanity. Social conflict was instead part of human nature, and had to be approached as such. Plessner’s stance towards conflict, however, was not entirely pessimistic. Both the chaos of social conflict and the vulnerability of the human senses on which such conflict was based testified to the constant possibility that the human being could reshape itself and its institutions.

Against the backdrop of this constant possibility for reinvention, human vulnerability took on a new meaning. The vulnerability of both the human senses and of human institutions was no longer a curse, but at least a mixed blessing. By accepting vulnerability as part of human nature, Plessner had largely given up on projects such as the public health espoused by Virchow. The ideal of creating a humanity in which social ills disappeared in tandem with physical ills would have been, for Plessner, contrary to human nature itself. However, Plessner did not simply accept the physical and social ills addressed with revolutionary pathos by a doctor such as Virchow. By exchanging revolutionary pathos for resignation, Plessner instead pointed to a new way of taking on such physical and social ills.

This new way of taking on physical and social ills took shape in the 1940s in texts written separately—but in close contact—by Plessner and Buytendijk. In these texts, the vulnerable human being was no longer the target for medical reform in the spirit of Virchow’s public health, but rather the starting point for a medicine based on philosophical anthropology. Buytendijk and Plessner moved from the drama of pain staged by a doctor such as Virchow to a philosophy of pain—a philosophy based on the vulnerability of both human senses and human institutions already taking shape in “Die Deutung des mimischen Ausdrucks,” Die Stufen des Organischen und der Mensch, and Macht und menschliche Natur. As a correlate to such human vulnerability, pain was hovering at the margins of Plessner and Buytendijk’s investigations into sense experience, emotion, and social conflict in the 1920s and 1930s. By the 1940s, however, pain moved from the margins to center stage. This move to center stage will be the focus of the next section.

A Philosophy of Pain

Pain was a crucial subtext of the philosophical anthropology Plessner developed in Die Stufen des Organischen und der Mensch and Macht und menschliche Natur. In these
books, he articulated a vision of a human being whose relation to its environment was unstable, an instability that played out in the social conflicts at the heart of the political. The human being, for Plessner, was vulnerable to pain not only on the level of the senses, but also on the level of the very social institutions meant to compensate for the instability of the senses. Yet, during the 1920s and 1930s, Plessner never directly addressed the role pain played in his understanding of human nature. Even in his 1941 book *Lachen und Weinen: Eine Untersuchung der Grenzen menschlichen Verhaltens*—a book that resumed the investigations of emotion he had undertaken with Buytendijk in “Die Deutung des mimischen Ausdrucks”—Plessner emphasized that not only pain, but also other overwhelming experiences such as joy or relief, could be the cause of crying.22

When Plessner turned his attention to the extreme limits of emotion, then, pain remained on the margins of his philosophical anthropology. However, philosophical anthropology was hardly the exclusive property of Plessner. Though most explicitly articulated by Plessner—along with Max Scheler—in the 1920s, the assumptions about human nature worked out in philosophical anthropology became the basis for refashioning sciences ranging from psychology, biology, and physiology to medicine.23 Indeed, it is precisely in the field of medicine that the subtext of pain underlying many of Plessner’s claims about the human being came to the surface. In order to examine pain as a point of intersection between medicine and philosophical anthropology, then, I will turn again to F. J. J. Buytendijk—the physiologist who collaborated with Plessner in 1925 to produce “Die Deutung des mimischen Ausdrucks.”

Almost two decades after collaborating with Plessner on this essay, and less than a decade after collaborating again with Plessner on another essay, Buytendijk published a book in Dutch with the title *Over de pyn* in 1943. Plessner was no longer a coauthor, but he nonetheless collaborated with Buytendijk on this book in another way: as translator. In 1948, Plessner translated *Over de pyn* into *Über den Schmerz.*24 His translation of Buytendijk’s book will be the focus of this section. My claim will be that, in this book, translation between languages mirrored another kind of translation between fields of knowledge—namely, between Plessner’s philosophical anthropology and the medicine espoused by Buytendijk.25

In *Über den Schmerz*, the understanding of human nature Plessner elaborated in his philosophical anthropology came to ground, for Buytendijk, a medicine that would embrace pain. Buytendijk saw pain not only as a crucial site of philosophical reflection

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23 For Scheler’s philosophical anthropology, see Scheler, *Stellung des Menschen im Kosmos*. For the ways in which philosophical anthropology emerged as collective enterprise among individuals from a range of scientific and philosophical backgrounds, see Fischer, *Philosophische Anthropologie*, 19-93.
24 For the original Dutch publication and the German translation, see the bibliography entry under Buytendijk. For Buytendijk’s other collaboration with Plessner, see Plessner and Buytendijk, “Die physiologische Erklärung des Verhaltens.”
25 For a related approach to pain combining anthropology and medicine already being developed in the 1920s, see Weizsäcker, “Die Schmerzen.”
on human nature, but also as the basis for holding together otherwise fragile social bonds. He transformed the sensory disharmony of pain into a basis for social harmony. While the writers, doctors, philosophers, and administrators examined in the first part viewed pain as a social ill against which empathetic and sympathetic observers had to be mobilized, Buytendijk mobilized pain itself in the service of shaping society. Buytendijk, and by extension Plessner, thus trained observers to adopt a stance towards pain that differed fundamentally from the stance taken in the last half of the nineteenth century.

In fact, Buytendijk began *Über den Schmerz* by addressing what he saw as the problem with a medicine preoccupied by the task of fighting pain. The dream of fighting pain and its causes—a dream at work in Virchow’s public health, the *Hilfsverein* of which Schneer was a representative, and Hauptmann’s theater—turned into a nightmare in Buytendijk’s eyes. “Der moderne Mensch,” he wrote, “ärgert sich über vieles, das man früher gelassen hinnahm. Er ärgert sich über das Altern, über langes Sichentum, selbst über den Tod, sehr sicher aber über den Schmerz. Schmerz darf nicht vorkommen.”

Medicine had become a victim of its own success in fighting pain. This success had transformed the stance of der moderne Mensch towards pain from Gelassenheit into anxiety. Modern man had eliminated pain only by giving birth to the pathology of what Buytendijk called “Algophobie” (14).

This pathological fear of pain put on display, for Buytendijk, the dark side of the sympathy underlying modern medicine. He acknowledged “Mitgefühl mit dem Leiden der Menschen” as a valuable “Impuls zum medizinischen Denken und Handeln” (14). Such Mitgefühl, however, could easily transform from a friend of humanity into an enemy. If medicine lost touch with the “Wesen des Menschen und den Sinn seines Leidens,” the impulse to eliminate pain—an impulse at the heart of sympathy—became a “bloßen Technik, die ihrem eigenen Gesetz gehorcht” (14). Once sympathy had become “autonom,” Buytendijk claimed, the impulse towards “Schmerzbekämpfung [steht] auch dann nicht mehr im Dienste der Menschheit” (14). Rather than serve a universal humanity, the impulse to fight pain served the particular interests of “eine bürgerliche Daseinsform, die eine Aufrechterhaltung eines angemessenen körperlichen Wohlbefindens durch bedingungslose Vermeidung aller störenden Reize und Einflüsse sichern will” (14).

The equation of physical well-being with the complete avoidance of pain was, for Buytendijk, a stance that emerged with a particular historical class—precisely the middle class targeted by Virchow in the name of a universal humanity. Buytendijk emphasized, however, that he was not interested in evaluating middle-class values on the whole. “Ein Werturteil über eine Daseinsform auszusprechen,” he cautioned, “bleibt stets fragwürdig” (14). Rather than critique the middle class, Buytendijk limited himself to what he had identified as “die ‘bürgerliche’ Haltung gegenüber dem Schmerz” (15). Of this stance towards pain, he wrote the following:

In dem Bilde, das der ‘Bürger’ von sich selbst besitzt, fehlt der schmerzliche Zug der Verletzbarkeit. Wohl weiß er, daß er Schmerzen haben kann, aber ihm mangelt das Bewußtsein eines ständigen Preisgegebenseins an die Möglichkeit

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körperlichen Leidens. Damit verliert der ‘Bourgeois’ ein Merkmal menschlichen Seins. (15)
The only stance towards pain taken by the Bürger of Buytendijk’s account, it turned out, was no stance at all. This Bürger never thought to view the passing sensation of pain as a part of human nature. The quality of Verletzbarkeit did not exist in the anthropology of the Bürger.

Transforming the Bürger’s avoidance of pain into an embrace of pain was precisely the task Buytendijk set for himself in Über den Schmerz. Pain was not simply a sensation to be avoided at all costs, but instead called for a response. “Nichts,” Buytendijk wrote, “bricht den Menschen so sehr in Leib und Seele als körperlicher Schmerz” (137). For precisely this reason, however, he claimed that “der Schmerz [muß] auf eine ganz eigene Weise beantwortet werden” (138). What he called the “Wesen des Schmerzes” only emerged “in der Haltung, die der Mensch, schmerzhaft getroffen, zum Schmerz, zur eigenen leiblichen Existenz, zu sich selbst und dem Grund seines In-der-Welt-Seins [. . .] findet” (138). Embracing pain was, for Buytendijk, the key to understanding human nature.

This embrace of pain would ultimately provide the basis for a new universal humanity to replace the particular interests of the Bürger targeted by Buytendijk. Before turning to this new basis for a universal humanity, however, it is important to note that the stance towards pain espoused by Buytendijk also represented a logical—though extreme—outcome of his collaboration with Plessner in “Die Deutung des mimischen Ausdrucks,” and of the philosophical anthropology that followed from this collaboration in Plessner’s writings in the late 1920s and early 1930s. The human being had to take a stance towards pain precisely because it was—as Plessner had claimed in Die Stufen des Organischen und der Mensch—constantly at work creating a stable Welt out of an unstable Umwelt. Pain, above all else, represented the point at which this work of stabilization threatened to break down. Only a strong response would guarantee the human being a way of establishing a Welt against the especially hostile Umwelt of pain and related experiences of being overwhelmed.

This, at least, was the claim Plessner made in his 1941 Lachen und Weinen. By the time of this book, Plessner had normalized the delicate process of worldmaking he first formulated in Die Stufen des Organischen und der Mensch. He claimed: “Als normal gilt dem Menschen ein Dasein, in dem er sich orientieren kann [. . .].”27 This orientation did not have to be precise. Plessner admitted that a “verschwimmende Grenze, die den Bereich der Vertrautheit vom dem der Fremdheit scheidet” would always exist (360). However, he no longer emphasized how this shifting boundary contained the seeds of social conflict, as had been the case in Macht und menschliche Natur. Instead, he highlighted the relative harmony of an approximate orientation between human and world. “Der Mensch,” wrote Plessner, “will sicher sein, daß es mit den Dingem eine Bewandtnis hat, auch wenn er nicht weiß (und vielleicht nie wissen kann), welche” (360).

Plessner only granted a relative degree of stability to the relation humans had with their world, however, in order to address a potentially dramatic instability in this relation.

27 Plessner, Lachen und Weinen, 360. Further quotes are in parentheses.
The human being might, in normal cases, succeed in finding a way to orient itself in the world. However, extreme cases existed in which such orientation failed to arise. Plessner wrote of “unbeantwortbare Lagen, in denen der Mensch sich nicht orientieren, zu denen er kein Verhältnis gewinnen, deren Bewandtnis er nicht durchschauen, die er nicht verstehen und nicht nehmen, mit denen er also nichts anfangen kann” (362). These *unbeantwortbare Lagen* could be the result of “einträchtender Schmerz oder lösende Freude, schenkende Gnade oder stille Entrücktheit” (365), or of the many other “Anlässe” Plessner documented in *Lachen und Weinen*. Pain belonged, for Plessner, to the occasions that placed the human being at the “Grenze allen Verhaltens” (365).

The boundary of behavior was not a nice place to be. For Plessner, the human being by nature constructed a stable artificial world to compensate for the instability of the senses. If this instability of the senses could not at least temporarily be overcome, the human being faced an existential threat. The *unbeantwortbare Lagen* triggered by an experience such as pain, Plessner claimed, “sind dem Menschen unerträglich” (362). “Er wird sie,” he continued, “um jeden Preis zu ändern versuchen, sie in eine irgendwie ‘beantwortbare’ umgestalten oder ihr entfliehen. Gelingt ihm das nicht, so kann sie sich zu einer Bedrohung seiner Existenz auswachsen [...]” (362). Pain, for Plessner, was unbearable not as a physical experience, but as the point at which the human activity of worldmaking threatened to cease.

The only way in which this activity of worldmaking could continue was for the human being to discover a response to the extreme disorientation of an experience such as pain. This was the role Plessner assigned to the behaviors of laughing and crying. Laughing and crying were not merely the final gestures of submission to a situation already beyond human control. The person who laughed or cried might experience a physical “Verlust der Selbstbeherrschung” (359), but this loss of control nonetheless paradoxically constituted a new means of orientation in the face of extreme disorientation. The “Desorganisation” of the laughing or crying body was in itself “eine Gebärde”—a gesture that, Plessner claimed, could be “wie eine sinnvolle Reaktion verstanden” (359). “Man lacht und weint nur in Situationen,” he wrote, “auf die es keine andere Antwort gibt” (359). Even if the only answer to a desperate situation, laughing and crying were nonetheless—in Plessner’s eyes—an answer. In this sense, they restored to the human being a way of acting in the most disorienting of situations.

Plessner was not far in the background when, in *Über den Schmerz*, Buytendijk aimed to shift what he saw as the predominant stance towards pain from avoidance to embrace. Buytendijk zeroed in on pain as the primary example of what, for Plessner, incuded a range of experiences in which the senses reached a point of overload. Picking up where Plessner left off in *Lachen und Weinen*, Buytendijk emphasized that “der Schmerz auf eine ganz eigene Weise beantwortet werden muß, obwohl eigentlich keine Antwort mehr möglich ist.” Like Plessner, Buytendijk saw a paradoxical side to pain and its demand for an answer. Pain, Buytendijk claimed, “ist in sich selbst völlig sinnlos, unabweisbar, und seine Sinnlosigkeit unterbindet jeden Appell an Denken,

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28 For these *Anlässe*, see Plessner, *Lachen und Weinen*, 277-358

Fühlen, Wollen [. . .]” (138). Yet, for precisely this reason, pain
zugibt ihn [den Menschen], [. . .] mit seiner Person zu antworten. Darin liegt das
Wesen des Schmerzes, daß er die Innerlichkeit des Menschen in ihrer ganzen
vitalen und psychischen Struktur mit einer—mit nichts sonst vergleichbaren—
Gewalt desorganisiert, ohne jedoch seine persönliche Existenz anzutasten. Der
Schmerz unterbindet nicht das Leben als Person. (138)
Pain disorganized the body in a way no other experience could, but nonetheless left the
person intact. In fact, the unity of the person only emerged against the extreme
disorganization of the body in pain—much in the way the stability of Welt emerged only
against the chaos of Umwelt.

Pain, then, played a crucial role in shaping the person. The person emerged, for
Buytendijk, as an observer of the pain suffered by his or her own body. Only by taking a
stance towards the incoherence of pain—that is, by answering pain in a way similar to
that envisioned by Plessner—did the person give coherence to his or her existence. The
act of answering pain took on great meaning precisely because pain was meaningless. As
Buytendijk wrote: “Weil vital sinnlos und für keine einzige psychische Funktion von
irgendeiner Bedeutung, erfüllt er [der Schmerz] sich erst für die Person in einem
existentiellen, darum ontologisch-metaphysischen Sinn” (138). Metaphysics took on the
role Plessner had assigned laughing and crying, and supplied the human being orientation
in the face of disorienting pain. This metaphysical twist to Plessner’s largely
physiological approach was at the heart of Buytendijk’s claim that the human being
found its place in the world by taking a stance towards pain.

In this sense, Buytendijk transformed what Plessner saw as a way of coping with
exceptional situations into a normative ethics. Pain and the response to it were no longer
at the boundary of normal behavior, but instead grounded a way of acting at a historical
moment in which the exceptional had become normal. By the time Buytendijk wrote
Over de pijn in 1943, he was addressing an audience surrounded by the horrifying
brutality of war. German readers of Plessner’s 1948 translation would undoubtedly have
been exposed to worse horrors. Buytendijk—and implicitly Plessner as Buytendijk’s
translator—looked for a way to transform the meaninglessness of the pain underlying
such horrors into an occasion for meaning. Both author and translator spoke to audiences
that could no longer, like the audiences to which Virchow and Hauptmann spoke, be
mobilized to alleviate pain by a shared bond of sympathy. Instead, these audiences had to
be taught how to embrace pain as, in itself, a bond that held society together.

To shape his readers into observers ready to embrace pain in this way, Buytendijk
expanded on the metaphysical twist he had given Plessner’s claim that pain required a
response. The response Buytendijk had in mind, however, was not simply to laugh or cry,
but rather to realize that pain went beyond the individual. “Der Schmerz des Einzelnen,”
Buytendijk wrote, “hat unverkennbar die [. . .] Bedeutung, die nicht in dem Bewußtsein,
sondern im Sein der Solidarität selbst gründet” (168). Suffering ultimately intensified the
strength of the bonds holding a society together, a process Buytendijk saw taking shape
“in dem dunklen Gang der Geschichte, der Krieg heißt [. . .]” (168). For Buytendijk, it
made no difference “wie das Leid des Krieges erlebt wird, mutig oder feige, gelassen
oder empört, sondern, daß es erlitten wird. Die Tatsache, daß jemand kämpft, verwundet
wird, für sein Vaterland stirbt, gibt seinem Leiden eine [...] Bedeutung” (168). The suffering of war, for Buytendijk, took on meaning only against the backdrop of a community such as Vaterland.

By invoking a notion such as Vaterland, Buytendijk was not simply falling back on a militaristic form of patriotism. Rather than lean on the ideal of country to justify future suffering, Buytendijk used this ideal to make sense of suffering that had already taken place. An ideal such as country no longer had the power to mobilize the able-bodied for war, but instead offered consolation to those disabled by it. Country represented, on its barest level, a perspective from which to universalize the suffering caused by war into what Buytendijk called “die Solidarität einer Lebensgemeinschaft” (167). Anyone wounded during war could, through the lens offered by country, recognize that their pain was also the pain of an other. An ideal such as country gave meaning to pain. Equally important, however, was the fact that pain reinforced the social bonds holding together a collectivity such as country.

To emphasize this point, Buytendijk turned to a book by the French physician and writer Georges Duhamel titled Vie des martyrs. In this book, Duhamel had recorded his experiences as a surgeon during the First World War. Buytendijk quoted passages in which Duhamel observed the contrasting ways two wounded soldiers recovering in a hospital responded to their suffering. A soldier named Auger, Duhamel noted, “souffre d’une façon [...] presque méthodique,” while another soldier named Grégoire “ne sait pas souffrir comme on ne sait pas parler une langue étrangère.”

Duhamel had concluded, from this contrast, that “les hommes ne sont pas égaux devant la souffrance.” Buytendijk, however, reached a different conclusion. “In einer Hinsicht,” he wrote, “sind Auger und Grégoire gleich. Beide litten sie für ihr Vaterland.” Grégoire and Auger might differ greatly in their tolerance for pain, but both had exposed themselves to pain. This exposure revealed what Buytendijk—borrowing a phrase Duhamel attributed to Grégoire—identified as a shared “Teilhabe an der existentiellen Not, in der der Mensch ‘mit den anderen’ steht” (170).

As the solidarity he saw among wounded soldiers as diverse as Grégoire and Auger suggests, Buytendijk fashioned pain into the basis for equality. Pain stripped away the particularities—explicitly physiological, but also implicitly social—of what Buytendijk called “Charakter” and “Temperament” (170), and left only a universal existentielle Not faced both by self and other. For Buytendijk, the recognition that others faced the same existentielle Not as self held together the fragile social bonds threatening to disintegrate not only in the isolating experience of pain, but also in the heterogeneous backgrounds of those who experienced pain. Buytendijk, in this sense, founded society on the shared capacity of its members to suffer.

This understanding of the relation between pain and society overturned many of the assumptions guiding the writers, doctors, and administrators examined in the first two chapters. Suffering was not a social ill, but the bond that held society together. Closely

32 Buytendijk, Über den Schmerz, 168. Further quotes are in parentheses.
related emotions such as sympathy and empathy, in turn, were no longer necessary, since
the observer of suffering always already suffered—and thus did not have to be taught
how to feel with the sufferings of others. In fact, the opposite was the case. The suffering
individual, for Buytendijk, had to be taught others suffered in the same way. The stance
towards suffering formulated by Buytendijk was the mirror image of that taken by the
sympathetic and empathetic observers of the nineteenth century. Rather than feel into the
sufferings of an other, the observer cultivated by Buytendijk felt outwards from his or her
own suffering. Community, in turn, did not emerge when the self came into contact with
an unknown world of pain, but instead when the self came to recognize its own pain in
the world.

In Über den Schmerz, then, Buytendijk founded a universal human community on
the shared embrace of pain. This universal community, in turn, he founded on the
anthropological parameters already taking shape in his collaboration with Plessner in
“Die Deutung des mimischen Ausdrucks”—parameters further developed by Plessner in
the writings examined in this chapter. In these writings, Plessner and Buytendijk
cultivated an understanding of the human as a being whose senses were open to both the
world and to others, and who was at the same time constantly threatened by the chaos of
this exposed state. This human being was, as Plessner claimed in Lachen und Weinen,
“ein Invalide seiner höheren Kräfte.” It had a unique capacity to create its own worlds,
but only because nature had deprived it of the secure environments already given to other
beings.

For Plessner and Buytendijk, disability was a crucial part of being human. This is
why I have started the second part of the dissertation by focusing on Plessner’s
philosophical anthropology and Buytendik’s adaptation of this philosophical
anthropology to medicine. Whether writing on the vulnerability of the human senses and
of human institutions, or on the pain shared by all of humanity, Plessner and Buytendijk
identified disability—and correlates to disability including pain and social conflict—as
conditions worthy, in themselves, of philosophical exploration. The human being was by
nature imperfect, and this imperfection did not have to become the target of social
engineering. Instead, imperfection could ground a philosophy of the human senses and of
human action.

The documents Plessner and Buytendijk wrote in the name of this philosophy
could not have existed in the nineteenth-century world examined in the first part of this
dissertation. These documents mark the contrast between the anthropological
assumptions underlying the empathetic and sympathetic observers who took shape in the
last half of the nineteenth century and the—to borrow a term from Plessner—eccentric
observer who took shape in the first half of the twentieth century. The eccentric observer,
simultaneously bound to his or her body and capable of taking distance from it,
recognized pain as a necessary result of constantly living in such a condition. In turn, it
was no longer necessary to introduce the eccentric observer to the pain of others, because
pain was already bound up with the way this observer related to his or her senses and to
the world. Rather than act as a foil against which to cultivate the self, pain became—for

33 Plessner, Lachen und Weinen, 384.
the eccentric observer—the terrain on which the self took shape.

The current chapter, then, has shifted from the archaeology of the empathetic and sympathetic observers examined in the first part of this dissertation to an archaeology of the eccentric observer—an eccentric observer who was, as I have claimed, a mirror image of these sympathetic and empathetic observers. While empathetic and sympathetic observers came to know pain by knowing others, the eccentric observer came to know others by already knowing pain. The remaining chapters will be dedicated to fleshing out the ways in which this eccentric observer became the addressee of texts on pain written at the intersection of literature and organization. The philosophy of pain developed by Plessner and Buytendijk, I have claimed, represents one such way of writing. The final two chapters will, in turn, examine other ways in which contemporaries of Plessner and Buytendijk asked readers to assume a role much like that of the eccentric observer who has taken shape in this chapter. These contemporaries aimed—like Plessner and Buytendijk—to shape readers sensitive to the full panorama of experiences offered by pain.
In 1912, Gottfried Benn published—under the title *Morgue und andere Gedichte*—a cycle of nine poems featuring scenes of suffering that could have been taken from Rudolf Virchow’s typhus report. One poem in *Morgue* put on display the cries of pain uttered by “[d]ie ärmsten Frauen von Berlin / [. . .] Huren, Gefangene, Ausgestoßene” in a *Kreißsaal*. The pained cries of these women contrasted, in other poems, with the silence of patients in a *Krebsbaracke* who had been reduced to “dieser Klumpen Fett und faule Säfte,” and of cadavers that arrived in the morgue after a violent and anonymous death—cadavers including those of “[e]in ersoffener Bierfahrer,” “Dirne, / die unbekannt verstorben war,” and a man “durch Pferdehufschlag / Augen und Stirn zerfetzt.” By showing individuals both dead and dying in medical settings, Benn’s poems—like Virchow’s typhus report—confronted readers with a panorama of what one critic writing on *Morgue* in 1912 called “der Menschheit ganzer Jammer.”

It is, of course, important to emphasize that *Morgue* captured the suffering on display in medicine in an aesthetic register. Ultimately, the poems in *Morgue* were not a report, just as Virchow’s report was not a tragedy. Yet, as was the case for Virchow’s report, literature and medicine overlapped in a complex way in *Morgue*. My claim in the second chapter was that, even if Virchow’s report was not a tragedy, critics writing on tragedy articulated a program for training the sympathetic observers Virchow aimed to mobilize in his public health. My claim in this chapter is that *Morgue* played a similar role for Benn of training observers he could deploy in medicine. However, while Virchow aimed to train sympathetic observers, Benn cultivated in his observers the dark underside of sympathy: namely, disgust.

Disgust is hard to overlook in the reactions by critics writing on *Morgue* around 1912. To describe Benn’s poems, critics used phrases such as “Uebelkeit und Grauen,” “diese grausigen Dinge,” “die ekelhafte Sektion,” “scheußliche und Ekel erregende Phantasieproduktion,” “wüste Gärung,” and “ekelhafte Lust am Häßlichen.” The disgust evident in these descriptions of *Morgue*—rather than *Morgue* itself—will play a key role in the current chapter. Such disgust had a history that, like the history of sympathy,

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1 The quotes from *Morgue* in this paragraph are taken from the 1912 unpaginated *Flugblatt* published by Alfred Richard Meyer, and appear—respectively—in the following poems: “Saal der kreißenden Frauen,” “Mann und Frau gehn durch die Krebsbaracke,” “Kleine Aster,” “Kreislauf,” and “Negerbraut.” These poems can also be found in Benn, *Sämtliche Werke*, 1: 11-12, 16-17.


3 See Dyck, “Requiem,” 20; and Lethen, *Der Sound der Väter*, 75-78.

traversed aesthetics. Around the same time Virchow was championing public health, the philosopher Karl Rosenkranz was developing a way of observing disease that would contrast with the sympathy so crucial to Virchow’s medicine. In his 1853 *Aesthetik des Häßlichen*, Rosenkranz set his sights on disease as worthy on its own of observation. He shaped observers whose disgust compelled them to dwell on disease rather than observers who—like those cultivated by Hauptmann and Virchow—overcame disgust for disease in the name of sympathy and social reform.  

The disgust central to Rosenkranz’s *Aesthetik des Häßlichen* resurfaced in the reviews of *Morgue* written by critics around 1912. Why disgust resurfaced in this way for Benn’s critics becomes particularly clear in light of the disgust Benn himself expressed for medicine in writings published between roughly 1910 and 1920—writings such as a 1920 essay “Das moderne Ich,” a 1914 Szene titled *Ithaka*, and a 1911 fictional letter titled “Unter der Grosshirrinde: Briefe vom Meer.” The attack Benn carried out on modern medicine in these writings—published during what I am calling his decade of disgust—resembled in an important way the critique F. J. J. Buytendijk and Helmuth Plessner directed against medicine in the following decades. Modern medicine had become, for Benn, a narrow institution focused exclusively on practical tasks such as alleviating pain, and had in turn forgotten how to examine what Buytendijk would later call—with a phrase as crucial to the third chapter as to the current chapter—the *Sinn des Leidens*.

Benn felt disgust for medicine precisely because it did not dwell on pain with the intensity manifest in the disgust at the heart of Rosenkranz’s aesthetics. Modern medicine, then, had to be taught again how to respond to pain with an emotional intensity equal to that of disgust. While Plessner and Buytendijk later carried out this task by formulating a philosophy of pain based on the vulnerability of the human senses, Benn turned to an aesthetics that would—much like the aesthetics of Rosenkranz—overwhelm these vulnerable senses. Benn followed a strategy, evident especially in critics’ reactions to *Morgue*, of representing death and disease in a way aimed to evoke disgust rather than sympathy. The disgust at death and disease shown by critics of *Morgue* around 1912 exemplified the kind of strong emotional reaction Benn wanted from observers of disease in a cold and technocratic medicine that had lost touch with the affective side of suffering.

In this sense, disgust played two constrasting but mutually reinforcing roles for Benn in the decade between 1910 and 1920. During this decade, Benn expressed disgust for medicine in a way that can be characterized as entirely negative. This disgust emerged in the at times physical aggression he and his protagonists directed towards medicine and its representatives in texts such as “Unter der Grosshirrinde,” *Ithaka*, and “Das moderne Ich.” The negative disgust Benn and his protagonists expressed for medicine in these texts, however, gave way to a disgust whose purpose was ultimately positive: to model for medicine a new way of observing pain. The texts in which Benn expressed a negative

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5 This claim about the relation between disgust and sympathy owes a debt to the philosopher Aurel Kolnai’s reflections on the power of “makabres ‘Anlocken’ ” exercised by *Ekel*, and on the “‘Überwindung’ des Ekels” by *Liebe*. See Kolnai, “Der Ekel,” 526, 566-569.
disgust for medicine, then, harbored a program for reforming medicine by putting disgust to a positive use.

The disgust Benn would ultimately use in a positive way was most visible in the reactions of critics writing on Morgue around 1912. For this reason, I will first reconstruct the reception of Morgue around the time of its publication, with particular attention to the role disgust played for critics writing on Benn’s poems. To cast further light on the strong response to Morgue by such critics, I will turn to Rosenkranz—the philosopher who, I maintain, normalized disgust as a response to disease in both aesthetics and medicine. Finally, I will examine the texts Benn wrote during his decade of disgust. My focus, in these texts, will be on the way Benn put disgust to what I have called its negative and positive uses in his effort to shape observers in medicine who would embrace pain.

Observers in the Morgue

In a 1948 memoir, Alfred Richard Meyer recalled the aftermath of his decision to publish Morgue in 1912. He wrote: “Wohl nie in Deutschland hat die Presse in so expressiver, explodierender Weise auf Lyrik reagiert wie damals bei Benn.” Though likely exaggerated, Meyer’s remark captures the intensity with which critics reacted to Morgue around 1912. Whether critics dedicated an entire article or only a few lines of a Sammelrezension to Morgue, they never showed indifference towards it. As I have indicated, critics typically responded with intense emotion to the scenes of death and disease in Benn’s poems. My focus, in this section, will be on the responses of these critics. Such responses point to the ways in which the predominant mode of observing suffering shifted from sympathy to disgust around 1900. Benn’s critics belong, in this sense, to the same genealogy as the sympathetic observer examined in the first part of this dissertation.

Reviews of Morgue around 1912 contain traces of the conflict between disgust and sympathy unfolding at the beginning of the twentieth century, a conflict that also hints at the affinity between these two emotions. Arguably the most insightful critics of Morgue—critics who saw it as an aesthetic innovation rather than as a moral outrage—located sympathy beneath Benn’s brutal depictions of death and disease. One of these critics was Ernst Stadler. In a 1912 Sammelrezension published in Cahiers Alsaciens on new lyric, Stadler praised the “unheimliche Schärfe und Sachlichkeit” of Morgue. This Sachlichkeit, however, ultimately did not hide a strong undercurrent of emotion. Though Morgue was, “fast brutal, als handele es sich um nichts als einen nackten ärztlichen

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6 Meyer, die maer von der musa expressionistica, 15.
7 For other scholarly work on the reception of Morgue, see Dutt, “Gottfried Benn”; and Sauder, “Gottfried Benn,” 80-82. Peter Uwe Hohendahl has collected reviews essential to any scholar writing on the reception of Morgue. See Hohendahl, Benn—Wirkung wider Willen, 89-99. Many of the reviews examined in this section can be found Hohendahl’s compilation.
8 Stadler, “Lyrische Flugblätter,” 320. Further quotes are in parentheses.
Operationenbericht” (320-321), Stadler maintained that Benn nonetheless betrayed “eine starkes mitleidendes Gefühl [. . .], eine fast weibliche Empfindsamkeit und eine verzweifelte Auflehnung gegen die Tragik des Lebens und die ungeheure Gefühllosigkeit der Natur” (321). For Stadler, Benn moved in the orbit of tragedy and its accompanying pathos of sympathy. The brutality of Morgue did not reveal hardened emotion, but instead highlighted Benn’s capacity to feel in the face of unfeeling nature.

Rolf Wolfgang Martens noted a similar relation between Sachlichkeit and emotion in an article on Morgue titled “Klinische Lyrik” published in Die Aktion in 1912. Though Martens believed Benn “im Naturalismus stecken bleibt,” he identified artistic promise in what he called Benn’s capacity “die Natur mit eigenen Augen zu sehen.” Precisely this capacity was what, for Martens just as for Stadler, ultimately revealed Benn’s sensitivity to suffering. Martens claimed that Benn might subject his readers to “das Blinken des Operationsmessers,” “das Schmerzensgewimmer,” and “der Kotgeruch,” but nonetheless displayed an “Ueberempfindlichkeit gegen das Widrige” (1108). In fact, for Martens, Morgue demonstrated that Benn had a greater sensitivity to suffering than many of his colleagues in medicine. “Eines besitzt er [Benn] jedenfalls,” wrote Martens, was Tausenden seiner Studienkollegen abgeht: die Empfindung für die Furchtbarkeit des menschlichen Leidens im Krankenhause! Besser ausgedrückt: die Empfindung ist ihm erhalten geblieben [. . .], während sie bei der überwiegenden Mehrzahl der anderen abgeschwächt worden ist und [. . .] die Gewohnheit sie zu einer alltäglichen Sache gemacht hat. (1109)

Scenes such as those that played out in Morgue might harden not only many observers in medicine, but also—implicitly—might harden readers. However, Benn showed his sensitivity precisely in the role of writer who could restore pathos to scenes of suffering that had become all too common in everyday life.

Strangely, then, the critics who were most ready to recognize the aesthetic innovation of Morgue around the beginning of the twentieth century were also the critics who observed suffering with a sympathy prevalent in the last half of the nineteenth century. Stadler and Martens, however, were the exception rather than the rule. Other critics writing on Morgue around 1912 could not overcome their own disgust for Benn’s poems—or the disgust they saw these poems as likely to provoke in readers—and attribute any measure of sympathy to Benn. Even critics willing to grant Morgue a nod of approval did not hesitate to highlight the moments in it that either caused them to feel disgust or that would cause others to feel disgust.

For example, in a 1912 review titled “Fortgeschrittene Lyrik” published in the journal Pan, Emil Faktor begrudgingly acknowledged his respect for Benn by contrasting him with poets who, in a majority of cases, “erregen mit neuen Gedichten selten das Gefühl so stark, daß man ihnen gleich öffentlich danken möchte.”10 The feeling Faktor saw Benn’s poems as capable of provoking, however, was no longer sympathy. He claimed that the “[u]nverschmückte Eindrücke” registered in Morgue would “verbreiten Entsetzen”—impressions that included “Leichname, von Ratten ‘angeknabbert,’ ” “die

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9 Martens, “Klinische Lyrik,” 1109. Further quotes are in parentheses.
10 Faktor, “Fortgeschrittene Lyrik,” 711. Further quotes are in parentheses.
Stimmung einer Krebsbaracke,” “die umschnürende Musik eines proletarischen Gebärhauses,” and “Bilder des Operationstisches” (710). Faktor did not identify this Entsetzen as his own, but instead attributed it to other critics—critics such as Hans von Weber. As Faktor noted, Weber “wünscht dem Leser der Bennschen Morgue […] einen steifen Grog zur Lektüre” (710). While Stadler and Martens maintained that Benn displayed sympathy by highlighting brutal scenes of suffering to which most other observers had become indifferent, Faktor saw no other option than disgust for readers confronting such brutality. Just as writer gave way to reader, sympathy gave way to disgust in Faktor’s review.

Rudolf Kurtz, also writing in Pan in 1912, filled out the contours of the observer Faktor saw taking shape in the reactions by critics such as Hans von Weber to Morgue. In an article titled “Bei Gelegenheit Benns,” Kurtz explicitly renounced sympathy as an emotion suited to observing the suffering on display in Morgue. He wrote: “Benn mobilisiert nicht einmal das allgemeine Mitleid.” Instead, Kurtz maintained, “Stöhnen [prallt] gegen frostige Sachlichkeit” (1060). The Sachlichkeit of Benn’s poems no longer contrasted with a strong underlying emotion such as sympathy. Instead, the cold gaze cast by Benn on “faulenden Leibern” (1061) and the “stinkende Sekretionen des Organismus” (1060) aimed to shock observers.

Such shock was, for Kurtz, necessary given the way in which the emotional life of the middle-class observer had stagnated around 1900. “[D]ie Gehirnbahnen des Bürgers,” he maintained, “werden von Familienglück und unerlaubten Vergnügsamkeiten gleich hemmungslos durcheilt. Was ihm auch vorgesetzt wird: es mündet in einer satten Gerührtheit” (1059). For precisely this reason, he wrote, “[e]s gilt, den bewegten Zeitgenossen mit Vorstellungen zu bedrohen, die den Hals voll Ekel propfen, die Augen aus den Höhlen drehen” (1059). While Faktor noted concrete instances of observers (such as the critic Hans von Weber) who expressed disgust at Morgue, Kurtz approached Morgue as a concrete instance of an aesthetics that would shape an ideal observer: the observer whose eyes were frozen in an expression of disgust. In Kurtz’s article on Benn, the bulging eyes of the observer filled with disgust replaced the tear-filled eyes of the sympathetic observer.

Faktor and Kurtz, then, described—in fledgling form and in full form, respectively—the emergence of a new observer who regarded suffering with disgust. Many critics writing on Morgue, however, simply took on the role of this new observer. The review by Hans von Weber cited by Faktor was, in fact, only a mild example of a critic expressing disgust at the graphic scenes in Morgue. Other critics responded with an intensity that would not have been dampened by the strong grog Weber had recommended. These critics put into action the disgust Faktor and Kurtz predicted as the inevitable response to Morgue.

Such disgust was nowhere more evident than in the response by critic Hans Friedrich to Morgue. In a Sammelrezension he wrote on recent lyric in a 1912 volume of Janus, Friedrich dismissed the poems in Morgue out of hand as “scheußlichen und Ekel

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11 For the review to which Faktor alluded, see Weber, “Gottfried Benn,” 75-76.
12 Kurtz, “Bei Gelegenheit Benns,” 1061. Further quotes are in parentheses.
erregenden Phantasieprodukten.” Über die Perversität dieser Gedichte zu schreiben, he proclaimed, “ist als Lyrikkritiker nicht meine Sache. Ich überlasse diesen interessanten Fall den Psychiatern” (97). Benn no longer—as had been the case for Martens and Stadler—cast a sympathetic eye on a suffering that was either greeted with indifference by colleagues in medicine or that testified to the indifference of nature. Instead, for Friedrich, Benn himself deserved to be the object of another medical gaze: the gaze of psychiatry. Friedrich recast sympathy as perversity, and thus denied Morgue the status of literature. The representations of “Verwesung” (97) he saw as pervasive in Morgue had no potential to revolutionize lyric, but instead made visible the workings of a sick mind.

Other critics followed a similar strategy of pathologizing Benn and at the same time dismissing Morgue as literature. Hanns Wegener, in a 1912 review of Morgue published in Die schöne Literatur, complained that “[u]nverständlichkeit, barer Unsinn, Perversität und Erotik sollen eine Gewähr sein für dichterische Begabung.” “Was aus diesen Versen spricht,” Wegener continued, “ist eine ekelhafte Lust am Häßlichen, Unflätigen, an schamlosen Offenheiten” (264). Using language similar to that of Wegener, Max Geißler claimed in his 1913 Führer durch die deutsche Literatur des zwanzigsten Jahrhunderts: “B. hat eine merkwürdige Ansicht von Poesie und entnimmt die Stoffe mit perverser Lust dem Reiche des Häßlichen [. . .].” For Wegener and Geißler, as for Friedrich, the pathologies of the body registered vividly in Morgue testified to the pathologies in the mind of Morgue’s author. Benn’s attraction to das Häßliche—the term both Wegener and Geißler used to capture these pathologies of the body—was nothing more than an ekelhafte Lust or perverse Lust.

Das Häßliche, however, had a more complex history in aesthetics than critics such as Wegener and Geißler were willing to admit. Over fifty years before critics such as Wegener, Geißler, and Friedrich reduced the physiological pathologies on display in Morgue exclusively to the pathologies of Benn’s mind, terms such as das Ekelhafte and das Häßliche played an inclusive role in aesthetics. These terms were used by philosophers such as Karl Rosenkranz to explore the aesthetic side of—among other disfigurations—the physiological pathologies critics such as Wegener, Geißler, and Friedrich hoped to exclude from literature on the whole. Rosenkranz not only explored the aesthetics of the ugly denied by critics who vehemently rejected Morgue, but also fleshed out how disgust worked on the level of the senses as a way of observing death and disease.

Given his engagement with disgust on the level of the senses, Rosenkranz is an important point of reference for understanding how the critics examined in this section observed suffering and its accompanying disfigurations in Morgue. As my reconstruction of Morgue reception around 1912 suggests, disgust played a central role for critics of Benn as observers of suffering—whether these critics attributed disgust to others (as was the case for Kurtz and Faktor), or expressed disgust themselves (as was the case for Wegener, Geißler, and Friedrich). Even for critics such as Stadler and Martens, disgust

14 Wegener, “Lyrik,” 264. Further quotes are in parentheses.
15 Geißler, Führer durch die deutsche Literatur, 31.
was the precondition for the sympathy they saw underlying Benn’s *Sachlichkeit* in *Morgue*. Such sympathy only emerged, for Stadler and Martens, against the backdrop provided by repulsive scenes of death and disease. Whether treated as an emotion to be overcome, observed, or indulged, disgust played a crucial role in the reviews of critics faced with scenes of death and disease in *Morgue* around 1912.

Critics who responded to *Morgue* in otherwise diverse ways used closely related terms such as *fast brutal* (Stadler), *das Widrige* (Martens), *Entsetzen* (Faktor), *Ekel* (Friedrich), and *das Häßliche* (Wegener and Geißler) either to describe the aesthetics of death and disease in *Morgue* or to exclude death and disease from aesthetics. Yet, none of these critics invoked the role such terms had played in the history of aesthetics. Only in a 1937 essay would the critic Alfred Kurella, looking back on Benn’s early writings, call the poems in *Morgue* “diesen sechs Programmstücken der ‘Ästhetik des Häßlichen.’” 16 Kurella maintained that “dies Programm erfüllten damals auch andere und besser” (202). However, precisely the mode of observing death and disease at work—to a wide range of ends—in the responses to *Morgue* by critics around 1912 first took shape in the *Ästhetik des Häßlichen* identified but neglected by Kurella. For this reason, I will turn to Rosenkranz in the next section.

**Disease between Medicine and Aesthetics**

Critics writing on *Morgue* around 1912, as I claimed in the previous section, observed death and disease in a way already taking shape in what has come to be known as an aesthetics of the ugly. This aesthetics had a long history dating back to the Enlightenment and Romanticism. 17 The first philosopher, however, to dedicate a philosophy entirely to *das Häßliche*—a philosophy that would describe at length “seinen Ursprung, seine Möglichkeiten, seine Arten”—was Karl Rosenkranz. 18 In his 1853 *Aesthetik des Häßlichen*, Rosenkranz promised to descend into the “Hölle des Schönen.” 19 This hell would be revisited, even if only briefly, by many philosophers and psychologists writing after Rosenkranz. Indeed, in the decades before 1912, when critics were using terms such as *Ekel* and *das Häßliche* to describe the scenes of death and disease in Benn’s *Morgue*, *das Häßliche* had become a concept—like *das Schöne* or *das Erhabene*—regularly appearing in aesthetics such as those of Theodor Lipps, Eduard von Hartmann, Max Dessoir, and Karl Groos. 20

Rosenkranz, however, was one of the few philosophers to write in detail on

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16 Kurella, “‘Nun ist dies Erbe,’” 202. Further quotes are in parentheses.
17 For an overview of this history, see Menninghaus, “Ekel,” 142-152; and Kliche, “Häßlich,” 32-50. See also Menninghaus, Ekel: Théorie und Geschichte.
18 Rosenkranz, Aesthetik des Häßlichen, 5. For more on Rosenkranz, see Menninghaus, “Ekel,” 152-154.
19 Rosenkranz, Aesthetik des Häßlichen, 3.
20 For sections of these aesthetics on *das Häßliche*, see Hartmann, Philosophie des Schön, 208-262; Dessoir, Ästhetik und allgemeine Kunstwissenschaft, 213-225; Lipps, Grundlegung der Ästhetik, 593-601; and Groos, Einleitung in die Ästhetik, 283-308.
disease as an instance of das Häßliche, and to normalize disgust as a response to the ugliness of disease. He established, in his Aesthetik des Häßlichen, a way of observing disease between medicine and literature. Precisely this way of observing disease would be at stake in the reception of Benn’s Morgue around 1912. Though his Aesthetik des Häßlichen was published in 1853, Rosenkranz was more a contemporary of Benn than many philosophers and psychologists writing on das Häßliche around 1900. As the critic Rudolf Gottschall noted in 1900, Rosenkranz had “für moderne Litteratur- und Kunstbestrebungen eine maßgebende Bedeutung.” Gottschall was referring largely to Rosenkranz’s significance for naturalist literature. Nonetheless, this comment reveals the way in which Rosenkranz retained a significance—or indeed, as Gottschall wrote, took on “nachträglich eine erhöhte Bedeutung” (51)—for critics writing only a decade before the publication of Morgue.

Among the wide historical range of aesthetics engaging with das Häßliche between the Enlightenment and the early twentieth century, Rosenkranz’s Aesthetik des Häßlichen thus plays the most significant role for me in a chapter that seeks to examine how observers in aesthetics and medicine responded to suffering between 1910 and 1920. My aim, in turning to Rosenkranz, is not to argue that the critics featured in the previous section had read Rosenkranz’s aesthetics, or that these critics were even well read in aestethetics at all. Instead, I am arguing that Rosenkranz formulated a way of observing suffering equally dominant around 1850 and around 1912. Critics writing on Morgue were still operating within the horizon for observing suffering that emerged in Rosenkranz’s aesthetics. Whether these critics had read Rosenkranz or not, his aesthetics normalized a way of observing suffering prevalent in their reviews of Morgue.

Rosenkranz’s aesthetics, then, play a role in this chapter similar to the role played in the first chapter by Schneer’s report, or in the second chapter by the writings on tragedy by critics around 1850. Schneer and these critics shaped a particular set of what I have called the anthropological parameters determining how observers respond—the level of the senses—when confronted with the disfiguring powers of pain, death, and disease. These parameters, in turn, were at work in the observers staged by Hauptmann and Virchow. Rosenkranz played a similar role of establishing the parameters that determined how critics writing on Morgue around 1912 observed suffering. The specific parameters for observing suffering outlined by Rosenkranz departed from those outlined by Schneer and critics writing on tragedy around 1850—a departure that establishes the lines along which this dissertation distinguishes sympathy from disgust. Nonetheless, like Schneer and critics writing on tragedy around 1850, Rosenkranz formulated a program for training the senses to respond in a particular way to the gruesome sights of death and disease.

For Rosenkranz, this program of training the senses to respond to death and

21 Compare, however, Rosenkranz’s descriptions of disease to those of Hartmann over thirty years later. See Hartmann, Philosophie des Schönen, 231-237.
22 Gottschall, “Glossen zur Ästhetik des Häßlichen,” 53. Further quotes are in parentheses.
23 Gottschall was not the only critic to turn to Rosenkranz in this way. See Hölzke, Das Häßliche, 7.
disease was intimately related to the new knowledge he aimed to introduce by targeting *das Häßliche* as a concept worthy of exclusive attention in aesthetics. “[D]ie Wissenschaft der Ästhetik,” he wrote, “ist seit einem Jahrhundert von den Europäischen Culturvölkern bis in eine große Breite hin durchgebildet worden, allein der Begriff des Häßlichen, obwohl man ihn überall streifte, war doch verhältnißmäßig sehr zurückgeblieben.”\(^{24}\) Precisely this lack of attention to *das Häßliche* led Rosenkranz to claim: “Man wird es in der Ordnung finden, daß nunmehr auch die Schattenseite der Lichtgestalt des Schönen eben so ein Moment der ästhetischen Wissenschaft werde, als die Krankheit in der Pathologie” (4). Just as medicine comprised both the pathological and the normal, so should aesthetics comprise the ugly and the beautiful—two concepts related like *Schattenseite* and *Lichtgestalt*.\(^{25}\)

Rosenkranz, however, did not simply see the pathological as playing a role analogous to that of the ugly, but also drew on pathology for examples of the ugly. The examples he used in his *Aesthetik des Häßlichen* matched the poems in *Morgue* for gruesome detail, and actually exceeded in medical precision the vocabulary used by critics writing on these poems around 1912. A critic such as Kurtz had referred in general terms, in his review of *Morgue*, to the “stinkende Sekretionen des Organismus,” and noted that “Benn hat die lyrischen Reize der Pest entdeckt” when no poem featured *Pest*.\(^{26}\) Rosenkranz, however, described specific diseases and their physical effects. In his *Aesthetik des Häßlichen*, he wrote:


*Das Häßliche* included diseases such as *Scharlach*, *Pest*, *Flechten*, *Weichselzopf*, *Gelbsucht*, and *Aussatz*, and devastating physical effects of disease such as *Exantheme*, gangrene, and infection of the bones in late-stage syphilis. By subsuming a wide range of diseases and their effects under *das Häßliche* in this way, Rosenkranz brought disease into the realm of aesthetics.

The role disease could play in aesthetics accounts for why Rosenkranz, even if he used a more precise medical vocabulary than Benn’s critics, nonetheless shared with these critics a horror for disease. A disease such as syphilis, after all, caused—according to Rosenkranz—not simply deformities, but *die scheußlichsten Deformitäten*. Rosenkranz responded with such strong emotion to syphilis because it caused deformities that

\(^{24}\) Rosenkranz, *Aesthetik des Häßlichen*, 4. Further quotes are in parentheses.

\(^{25}\) For more on the way in which the beautiful and the ugly became part of a “monistische Normalitätsdiskurs” in aesthetics around the same time as the normal and pathological in medicine, see Kliche, “Häßlich,” 51-52.

\(^{26}\) Kurtz, “Bei Gelegenheit Benns,” 93.
exemplified for him a particular type of das Häßliche: what he called das Ekelhafte.27 Disease was, Rosenkranz claimed, “an sich nicht nothwendig widrig oder gar ekelhaft.” “Dies wird sie erst,” he continued, “wenn sie den Organismus in der Form der Verwesung zerstört” (317). Disease only took on the aesthetic quality of disgust by disturbing the integrity of the organism in visible ways.

Precisely the visible decomposition of the organism is what Rosenkranz emphasized in his abstract definition of das Ekelhafte. “Das Ekelhafte,” he wrote, “ist die reelle Seite, die Negation der schönen Form der Erscheinung durch eine Unform, die aus der physischen oder moralischen Verwesung entspringt” (312). Rosenkranz equated the decay, or Verwesung, of physical and moral form with the collapse of aesthetic form so crucial to das Schöne.28 Even if Verwesung had both physical and moral sides, Rosenkranz highlighted its physical origins as “dasjenige Werden des Todes [. . . ], das nicht sowohl ein Welken und Sterben, als vielmehr das Entwerden des schon Todten ist” (313). Physiological decay and its products—such as “Schweiß, Schleim, Koth, Geschwüre, u. dgl.” (313)—marked the active transition of form into formlessness, and thus of the beautiful into das Ekelhafte.

Of course, the bodily fluids and sores Rosenkranz saw as characteristic of das Ekelhafte did not always signal the presence of disease. Yet, he had already located—in the catalogue of specific diseases he provided for his readers—the most disgusting incarnations of such bodily fluids and sores. The graphic instances of decay and its products taken from medicine provided, in this way, a concrete ground from which Rosenkranz could move to his abstract definition of das Ekelhafte. It is precisely in this move from the concrete empirical reality of disease to the abstract notion of das Ekelhafte, I am claiming, that Rosenkranz normalized a particular way of observing disease. He cited particular diseases as extreme examples of the physiological decay at the heart of das Ekelhafte. The Exanthemen, gangrene, and other conditions accompanying diseases such as syphilis, Pest, or Aussatz were not simply empirical entities, but instead represented—to borrow a term from the philosopher Aurel Kolnai—the auslösende Qualitäten of disgust.29 Rosenkranz taught his readers how to respond to disease by mapping out exactly which of its features should activate disgust.

This mapping of disgust onto specific features of disease is where Rosenkranz traversed a ground between medicine and aesthetics. On the one hand, he identified specific features of disease with enough precision to introduce a degree of empirical medical knowledge into his aesthetics. On the other hand, he cultivated towards this empirical knowledge an affective stance of disgust in his readers—an affective stance lacking in the medicine of his time. Indeed, Rosenkranz may have claimed that “[i]n einem Atlas der Anatomie und Pathologie zu wissenschaftlichen Zwecken ist natürlich

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27 For all the types subsumed under das Häßliche—such as das Kleinliche, das Schwächliche, and das Rohe—see Rosenkranz, Aesthetik des Häßlichen, 176-426.
28 The division between physical and moral Verwesung would be followed by philosophers writing on das Ekelhafte after Rosenkranz. See Kolnai, “Der Ekel,” 536-553.
29 See Kolnai, “Der Ekel,” 518.
auch das Scheußlichste gerechtfertigt [. . .].” Yet, no contributor to an atlas of pathology writing on disease around the time Rosenkranz published his Aesthetik des Häßlichen would have used a term such as das Scheußlichste or expressed an emotion that could be described with this term.

Around 1850, such a term—and the disgust it betrayed—had no place in the way pathologists wrote about disease. Even when describing the most gruesome deformities caused by disease, doctors writing in pathological Handbücher around 1850 largely restrained themselves from expressing a strong emotion such as disgust. Pathology was, at this time, growing into what Constantin Goschler has called a “Schule des ‘Sehens’” based strictly on empirical observation and exact description—a trend Rudolf Virchow, showing a detachment at odds with the sympathy on display in his typhus report, played a significant role in establishing. Pathologists, like many other scientists around this time, strove for an ideal of objectivity that required them to record observations without the interference of all-too-human liabilities such as emotion and interpretation. The only guarantee of such objectivity was emotional restraint.

Such emotional restraint is evident in an entry by a Dr. Simon published in a prominent Handbuch of pathology in 1855 on syphilis, the disease Rosenkranz saw as producing die scheußlichsten Deformitäten. Simon described, in an entry over two hundred pages long, aspects of syphilis ranging from its historical origins and the typical courses it ran to the parts of the body it could infect—parts such as muscles, tendons, glands, skin, inner organs, and bones. In a section of less than ten pages dedicated to infections of the bones, Simon wrote:


Simon described, in graphic detail, the “Deformität des Gesichts” caused when syphilis infected the bones in the nose. He focused not only on the “fötiden Geruch,” but also on the “ichoröse oder eiterschleimige” texture of the “Flüssigkeit” released as the nose

30 Rosenkranz, Aesthetik des Häßlichen, 317.
31 For Virchow’s role in establishing pathology as a “Schule des ‘Sehens,’” see Goschler, Rudolf Virchow, 204-211.
32 For this concept of objectivity, I am relying on Lorraine Daston and Peter Galison. See Daston and Galison, Objectivity, esp. chap. 3 and 4.
33 For the entire entry, see Simon, “Syphilis.”
decayed. Undoubtedly, these smells and bodily fluids—as signs of *Verwesung*—placed Simon’s description in close proximity to *das Ekelhafte* as conceived by Rosenkranz.

Yet, Simon responded to the signs of *Verwesung* at work in syphilis with a relatively mild display of emotion, particularly in comparison to the strong emotion Rosenkranz expected his readers to show when responding to the horrifying powers of syphilis to destroy the bones. Simon called the infection of the nose by syphilis a *traurigen Zustand*, and lamented the deceptive way in which syphilis robbed patients of their nose before they realized what was happening. Disgust, however, was largely under control in Simon’s description of syphilis. In fact, immediately after calling the decay of the nose a sad condition, Simon proceeded to classify this condition as *Ozaena syphilitica*. The sights and smells of decay produced by syphilis were not, for Simon, *auslösende Qualitäten* for disgust, but simply empirical features that contributed to knowledge of the disease.

The role such knowledge played for Simon points to a crucial difference in the way he and Rosenkranz wrote on disease. Simon limited his entry on syphilis strictly to the features necessary to classify the varieties of the disease. *Ozaena syphilitica* might cause horrible deformities, including the too-frequent cases in which patients ended up with what Simon described as “ein grosses Loch mitten im Gesicht.” These deformities, however, only had a place in Simon’s entry because they contributed to an objective knowledge of all the manifestations in which syphilis appeared. Disease, and not the observer of disease, took center stage in Simon’s entry on syphilis. For precisely this reason, Simon largely refrained from expressing emotion, even—or especially—at moments when the power of syphilis to disfigure the human face was most visibly on display. In order for syphilis to emerge as an empirical entity, Simon had to withdraw into the background in his role as observer.

Rosenkranz turned this relation between disease and observer on its head. In his aesthetics, he foregrounded the observer of disease over disease itself. While Simon hid the emotional life of the observer in order to make syphilis visible as an empirical entity, Rosenkranz deployed syphilis in its most visible guises in order to reveal the emotional life of the observer. This emotional life could be the object of study in aesthetics, just as syphilis was an object of study in medicine. In fact, by studying an emotion such as disgust, Rosenkranz closed the gap between medicine and aesthetics. On the one hand, he relied on medicine for a catalogue of already existing diseases that would epitomize the concept of *das Ekelhafte* central to his aesthetics. On the other hand, precisely this concept of *das Ekelhafte* offered a perspective on disease not available in medicine—a perspective that included the emotion largely excluded from the field of pathology.

In this sense, Rosenkranz not only built his aesthetics with knowledge taken from medicine, but also shaped new knowledge of disease on the terrain of his aesthetics. Disgust ultimately provided, for Rosenkranz, a new way of observing disease in an emotional register not available to medicine. The fact that this emotional register was not yet available as a way of observing in medicine, however, does not relegate the knowledge of disease shaped by Rosenkranz entirely to aesthetics. Instead, the way of

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observing disease Rosenkranz developed in his aesthetics was related to the way of observing disease in the medicine of his time like *Schattenseite* to *Lichtgestalt*, to borrow terms used by Rosenkranz himself to describe the inseparability of the beautiful and the ugly. The knowledge that emerged in medical observation could not, for Rosenkranz, be separated from the emotional life of the observer—an emotional life most visible in disgust.

The disgust expressed by critics of *Morgue* thus originated in greater proximity to medicine than many of these critics realized. While a critic such as Hans Friedrich mobilized disgust to protect aesthetics from encroachment by medicine, Rosenkranz encroached on medicine by establishing disgust as a new way of observing disease in aesthetics. Benn aimed to encroach on medicine in precisely such a way. Many critics writing on *Morgue* around 1912 would not have realized how their cries of disgust could be enlisted for this task. Yet, Benn adopted a strategy not unlike that of Rosenkranz: cultivate disgust as a way of observing disease in aesthetics, and in the process reshape existing ways of observing disease in medicine. The disgust expressed by critics of *Morgue* around 1912 indicates the success Benn had in carrying out the first part of this strategy. The next two sections will focus mainly on the way Benn carried out the second part of this strategy at a moment when medicine had followed to an extreme the imperatives of objectivity.

**A Decade of Disgust I: Medicine as Disease**

The disgust Benn provoked in critics writing on *Morgue* around 1912, I have claimed, formed part of a strategy he followed in order to shape a new way of observing suffering in the medicine of his time. The graphic scenes of suffering in *Morgue* were not simply meant, as a critic such as Rudolf Kurtz had claimed, to shock the complacent bourgeoisie. *Morgue* had a strategic purpose that went beyond shock. This strategic purpose emerges when the disgust Benn elicited from readers of *Morgue* is examined in relation to another kind of disgust Benn himself expressed for medicine in texts published during the same decade *Morgue* first appeared. Benn expressed this disgust in texts that not only assaulted the limits of empirical knowledge in modern medicine, but also staged a physical assault on a representative of medicine as an institution.

The next two sections will focus on these texts written by Benn during his decade of disgust between roughly 1910 and 1920. The disgust Benn showed for medicine during this decade casts light on why he turned to an aesthetics of disgust in *Morgue*. By turning to such an aesthetics, Benn aimed—much in the way, over fifty years before him, Rosenkranz had aimed—to shape observers who would react with strong emotion to the suffering caused by disease. The lack of such emotion represented, in Benn’s eyes, the greatest shortcoming of a medicine that had become overly specialized and obsessed with strict empirical knowledge, and that in turn overlooked the affective side of suffering.

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36 I quote primarily from the original versions of the Benn texts covered in the next two sections. These texts—though at times heavily revised—can also be found in Benn, *Sämtliche Werke*, vol. 3; and Benn, *Sämtliche Werke*, vol. 7, bk. 1.
Benn thus ultimately deployed an aesthetics of disgust in *Morgue* as part of a larger strategy for reforming medicine as an institution.

This strategy of reform emerged in the other kind of disgust evident in writings Benn published during the same decade as *Morgue*—namely, the disgust Benn himself felt for medicine. This disgust for medicine, like the disgust critics writing on *Morgue* expressed for scenes of suffering taken from medicine, has found its way into Benn reception. In a 1924 article in *Die Weltbühne*, the critic Otto Flake pinpointed *Ekel* as the main reason Benn had turned the publication of his 1922 *Gesammelte Schriften* into an occasion to declare “daß er sich nicht als literarische Persönlichkeit demonstrieren, sondern verabschieden will.”37 “Der Ekel,” Flake claimed, “machte ihn [Benn] stumm” (392). Flake included Benn as a member of “die deutsche Intelligenz, die den moralischen Bankrott ihres Landes erkennt” (393). Benn had ultimately been driven to silence by his disgust with this moral corruption—a disgust voiced most strongly in his “zunehmende Kritik an der Fähigkeit der Naturwissenschaft, wirkliche Erkenntnis zu liefern” (393).

Flake, however, did not foreclose the possibility that Benn would break this silence. “Nichts in Benn scheint mir zu verhindern,” claimed Flake, “daß er seine Opposition bis zu dem Grade vortreibt, wo die Negierung der Zeit zur Proklamation der Zukunft wird” (393). The disgust Benn felt for what he called the “naturwissenschaftliches Jahrhundert” approaching an end around 1900, Flake insisted, more than a negation (393). This disgust had the power to compel Benn not only to reject the past, but also to embrace the future. Unlike Rosenkranz, Flake saw *Ekel* as encompassing more than decay. Flake maintained that “der Ekel [kann] nur Durchgangsstation sein, nur prismatischer Punkt, der die Energie neu sammelt und neu ausstrahlt [. . .]” (392). The decay Rosenkranz placed at the heart of das Ekelhafte gave way, for Flake, to regeneration.

As this turn to regeneration suggests, Flake ultimately believed disgust would create in Benn an impulse to reshape in concrete ways the Naturwissenschaft belonging to “ein sterbendes Weltbild” (393). Flake wrote of this underlying impulse in the following terms: “Jeder Ekel, jeder Zynismus ist im Grunde nichts als Symptom für Idealität, für positive Forderungen, für Reinheit des Gefühls [. . .]” (392). Disgust might spring from what Aurel Kolnai has called “das ‘Wühlen im Kote.’ ”38 However, such rolling in filth betrayed a purity of feeling. For Flake, idealism had driven Benn to express disgust for the Naturwissenschaft of the nineteenth century. This idealism would ultimately lead Benn to make, as Flake maintained, positive demands on the sciences of an age that had become unbearably disgusting.

Precisely this desire for positive demands points to the way in which, by 1924, a critic such as Flake had already identified the impulse for reform underlying Benn’s decade of disgust. A disgusting state of affairs, for Flake, was not simply to be rejected out of hand, but instead reshaped according to new ideals. My task, in the remainder of this section, and in the next section, will be to flesh out the exact ways in which disgust

37 Flake, “Gottfried Benn,” 392. Further quotes are in parentheses.
38 Kolnai, “Der Ekel,” 536.
gave way to such an impulse for reform in Benn’s writings between roughly 1910 and 1920. The focus of the current and next sections will be divided according to this trajectory from disgust to reform. The current section will examine the way in which Benn relied on an aesthetics of disgust to express his dissatisfaction with modern science—particularly with medicine. The next section will, in turn, examine how this dissatisfaction led Benn to target medicine for reform.

The best place to start examining Benn’s disgust for modern science and medicine is in the text that inspired Flake to declare Ekel had caused Benn to go silent. Benn appended this text—titled “Epilog”—to his 1922 Gesammelte Schriften without listing it in the table of contents. As its position at the end of the collection representing his literary output until 1922 suggests, Benn intended “Epilog” to be the last word on his short-lived literary career. Towards the end of “Epilog,” Benn made no secret of his desire to end this career. He not only repudiated the existing writings published in the Gesammelte Schriften as “sehr dürftig” and as “[k]ein nennenswertes Dokument,” but also declared: “fünfunddreißig Jahre und total erledigt, ich schreibe nichts mehr—man müßte mit Spulwürmern schreiben und Koprolalien [. . .].” The prospect of continuing to write only conjured, for Benn, thoughts of Spulwürmern and Koprolalien, two medical terms whose imagery and etymology belonged to an aesthetics of disgust much like that formulated by Rosenkranz around 1850 and still at work in the reviews of critics writing on Morgue around 1912.

The terms Spulwürmern and Koprolalien referred, respectively, to a parasite that frequently resided in the intestines and to a psychiatric disease in which the mind essentially acted like the stomach or intestines. According to a medical dictionary published in 1901 by Otto Dornblüth, Spulwürmer were “parasitische Fadenwürmer” often found—among other regions of the body—in the intestines. Though a disease of the mind, Koprolalie nonetheless had etymological roots in the same physiological region often occupied by Spulwürmer. Dornblüth’s medical dictionary defined Koprolalie as the “Ausstoßen unanständiger Worte, zuweilen zwangsmäßig” (86). An individual suffering from Koprolalie literally pushed dirty words from his or her mouth in the same way the intestines pushed out excrement. This parallel between mental and physical excretion was built into the term Koprolalie itself. Dornblüth’s medical dictionary traced the etymology of Koprolalie to the Greek words kopros lalein, or Kot reden (86). When Benn declared he would in future only be able to write mit Spulwürmern und Koprolalien, he thus suggested that any further literary production would be no different than the production of organic waste.

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39 “Epilog” had also been published on its own a year earlier in Die Zukunft. See Gottfried Benn, “Epilog,” Die Zukunft 30, no. 2 (1921): 57-61. I will quote, however, from the identical version of “Epilog” published in Benn’s 1922 Gesammelte Schriften. See Benn, “Epilog.”

40 Benn, “Epilog,” 214.

41 Dornblüth, Klinisches Wörterbuch, 17. Further quotes are in parentheses.

42 The term Koprolalie had crossed over from medicine into general usage around 1900. See the entry in Brockhaus’ Konversations-Lexikon, 617.
Organic waste was, as I indicated in the previous section, precisely the sign of physiological decay so crucial to Rosenkranz’s understanding of das Ekelhafte. By comparing writing to the production of organic waste, Benn thus combined in “Epilog” the two senses of disgust I am claiming played a crucial role in his writing between 1910 and 1920. On the one hand, as his use of the terms Koprolalie and Spulwurm suggests, Benn turned to an aesthetics of disgust not unlike that which critics had already located in Morgue around 1912. On the other hand, Benn mobilized this aesthetics of disgust towards a particular end: to declare he had given up faith in the potential of writing during an age when, as he wrote in “Epilog,” “die verbissenste Individualität bis in den Dreck der Fingernägel und zu sozialen Kompromissen gezwungen vom Fressen bis zum Koitus [. . .].” With the disgusting physiology of Koprolalie and Spulwurm, Benn took revenge against a society that excessively regulated vital physiological activities such as eating and coitus.

Despite long passages in which Benn described what he called his Entfremdung from the field of psychiatry, the specific role medicine played in shaping the social compromises he so despaired was lost amidst the pathos with which he renounced his entire age in “Epilog.” However, Benn had made clear—in the decade leading to the publication of his 1922 Gesammelte Schriften—that the age he was renouncing on such a grand scale in “Epilog” had largely been formed by the sciences underlying modern medicine. During this decade, he frequently declared he was taking leave from science and medicine with a vehemence equal to that which he showed in taking leave from writing in “Epilog.” Moreover, he at times voiced these declarations by turning to an aesthetics of disgust that featured bodily excretions much like those he invoked with Spulwurm and Koprolalie in “Epilog.”

This aesthetics of disgust came especially to the foreground in the text Holger Hof has identified as Benn’s „frühesten literarischen Prosatext.” This text—published in 1911 and titled Unter der Grosshirnrinde: Briefe vom Meer”—already relied at key points on an aesthetics of disgust similar to that which would come to dominate Morgue a year later. As would also be the case in “Epilog,” Benn deployed this aesthetics of disgust in Unter der Grosshirnrinde to express his own disgust—a disgust now specifically directed towards medicine. Unter der Grosshirnrinde was, as its subtitle indicated, a series of fictional letters written by a doctor who has surrendered to his “Sehnsucht nach Flucht und Ferne und südlichen Ländern” and retreated to the sea. This geographical retreat signifies a simultaneous retreat by the doctor from his profession. A large part of Unter der Grosshirnrinde thus registers the crisis of confidence Benn’s fictional doctor experiences in medicine.

Benn registered this crisis in confidence as a physiological breakdown, a breakdown in which knowledge—like writing mit Spulwürmern und Koprolalien in “Epilog”—ultimately transformed into excrement. This knowledge was both general and

43 Benn, “Epilog,” 213.
44 For the passages on Benn’s Entfremdung from psychiatry, see Benn, “Epilog,” 211-212.
45 See Benn, Sämtliche Werke, 7.1: 657.
46 Benn, “Unter der Grosshirnrinde,” 355. Further quotes are in parentheses.
specific. Benn’s fictional doctor expresses disgust for what he calls “das große fressende herrschüchtige Tier: der erkennende Mensch [. . .]” (359). The general capacity for knowledge (Erkenntnis) represents, for Benn’s fictional doctor, a recent and unfortunate development in human history—a development that “kam [. . .] plötzlich zum Ausbruch und fraß wie eine Seuche über die Welt” (359). While a doctor such as Virchow saw the knowledge imparted by universal Bildung as the only way to combat disease, Benn’s fictional doctor compares such knowledge itself to disease. Not far beneath the surface of this comparison between knowledge and disease was das Ekelhafte in the specific sense of physical decay and organic waste formulated by Rosenkranz.

However, in “Unter der Grosshirnrinde” Benn did not simply hint at disgust by comparing the general human capacity for knowledge to disease. He also zoomed in both on specific kinds of medical knowledge and on a portrait of disgust painted in intimate physiological detail. After asking whether the addressee of his letter had “wohl nie ein menschliches Gehirn in Deiner Hand gehalten” (356), Benn’s fictional doctor describes a scenario similar to those unfolding in neurology around 1900 in competing theories of Hirnlokalisation. In this scenario, an experimenter cuts out sections of a human brain in order to see how these sections affected physical and intellectual functions such as motion or reading. The disturbances caused by this experiment at times border on comedy—a type Rosenkranz claimed was closely related to das Häßliche. For example, Benn’s fictional doctor informs the addressee of his letter: “Oder du ritzt mit deinem Nagel in einer anderen Furche herum, und dann macht er [der Mensch] alles falsch; dann steckt er das Streichholz in den Mund und will sich mit der Zigarre die Hände waschen und will auf einer Stiefelbürste zu Mittag essen” (357). Without the section of the brain casually removed by an experimenter’s fingernail, the experimental subject imagined by Benn’s fictional doctor performs a slapstick routine with everyday objects such as matches, cigars, and brushes.

Comedy, in turn, quickly transforms into its close relative disgust. After staging the slapstick routine performed by a man missing part of his brain, Benn’s fictional doctor cautions the addressee of his letter:

Dir klingt dies alles jedenfalls unendlich harmlos. Es ist ja auch nur Gemurmel, was ich da geschrieben habe, aber aus diesem Schlunde kommen furchterliche Stimmen. Drei Wissenschaften streiten um diese Fragen. Jede sagt, die beiden andern seien idiotisch; ich bin von allen dreien durchseucht; ich habe mich in jede einzelne eingewühlt wie die Sau in die Suhle; ganz eingeschmutzt habe ich mich mit ihnen; mit dem Erfolg, daß ich nun keiner mehr glauben kann. Ich habe die Zähne zusammengebissen vor Wut. Ich habe das ganze Zeug ausspeien wollen, aber es blieb mir am Gaumen kleben. (357)

47 For more on the knowledge of the brain emerging in neurology around this time, and on the role such knowledge played in “Unter der Grosshirnrinde” and other early texts by Benn, see Hahn, Gottfried Benn, 71-92.

48 Rosenkranz argued that das Häßliche was “ein Mittel der Komik.” Aesthetik des Häßlichen, 10. See also the section on caricature in Rosenkranz, Aesthetik des Häßlichen, 386-426.
Intensive engagement with the science of Hirnlokalisation has only infected Benn’s fictional doctor with the diseased knowledge he claims had emerged on a general level in recent human history. Benn’s fictional doctor is not, however, content simply to capture his disgust for the science of Hirnlokalisation by comparing this specific knowledge to disease in the same way as knowledge in general. He adds that he has rolled like a pig in the mud represented by the science of Hirnlokalisation, and that he has wanted to spit this science out—not unlike Kot. By confronting the addressee of his letter with an over-the-top procession of disease, mud, and Kot in this way, Benn’s fictional doctor expresses—to an extreme—the disgust he feels for the neurology of his time.49

Precisely this disgust leads Benn’s fictional doctor in “Unter der Grosshirrinde” to renounce medicine much in the way Benn would renounce writing a decade later in “Epilog.” “Ich kann nicht mehr an meine Arbeit zurück. Ich lehne den Erkenntnistrieb des Naturforschers für mich ab” (362). With these words, Benn’s fictional doctor takes leave of what he calls the Erkenntnistrieb underlying modern science. He has become, as it were, an observer of the suffering he has inflicted on himself by following such a drive for knowledge—an observer not unlike those Benn would shape a year later with the publication of Morgue. Just as critics writing on Morgue around 1912 largely turned from scenes of suffering that unfolded in medical settings featuring disease and bodily fluids, Benn’s fictional doctor turns from the suffering he observes in his own extensive engagement with sciences he comes to believe are little more than disease and the waste products to which it gives rise.

This turn away from the suffering caused by an engagement with modern science nonetheless did not constitute a wholesale rejection of the objects modern science studied. Benn’s fictional doctor, disgusted by the drive for knowledge at work in modern science, might claim: “Ich kann mich nicht mehr an der Notzucht der Dinge durch die menschliche Grosshirrinde und an der intellektuellen Befleckung der Welt beteiligen” (362). He is, however, quick to replace the violent Notzucht der Dinge carried out by the human intellect with an alternative way of knowing. “Ich möchte mit den Dingen wieder rein und brüderlich verkehren,” writes Benn’s fictional doctor. “Ich mag mich nicht mehr zwischen die Dinge drängen; ich möchte sie nur noch anschauen, betrachten, über sie lächeln, mich an ihnen freuen” (362). The negation of scientific knowledge carried out by Benn’s fictional doctor also harbors, in this sense, an impulse for a new knowledge of what he—rather vaguely—calls the Dinge on which the modern sciences had set their sights.

As will become clear in the next section, both these Dinge and the new way of knowing them envisioned by Benn’s fictional doctor would take more concrete shape as the decade of disgust Benn inaugurated in 1911 with “Unter der Grosshirrinde” approached an end. Before he formulated this alternative to existing scientific knowledge at the end of the decade, however, Benn increased—towards the middle of the decade—

49 For the way in which a substance such as mud can be disgusting in same way as disease or as an organic waste such as Kot, see Rosenkranz, Aesthetik des Höflichen, 313-314. For the way in which Schmutz—though itself physically harmless—can be as disgusting as disease, see Kolnai, “Der Ekel,” 538-539.
the intensity with which his protagonists expressed their disgust for modern medicine. Rather than immediately elaborate a program for interacting in a new and brotherly way with the *Dinge*—as his fictional doctor in “Unter der Grosshirnrinde” dramatically claims—raped by science, Benn instead staged the equally dramatic murder of a scientist in a 1914 *Szene* titled *Ithaka.*

*Ithaka* begins on a comic note similar to that struck by Benn’s fictional doctor when introducing the addressee of his letter to theories of *Hirnlokalisation* in neurology. The *Szene* opens at the close of a lecture given to students of medicine by a professor of pathology named Albrecht in his laboratory. Albrecht concludes his lecture with what he considers a “köstliche Überraschung”:


In Albrecht’s speech, Benn parodied the ideal of objectivity emerging around 1850 in pathology and still dominant in the early decades of the twentieth century. As I maintained in the section on Rosenkranz, scientists espousing this ideal of objectivity aimed to exclude all emotion and interpretation from observation. For Benn, such exclusion of emotion and interpretation culminated in an absurd empiricism—an empiricism best exemplified by the obsession Albrecht displays for the minute differences in color of a dyed rat brain. This obsession is matched in absurdity only by the petty rivalry Albrecht feels for an institute that had contradicted his past observations on these differences in color. Albrecht insists he has in hand compelling evidence to contradict his rival. However, the command *sehen Sie* he repeats to the students in his audience fails to open the enormous perspectives he expects, and instead only emphasizes the limited knowledge generated by pathology in its role as a *Schule des Sehens.*

After most of the audience has left, a student named Lutz calls Albrecht to task for precisely these limits to knowledge in pathology. Lutz asks: “Wenn man nun, Herr Professor, dies Präparat genau angesehen hat, läßt sich dann irgendetwas anderes sagen als: so, so, dies ist also nicht rot, sondern rosarot mit einem leicht braunvioletten Farbenton, der ins Grünliche spielt gefärbt?” (673). This question as to how far scientific language can go beyond registering observations in—for Lutz, excessively minute—detail sets off a debate on the value of modern science between Albrecht and a small

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50 I am adopting the designation *Szene* from Benn’s 1922 *Gesammelte Schriften.* This designation did not appear in the 1914 version of *Ithaka* published in *Die weißen Blätter.*

51 Benn, *Ithaka,* 672. Further quotes are in parentheses.
group of students who are eventually joined by Albrecht’s assistant Dr. Rönne. Albrecht fails to realize the high stakes of this debate and—when he cannot convince Rönne and the students to embrace the sober thinking of modern science over their yearning for the primitivism of a mythical past—is beaten to death by them.

Before he meets his violent end, however, Albrecht plays a crucial role as an embodiment of the modern science that had come to disgust Benn around 1910. The dialogue between Albrecht, the students, and Rönne in Ithaka maps out—in greater detail than the letter written by Benn’s fictional doctor in “Unter der Grosshirnrinde”—the terrain on which Benn was attacking modern science during his decade of disgust. This terrain included both the way of knowing at stake in modern science, and the social side that had emerged with this way of knowing. In the dialogue both preceding and carried out during Albrecht’s murder, Benn not only continued to rely on the aesthetics of disgust he developed in “Unter der Grosshirnrinde” in order to to express disgust for the Erkenntnistrieb of modern science, but also rejected what Albrecht calls the “eminent praktischen Tendenzen” (675) of a modern medicine directed towards prolonging life and improving health.

This rejection of medicine’s practical side reveals just how little Benn had in common with a doctor such as Virchow. In fact, the way in which Rönne and the students respond in Ithaka when Albrecht praises the practical side of modern medicine indicates the extent to which, for Benn, the Mitleid driving a science such as Virchow’s public health had to be replaced by a new way of observing suffering. Albrecht—revealing a sympathy not unlike that at work in Virchow’s typhus report—declares to his students: “Und die Menschlichkeit? Einer Mutter das Kind erhalten, einer Familie den Ernährer? die Dankbarkeit, die in den Augen aufblitken—” (675). Before he can finish his proclamation of faith in the way medicine serves humanity, however, Albrecht is interrupted by Rönne, who protests: “Lassen Sie’s aufblitken, Herr Professor! Kindersterben und jede Art Verrecken gehört ins Dasein, wie der Winter ins Jahr. Banalisieren wir das Leben nicht” (676). For Rönne, a science driven by Mitleid overlooks the kinds of miserable death that—like the seasons—cannot be engineered out of existence, and thus ultimately trivializes suffering.

The attack carried out by Rönne on the limits to practical action driven by Mitleid in Ithaka is accompanied, as I have claimed, by an attack on the limits of knowledge already initiated in “Unter der Grosshirnrinde.” The aesthetics of disgust on which Benn continued to rely in order to carry out this attack on the Erkenntnistrieb of modern science in Ithaka were, in fact, at times borrowed nearly word for word from “Unter der Grosshirnrinde.” In Ithaka, the student Kautski compares scientific knowledge to “eine Seuche über die Welt,” and describes “der erkennende Mensch” as “das große fressende herrschsüchtige Tier” (678), while Rönne proclaims: “Ich habe gedacht, bis mir der

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52 Rönne would appear again a few years later, with a less murderous but equally disaffected stance towards modern science, in the series of Novellen titled Gehirne. See Benn, Gehirne. Benn created other fictional doctors who expressed a similar disaffection for modern science in Novellen published around the same time as Gehirne. See Benn Die Phimose; and Benn, Diesterweg.
Speichel floß. Ich war logisch bis zum Koterbrechen” (676). Like Benn’s fictional doctor in “Unter der Grosshirnrinde,” both Rönne and the students confronting Albrecht view scientific knowledge as disease and bodily waste.

Benn, however, did not simply recycle in *Ithaka* the aesthetics of disgust he had already formulated in “Unter der Grosshirnrinde.” Characters in *Ithaka* might—like Benn’s fictional doctor—at times compare modern science to a worldwide epidemic in order to highlight the dangers of the human drive to know. These same characters nonetheless simultaneously deny modern science the stature required to pose a danger so vast as a worldwide epidemic. *Der erkennende Mensch* at the heart of modern science is not—for characters such as Rönne and the students in Albrecht’s laboratory—simply a *herrschsüchtige Tier*, but can also take on the role of the myopic empirical scientist parodied in Albrecht’s speech on the color of a dyed rat brain.

This parody of Albrecht as a myopic empirical scientist was not only for Benn’s audience. Both the audience in Albrecht’s laboratory and Albrecht’s assistant carry on the same parody in their dialogue with Albrecht. Rönne asks whether—just as his contemporaries find amusing past efforts to prove “aus der Vollkommenheit von Organen die Weisheit Gottes”—“man nicht nach weiteren 200 Jahren ebenso darüber lächeln wird, daß Sie, Herr Professor, drei Jahre Ihres Lebens darauf verwandten, festzustellen, ob sich eine bestimmte Fettart mit Osmium oder Nilblau färbt?” (674). Lutz, in turn, makes clear that he is not ready to wait two hundred years for Albrecht’s obsession with the chemical best suited to dye a particular kind of fat to become obsolete in science. He asks Albrecht: “Was wissen Sie eigentlich? Daß die Regenwürmer nicht mit Messer und Gabel fressen und die Farrenkräuter keine Gesäßschwielen haben. Das sind Ihre Errungenschaften. Wissen Sie sonst noch was?” (675) For Lutz, a science based on empiricism merely affirms that reality does not follow absurd laws such as those of a comedy in which worms eat with fork and knife or ferns have the calluses typically found on the backsides of apes.

The biting humor of the questions Lutz and Rönne direct towards Albrecht indicates the extent to which both Albrecht’s students and even Albrecht’s assistant view as impoverished the way of knowing central to modern science. Lutz not only insists on asking what kind of knowledge Albrecht actually possesses, but—in the act of murdering him—proclaims: “Forsche tiefer, wenn Du uns lehren willst! Wir sind die Jugend. Unser Blut schreit nach Himmel und Erde und nicht nach Zellen und Gewürm” (680). Albrecht is, in the end, a bad teacher who has failed to train his students to look past the superficial world available to the senses—a world often, as Lutz’s reference to *Gewürm* suggests, in itself disgusting.53 The task of a new science—a science whose gaze is directed, for Lutz, towards *Himmel*—would thus be to soar beyond the limits of an empiricism narrowly focused on disgusting objects such as *Gewürm*, and beyond the similarly earth-bound practical action directed against suffering by medicine as a social institution.

Though overshadowed by a yearning for the primitivism of a mythical past, this task is nonetheless implicit in the final lines of *Ithaka*—lines in which Lutz states: “Seele,

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53 Rosenkranz included *Würmer* among the creatures that “von der Verwesung leben.” *Aesthetik des Häßlichen*, 314.
klaftere die Flügel weit; ja, Seele! Seele! Wir wollen den Traum. Wir wollen den Rausch. Wir rufen Dionysos und Ithaka! —” (680). As he murders the representative of a science that has become obsolete, Lutz demands a new science of Seele. Half a decade after Benn published Ithaka, he wrote a fictional speech designed to train students such as Lutz in precisely this science of Seele and its corresponding approach to suffering. The yearning for Rausch and Traum to which Lutz gives voice in Ithaka continued to play a significant role in the fictional speech written by Benn as his decade of disgust reached an end. Beneath this yearning, however, was a concrete program for reforming medicine—a program I will examine in the next section.

A Decade of Disgust II: Reforming Medicine

The current chapter has, to this point, tracked the varying uses to which Benn put disgust in the decade between 1910 and 1920, as well as the history these uses of disgust already had starting around 1850 in Rosenkranz’s Aesthetik des Häßlichen. Rosenkranz introduced, I have claimed, emotion into the observation of disease—emotion missing in the ideal of objectivity espoused by the medicine of his time. Despite Rosenkranz’s efforts, however, objectivity remained the dominant ideal in medicine at the beginning of the twentieth century. Benn ultimately targeted this ideal of objectivity—and particularly the lack of emotion it required from observers of disease—with an aesthetics of disgust similar to that which Rosenkranz had formulated in the middle of the nineteenth century. The aesthetics of disgust that came to the surface in the reception of Benn’s Morgue around 1912 thus aimed to recover emotion for observers confronted with disease in medicine during an age that had forgotten the lessons of Rosenkranz.

Benn’s desire to recover emotion for observers of disease by turning to an aesthetics of disgust in Morgue only makes sense, as I claimed in the previous section, in light of the disgust Benn himself expressed for medicine around the same time he published Morgue. In texts such as “Epilog,” “Unter der Grosshirnrinde,” and Ithaka, Benn rejected what he called the social compromises of his age—social compromises medicine played a significant role in shaping. The rejection of medicine unfolding in these texts culminated with a group of medical students carrying out, in Ithaka, an act of physical aggression against a professor of pathology who embodied the limits of both scientific knowledge and practical scientific action guided by sympathy. The murdered professor Albrecht was, for Benn as for his protagonists in Ithaka, a bad teacher who failed to channel the energies of students dissatisfied with the intellectual and emotional reach of modern medicine.

Only a few years after he published Ithaka, Benn returned to the scene of the crime perpetrated by students disgusted with the science Albrecht taught them. Albrecht’s demise created, as it were, a vacuum at the lecture-hall podium. In a 1920 text titled “Das moderne Ich,” Benn filled this vacuum by staging a lecture designed to right the wrongs in Albrecht’s teachings. The lecture staged by Benn in “Das moderne Ich” betrayed a disgust—similar to that shown by the students of medicine and Rönne in Ithaka—with the limits of knowledge and practical action in modern medicine. However, rather than lead to murder, this disgust led to reform. In “Das moderne Ich,” Benn sketched the
contours of a new medicine that would look beyond the narrow limits of empirical knowledge and of practical action steered by Mitleid. This new medicine embraced suffering as knowledge in its own right, and foregrounded the privileged access to this knowledge available to the doctor who observed the broad panorama of suffering on display in everyday medical practice.

“Das moderne Ich” was, in this sense, a lecture aimed to train its audience in the art of observing suffering. Benn had laid the groundwork required for this task during the decade leading to the publication of “Das moderne Ich.” The aesthetics of disgust at work in the texts Benn published during the first half of this decade—an aesthetics unfolding especially in the scenes of death and disease in Morgue, but also in the comparisons between writing, Spulwürmern, and Koprolalien in “Epilog,” as well as in the similar comparisons between scientific knowledge, disease, and Kot in “Unter der Grosshirnrinde” and Ithaka—demanded that readers react to suffering with strong emotion. In “Das moderne Ich,” Benn converted the strong emotion he had cultivated in an aesthetic register into a model for observing suffering in medicine. Aesthetics thus ultimately provided Benn—as it had provided Rosenkranz—with a means to reform the stance taken by medicine towards the pain of suffering and disease.

Before articulating the specific terms of this reform, however, Benn revisited the disgust that had driven him to shape a new model for observing suffering in medicine. The fictional speaker in “Das moderne Ich”—a speaker whose identity remains unspecified—begins his speech by telling his audience: “Meine Herren Kollegen, die Sie jetzt Medizin studieren wollen, [. . .] ich will Mißtrauen säen in Ihre Herzen gegen Ihrer Lehrer Wort und Werk, Verachtung gegen das Geschwätz vollbärtiger Fünfziger, deren Wort der Staat lohnt und schützt, und Ekel vor einem Handwerk, das nie an eine Schöpfung glaubte.”54 Benn’s fictional speaker makes explicit for the fictional audience of “Das moderne Ich” the program Benn had already been carrying out in texts such as “Unter der Grosshirnrinde” and Ithaka: teach observers to feel disgust for a medicine that embraced Handwerk rather than Schöpfung.55

The fictional audience addressed by Benn’s speaker in “Das moderne Ich” differs, however, in an important way from the readers of texts such as “Unter der Grosshirnrinde” and Ithaka—and even from the other fictional audience of students whose yearning for intoxication leads them to inflict violence on their teacher in Ithaka. This yearning for intoxication, and the violence to which it leads, had—by the time Benn published “Das moderne Ich” in 1920—played out on a large scale in war. Soldiers who fought, and were often wounded, during the recently concluded war constitute a large part of the audience addressed by Benn’s fictional speaker. “Einige von Ihnen tragen ein Glausauge,” he states, “einige den Arm verbunden, fast alle waren im Krieg” (11). Benn’s fictional speaker faces an audience whose members have suffered not only disfigurations caused

54 Benn, “Das moderne Ich,” 11. Further quotes are in parentheses.
55 The same year he published “Das moderne Ich,” Benn published another text—titled Der Garten von Arles—containing a similar fictional lecture in which a “Privatdozent der Philosophie” aims to teach his audience what he calls “verachten” for “dies Jahrhundert der abgestandenen Kategorien.” Der Garten von Arles, 156.
by murderous physical violence similar to that inflicted by the students in *Ithaka* on their professor, but have also experienced the prolonged psychic agony of “Nächten, wo Ihnen die Ratten den Fettfleck aus der Jacke fraßen und aus den Mundwinkeln den Krümel Brot [. . .]” (12).

Both this physical and psychic suffering has, according to Benn’s speaker, placed the war veterans in his audience in a precarious position. “Es ist mit Ihnen so,” he claims, “daß Sie am Abgrund stehn [. . .]” (12). In this precarious position, fears Benn’s speaker, the war veterans in his audience might be susceptible to finding comfort in the false promises of modern science. He thus cautions these war veterans: “[W]enn man Ihnen einen Knochen in die Hand gibt und eine Brille vor die Augen, wenn man Sie in Räume führt, wo es so sachlich nach Jod und Alkohol riecht, wenn dann ein Glatzkopf hinter den Ladentisch tritt und ‘Auf, auf, junge Freunde’ ruft [. . .], so bemörsern Sie diesen kaufmännischen Vertreter [. . .]” (12). Science has become, for Benn’s speaker, little more than an industry propped up on particular material objects, instruments, and spaces. The representatives of this industrial science thus deserve, Benn’s speaker further claims, to be on the receiving end of violence just as extreme as that inflicted on the professor of pathology Albrecht in *Ithaka*—namely, the violence of being pulverized by mortars.

The speaker in “Das moderne Ich” does not simply encourage the veterans in his audience to turn their weapons against modern science. This speaker, unlike the medical students in *Ithaka*, proposes measures to reform the science with which he expresses disgust and for which he aims to cultivate a similar disgust in his audience. The physical and psychic suffering experienced by the veterans in this audience can, for Benn’s fictional speaker, not adequately be addressed by a science and society still gripped by the obsession with “praktischem Erfolg” that emerged amidst the upheavals of the French Revolution (21). To observers who espoused this ideal of practical success, suffering was an evil to be eliminated—a stance evident in the words Benn’s fictional speaker has a *Patentante* speak to the science of her age: “Wunderbar, wieviel Leiden kannst du lindern, wieviel Schmerzen stillen in Hütte und Palast” (22).

However, what went overlooked by this *Patentante*—and by the age she represented—was the fact that suffering could be engaged on its own terms. The society targeted by Benn’s speaker in “Das moderne Ich” had failed to account for the *Sinn des Leidens* in a way similar to that identified by Buytendijk over twenty years later in *Over de pyn*. The meaning of suffering had been lost with what Benn’s fictional speaker calls “die Umstellung zum sozialen Ich im neunzehnten Jahrhundert” (41), a shift that produced “[d]er Mitmensch, der Mittelmensch, das kleine Format, das Stehaufmännchen des Behagens [. . .]” (42). This *Mittelmensch* came to dominate an age, Benn’s speaker tells his audience, “[w]o der Schmerz belästigt wie eine Fliege, gegen die man eine Klappe schneidet, wo der Schmerz wie Flechte kommt und wie Schuppung geht [. . .]“ (42). Pain had, for a society obsessed with alleviating it, simply become a nuisance no different than a bothersome insect or a passing irritation of the skin.

This role as nuisance, Benn’s fictional speaker maintains, is too limited for pain to play—a fact he does not hesitate to tell pain directly. In an apostrophe to pain, Benn’s speaker tells it he laments the “prostituierter Klamauk” that has arisen because “der Utilitarier dich verwendet für des Mittelmenschen Dyskrasien” (44). The comic
miscasting of pain as nothing more than the constitutional indispositions of the Mittelmensch has to be replaced, for Benn’s speaker, by a myth that restores pain to its cosmic stature. Benn’s speaker invokes this cosmic stature by addressing pain as the “Chaos, das die Rieselfelder bürgerlicher Ratio überfegt und tief vernichtet und den Kosmos sich neu zu falten zerstörend zwingt [. . .]” (43-44). Pain had the power—much like the gods of myth—to create a new cosmos from the ruins of a cosmos once dominated by bürgerliche Ratio.

Benn’s speaker does not, in his apostrophe to pain, specify how this new cosmos should differ from the old. To an extent, his yearning for a new cosmos resembles the yearning for intoxication expressed by the students in Ithaka. Indeed, towards the conclusion of “Das moderne Ich,” Benn’s fictional speaker addresses his audience with a stream of poetic images that include the sudden appearance of Dionysus, and—in Dionysos’ train—“die Stunde der großen Nacht, des Rausches und der entwichenen Formen” (53). Before turning entirely to the realm of myth, however, Benn’s speaker points to a way medicine can engage pain on its own terms in a society that has reduced pain to a nuisance. Engaging pain in this way, he maintains, is a task best suited to the doctor whose senses are confronted on a daily basis by the suffering human being. Only by opening the archive of emotions stored, as it were, by the doctor in his role as an observer of pain could modern medicine adequately locate—to again borrow Buytendijk’s term—the Sinn des Leidens.

This meaning of suffering was not to be located in any specific field of medical knowledge, but in the subterranean knowledge—largely excluded from medical encyclopedias and handbooks—accumulating in the senses of the doctor as he observed his patients in pain. Benn’s speaker calls the doctor a “Professionist des Emotionellen” (44-45) who


The human being is, for Benn’s speaker, a catalog containing knowledge that can only be accessed by a doctor whose senses are trained in a way of knowing radically different than empiricism. Such a doctor, in the synecdoche deployed by Benn’s speaker for sensory immersion, has to smell and taste examples of suffering that include a man without eyelids and a woman with Vorfall—a condition Dornblüth’s medical dictionary defined as the “Heraustreten von inneren Organen.”56 The doctor attuned to the close sensory contact he experienced with these graphic disfigurements of the body could claim to know suffering in a way not available to a science and society that only knew how to alleviate suffering.

The way to reform medicine was thus, for Benn’s speaker in “Das moderne Ich” as for Benn, to access the knowledge of suffering stored in the senses of the doctor.

56 Dornblüth, Klinisches Wörterbuch, 130, under the entry “Prolapsus.”
However, this knowledge—buried as it was beneath the imperatives of objectivity dominant in the science assaulted by Benn and his protagonists in the texts examined over the course of this chapter—could only be located with the means offered by aesthetics. To establish for the doctor a special claim to knowledge of suffering, Benn relied on examples that belonged not only to medicine, but also to the aesthetics of disgust he had cultivated in the decade leading up to “Das moderne Ich.” The man without eyelids and the woman with inner organs outside her body who appeared in “Das moderne Ich” took their place—in this aesthetics of disgust—beside the diseased and dying bodies in Morgue, as well as beside the comparisons of knowledge to disease and Kot in “Unter der Grosshirrinde” and “Epilog.”

By returning to an aesthetics of disgust in this way, Benn made clear the role such an aesthetics played for him in reforming medicine. As Benn’s speaker in “Das moderne Ich” claims, the doctor stored—in his role as observer—a vast knowledge of suffering. The doctor could, however, only access this vast store of knowledge by accepting his role as observer—a role the imperatives of objectivity dominant in the medicine of his time largely required him to deny. Aesthetics did not abide by these imperatives, and had in turn been free to explore how observers responded to the suffering they observed in death and disease. The observer of death and disease who had emerged in Rosenkranz’s Aesthetik des Häßlichen around 1850—an observer whose lineage, I have claimed, extended to the critics responding to Benn’s Morgue over half a decade later—could thus teach doctors how to be what Benn’s fictional speaker in “Das moderne Ich” calls a Professionist des Emotionellen. Observers who felt disgust for death and disease in aesthetics modeled how medicine could turn to emotion in order to observe suffering in a new way.

It is ultimately in this sense that the aesthetics of disgust Benn developed in Morgue culminated, after a decade in which he had also expressed disgust for medicine itself, in a program of reform. Benn may have indicated aesthetics would play a role in reforming medicine only towards the end of this decade. In the years preceding the decade’s end, he had nonetheless already intensively prepared aesthetics to play this role. Before Benn’s fictional speaker in “Das moderne Ich” claimed medicine required a type of doctor who would observe suffering as a Professionist des Emotionellen, Benn had taught precisely this trade to readers of Morgue and the other texts deploying an aesthetics of disgust examined in this chapter. Though written and received as literature, these texts—and the observers of suffering they shaped—have an alternate history as the unofficial medical writings in which Benn formulated a new knowledge of pain.57

57 For Benn’s official medizinische Schriften, see Benn, Sämtliche Werke, 7.1: 377-450. The first to gather these medizinische Schriften was Werner Ruebe in 1965. See Benn, Medizinische Schriften.
Chapter 5
From Sympathy to Spannung: Ernst Weiss and Yellow Fever

The second part of this dissertation has examined ways of embracing pain that emerged in poetry, prose, and philosophy during the first half of the twentieth century. These ways of embracing pain, I have claimed, came to replace sympathy and its accompanying imperative to alleviate pain—an imperative evident during the last half of the nineteenth century in Virchow’s public health and in Hauptmann’s drama. The sympathy cultivated in these institutional settings lost traction, during the first half of the twentieth century, to the notion that pain could be observed on its own terms. The third and fourth chapters have traced this shift in the philosophical anthropology of Plessner and Buytendijk, and in the poetry and prose of Benn. The fifth and final chapter, both of this part and of this dissertation, will further explore the shifting stakes of observing pain in the twentieth century. To accomplish this aim, I will turn to a novel featuring an epidemic as devastating and persistent as the typhus epidemic at the heart of Virchow’s typhus report.

This novel is Ernst Weiss’ 1931 Georg Letham: Arzt und Mörder. Georg Letham, the novel’s eponymous protagonist, experiences a drastic change in character amidst an outbreak of yellow fever. The outbreak takes place on an island housing the penal colony to which Letham has been deported when found guilty of murder for poisoning his wife. Because of his background as a bacteriologist—and because of the influence exerted by his father, a high-ranking official in the Austrian government—Letham is placed on a commission studying the outbreak of yellow fever on the island. After a series of experiments on themselves and others, the members of the commission discover that yellow fever is transmitted by a particular kind of mosquito. With the cooperation of the island’s governor, the commission carries out a program of exterminating (ausrotten) this mosquito and thus of eliminating yellow fever. The commission’s success in this undertaking redeems Letham psychologically and socially. He makes amends for murdering his wife by fighting a murderous epidemic, is freed from forced labor, and continues to reside on the island as a doctor.

This chapter will focus largely on Letham’s social redemption, which is closely tied to the triumph of public health over large-scale disease in Weiss’ novel. The novel’s conclusion shows public health at the height of its effectiveness in alleviating the pain of disease. Such effectiveness was a distant goal when Virchow wrote his typhus report at the early stages of public health. Yet, in Weiss’ novel, public health—and its mission of alleviating pain—play a secondary role. Letham and the other members of the commission turn to public health only after a series of experiments designed to prove yellow fever is transmitted by the mosquito. By exterminating the mosquitoes on the island, the commission does not simply hope to alleviate the pain of a population suffering from yellow fever, but also to put a conclusive end to experiments whose central aim is new knowledge of disease. The public-health measures undertaken at the novel’s conclusion represent, in this sense, experimentation by other means.

By the time Weiss published Georg Letham in 1931, such experimentation had come to dominate public health. As early as the 1880s, the emerging field of bacteriology
had narrowed the cause and transmission of disease from the broad social conditions identified by Virchow to specific microorganisms and their carriers.¹ This emphasis on specific microorganisms by no means ruled out social and environmental causes, but nonetheless shifted the epistemological ground on which an institution such as public health was built. Virchow called for social reform because he believed poor living conditions created the miasma that ultimately caused typhus in Upper Silesia. Decades later, however, bacteriologists and other scientists in the field of public health lacked such certainty about the cause of disease. Instead, they had to perform experiments that would reveal the microscopic pathways by which the microbes causing disease traveled between human and nonhuman populations.

When Weiss—following the spirit of bacteriology—subsumed public health under experiment in *Georg Letham*, he gave shape to an observer of pain unlike those who have appeared in previous chapters. To the sympathetic observer cultivated by Hauptmann and Virchow, the eccentric observer cultivated by Plessner and Buynendijk, and the disgusted observer cultivated by Benn, Weiss added the observer in a state of *Spannung.*² For this observer, disease and the pain it caused were no longer primarily an occasion for social intervention driven by sympathy, or for a holistic medicine focused on the meaning of suffering. Instead, disease was a puzzle to be solved by means of experimentation. In turn, the primary task of the observer facing disease was to follow the twists and turns of experiments dangerous to the scientists performing them, and often uncertain in outcome. This observer was no longer moved to sympathize with a population suffering from disease as a collective protagonist, but to feel *Spannung* at the uncertainties faced by a new protagonist—namely, the scientists performing experiments in order to locate the cause of disease.

The rise of the experiment in bacteriology and public health, then, reshaped the parameters by which disease could be narrated. These parameters will be the focus of the current chapter. My interest, as in previous chapters, is in the way the *Spannung* Weiss cultivated in readers of *Georg Letham* emerged at the intersection of scientific knowledge and narration. My claim will be that Weiss cultivated *Spannung* in his readers precisely because the narrative of yellow fever in *Georg Letham* mirrored the logic of experimentation prominent in bacteriology and public health around 1930.

In order to make this claim, I will examine—in the first section—how literary scholars began to dedicate attention to *Spannung* around the beginning of the twentieth century. The second section will look at the role *Spannung* played in the way scientists understood the nature of experimentation. Towards this end, I will turn to the American writer and scientist Paul de Kruif, whose 1926 book *Microbe Hunters* was a significant source for Weiss in *Georg Letham*. In the second section, I will briefly consider a book published by de Kruif a few years before *Microbe Hunters*: his 1922 *Our Medicine Men*. Reflections in *Our Medicine Men* on spontaneity in experiment place de Kruif in close

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¹ For the rise of bacteriology, see Berger, *Bakterien in Krieg und Frieden*, 27-91.
² I am leaving the term *Spannung* untranslated, as it encompasses a wide range of meanings such as tension or suspense. For more on this range of meanings, see Anz, “*Spannung,*” 467; and Kaiser-El-Safti, “*Spannung,*” 1282-1283.
proximity to literary scholars writing on Spannung around 1900. In the third and fourth sections, I will examine how this notion of experiment—and the Spannung experiment entailed—played out in the way Weiss narrated both knowledge of and the fight against yellow fever in Georg Letham.

From Sympathy to Spannung

As the full title of Weiss’ novel suggests, Georg Letham: Arzt und Mörder was not only about a yellow fever epidemic. The first four of the seven chapters comprising the novel recount Letham’s fall from doctor to murderer. These chapters tell of how Letham poisons his wife with a toxin extracted from scarlet-fever cultures in his laboratory, is quickly arrested, sentenced, and deported to the island on which he later joins the commission investigating yellow fever. How Weiss narrated the murder—which terminates a phase of Letham’s life marked by professional, financial, and marital troubles—is not important for my argument. Important, however, is the fact that Weiss signaled he was borrowing from an existing set of narrative conventions. This signal comes shortly after Letham has murdered his wife and left his apartment. As he returns home, he is arrested. His stepdaughter and son-in-law, already suspicious that he intends to kill his wife and unable to reach anyone at the apartment, have called the police. Before recounting the details of his arrest, and of the evidence he has carelessly (and, it appears, almost intentionally) left behind, Letham addresses his reader. “Ich werde mich jetzt in äußerster Kürze fassen,” he states, “obgleich das Kommende, das ich in diesem Kapitel [. . .] abtun will, den Inhalt jener Literaturart ausmacht, die man in unserer Zeit für die spannendste hält, nämlich den Inhalt der Detektivromane.” Letham wants to quickly dispense with the narrative of his arrest, and proceed to the “eigentlich[e] Grunde” (55) for his act—reasons he will explore over the course of his trial, deportation, and redemption while investigating yellow fever. Nonetheless, he acknowledges his debt to the conventions of the Detektivroman in narrating his crime and its aftermath.

These conventions will be the focus of the current section. In particular, I am interested in why Letham could acutely note that his contemporaries held the Detektivroman to be so spannend. This nod to the Detektivroman suggests Weiss’ readers would have already been trained in the art of Spannung, an art that was—as will emerge in this section—closely related to the sympathy examined in the second chapter. Letham might have dismissed the Detektivroman as a shallow genre that failed to do justice to his actual reasons for committing murder. Nonetheless, my claim is that Weiss leaned heavily on the conventions of the Detektivroman to narrate much more than simply the details of Letham’s arrest. The Spannung so essential to the Detektivroman, as I will argue in following sections, also played a significant role in narrating experiments with yellow fever. Before making this claim, however, I will outline how—by the time Weiss wrote Georg Letham—the Detektivroman had come to be seen as a paradigm for the power of narrative to train readers in the art of Spannung.

3 Weiss, Georg Letham, 55. Further quotes are in parentheses.
The current section, then, will move outwards from the *Detektivroman* to the broader horizon of *Spannung* in aesthetics around 1900.4 The turn of the twentieth century witnessed a flood of writings on the *Detektivroman*.5 My interest is, however, limited mainly to the way the *Detektivroman* placed readers in a state of *Spannung*. When Weiss referred to the *Detektivroman* as *spannend*, he indicated familiarity with a reader whose contours had been sketched in aesthetics—a reader whose capacity for *Spannung* went well beyond the boundaries of a single genre. Ultimately, this reader was just as much the target of the *Georg Letham* chapters on epidemic as those on murder. Weiss’ juxtaposition of doctor and murderer in the person of Georg Letham was also a juxtaposition of the conventions shaping narratives of experiment and crime.

Indeed, literary scholars writing on the *Detektivroman* around 1900 were aware that the stakes of their investigations extended beyond it. For example, in a 1914 book titled *Sherlock Holmes, Raffles und ihre Vorbilder: Ein Beitrag zur Entwicklungsgeschichte und Technik der Kriminalerzählung*, Friedrich Depken noted that “[e]ine vollständige Geschichte des Kriminalromans ist bisher nicht veröffentlicht worden [. . .]”.6 Depken did not pretend to offer such an “erschöpfende Darstellung” (1), but instead limited himself to “eine bestimmte Entwicklungsreihe von Kriminalerzählungen” (1) comprised by those of Edgar Allan Poe, Emile Gaboriau, and Arthur Conan Doyle. These limitations, however, did not prevent Depken from addressing narrative as a whole. In a section on *Spannung* in narratives by Poe, Gaboriau, and Doyle, he wrote: “Um auf den Leser zu wirken, bedarf jede Erzählung der Spannung. Ohne sie tritt Ermüdung und Langeweile ein, weil das Interesse des Lesers nicht geweckt wird” (8). Like all good narratives, the *Detektivnovelle* captured the attention of a reader otherwise prone to fatigue and boredom. This reader in a state of *Spannung* became capable of feeling “lebhaftes Mitempfinden,” and in turn desired “an den Handlungen selbst teilzunehmen” (8).

Depken viewed the *Detektivnovelle* as a paradigm of the ways narrative created *Spannung* for readers. In particular, the *Detektivnovelle* modeled what Depken called “zwei Arten der Spannung” at stake in narration: “die Gemüts- oder Gefühlsspannung und die intellektuelle oder Verstandesspannung” (8). Emotional *Spannung*, he claimed, “bewirkt das Ergriffensein, das Sichversenken des Lesers” (8). Like sympathy, emotional

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4 Admittedly, I am focusing only on a part of this horizon. For texts on *Spannung* written around 1900, but largely beyond the scope of my argument, see Büchner “Bedeutung der *Spannung*”; and Harlan, *Schule des Lustspiels*, 20-33. *Spannung* has, moreover, recently regained scholarly attention. For a good overview, see Anz, “Spannung—eine exemplarische Herausforderung”; and Mellmann, “Bestimmung von ‘Spannung.’ ” See also Staiger, *Grundbegriffe der Poetik*, 155-218.

5 A prominent example is Siegfried Kracauer’s essay “Die Hotelhalle,” which was first written in the 1920s as part of a larger manuscript titled *Der Detektiv-Roman*. See Kracauer, *Der Detektiv-Roman*, 389-390. For the wide range of essays on the *Kriminalroman* published over the course of the twentieth century, see Vogt, *Der Kriminalroman*.

6 Depken, *Sherlock Holmes*, 1. Further quotes are in parentheses.
Spannung led the reader to identify with “Darstellungen des Innenlebens der Menschen” (8). Yet, this emotional Spannung could be accompanied by an intellectual Spannung that “erweckt Neugier auf Entwicklung und Ausgang der Handlung” (8). “Wir hoffen und erwarten,” Depken continued “daß eine Handlung in einer bestimmten Richtung sich entwickeln und ablaufen möge, und hegen doch zugleich die Befürchtung, daß es anders kommen kann, als wir es wünschen” (9). Like sympathy, Spannung created in readers a strong emotional investment in the outcome of a narrative. These readers, however, felt no impulse to intervene and steer the course of the narrative towards their hoped-for outcome. Instead, they oscillated between hope and fear as the plot unfolded.

This shift from intervention to oscillation points to a crucial difference between sympathy and Spannung. For Virchow and Hauptmann, sympathy would move readers to alleviate the hunger and disease suffered by populations in Upper Silesia. These readers were not suspended between a state of hope and fear, but—at least ideally—would intervene to change events for the better. The readers envisioned by Depken instead felt a “Bedürfnis nach Aufklärung” (9). One of the “Hauptmittel zur Erzeugung von Spannung,” he claimed, was “die Einkleidung in ein Geheimnis, das uns über den weiteren Verlauf der Erzählung stets im Unsichern läßt [. . .].” (9). For Depken, a good narrative held the attention of its readers by keeping them in a state of constant uncertainty. These readers, in turn, had to resolve uncertainty into knowledge. The desire for knowledge replaced the desire for social action as the motor driving narrative.

The way Spannung created this desire for knowledge—or Neugierde—had already, well before Depken wrote his book on the Kriminalerzählung, been the focus of the novelist and literary critic Otto Ludwig. In an essay published in 1891, and titled “Die Spannung in der Erzählung und im Drama,” Ludwig claimed that “die Spannung der Neugierde [besteht] darin, daß uns soviel gesagt wird, daß wir gern alles wüßten, und dieses uns ganz allmählich zugemessen wird.” A narrative kept readers in suspense by dealing out measured portions of knowledge. As Ludwig maintained:

Sehen wir Bewegungen eines Menschen, die wir nicht sogleich zu deuten wissen, so treten wir ihm näher und sehen ihm zu, bis wir wissen, was er macht. Durch und bei dem Thun wird der Mensch selbst uns interessant. Je auffallender und rätselhafter Thun und Mensch, desto mehr sind wir gespannt, zu wissen, was er macht, wer er ist, was er damit will. Dann, wenn wir dies wissen, ob es ihm gelingen wird. Wir erfahren dabei, auf welche andre Personen dieses Handeln geht, und je nachdem diese oder jener uns stärker interessieren, parteien wir uns für jenen oder diese. (102-103)

7 Ludwig, “Die Spannung,” 102. Further quotes are in parentheses. Ludwig died in 1865, but this essay was first published in his Gesammelte Schriften in 1891. See Ludwig, Gesammelte Schriften, 6.2: 457-458. In an important sense, this 1891 publication date reflects the way Ludwig anticipated the approaches to Spannung taken in psychology and aesthetics around 1900. His essay was cited, for example, next to works by Wilhelm Wundt, Theodor Lipps, and Wilhelm Dilthey in Büchler’s comprehensive study of Spannung. See Büchler, “Bedeutung der Spannung,” 219.
The interest readers felt for a protagonist grew, according to Ludwig, in tandem with the knowledge these readers had of the protagonist—knowledge gained largely as readers became drawn in by the protagonist’s rätselhafter Thun. As readers came to know this rätselhafter Thun, they sided either with the protagonist or other characters within the protagonist’s orbit. Spannung, like sympathy, thus had a partisan dynamic.

The partisan dynamic of Spannung differed, however, in a significant way from that of sympathy. Readers in a state of Spannung sided with or against a protagonist depending on the degree of agency this protagonist could exert over his or her actions. Ludwig maintained that this degree of agency differed for the protagonist of a novel and of a drama. He observed that “[i]m Drama will der Held sich die Welt unterwerfen und erreicht es oder nicht, er siegt oder geht zu grunde; im Romane macht die Welt etwas oder nichts aus dem Helden” (104-105). This neat inversion encapsulated the contrasting possibilities of agency available to the protagonists in two competing genres: the protagonist of a drama could act in the world, the while the world acted on the protagonist of a novel.

These different possibilities for agency produced, in turn, different emotions in readers. The source of emotion for spectators at a drama resided in the protagonist’s actions. As Ludwig maintained: “Der dramatische Held will etwas machen. Ist es recht? und handelt er so, daß sein Machwerk geraten wird? Wünschen wir, daß es gerate oder nicht—in Bezug auf unsre Sympathie [. . .]” (104). Whether the Machwerk erected by the protagonist of a drama would withstand the existing social order drove the spectator at a drama to feel an emotion akin to what Depken would later call Gefühlsspannung—an emotion, I have maintained, closely related to sympathy. For readers observing the reduced agency of the protagonist in a novel, however, the questions that generated emotion changed. Ludwig claimed that “der epische Held ist ein Lotteriespieler; er hat ein Los; wie hat er es erhalten? wird das Los gewinnen oder nicht? gönne ihm das eine oder das andre?” (104). While the tragic hero was capable of acting against the world, the hero in the novel was no different than a Lotteriespieler subject to the world’s turnings. All the reader could do was join the hero for the ride.

The reader in this position observed the pain of others in a much different way than the sympathetic observer. This difference is particularly evident in the pages Hubert Roetteken dedicated to Spannung in a broader examination of what, in his 1902 Poetik, he called “die einzelnen Gefühlstanlässe.” Roetteken maintained that “[w]enn eine dichterische Figur einen tiefen Schmerz oder einen schweren Konflikt zeigt, so habe ich die Tendenz, die Gründe dieses Schmerzes oder dieses Konflikts auf ihre Stichhaltigkeit genau zu prüfen, bin also gespannt auf jede Aufklärung, die mir darüber zu teil wird” (221). For the observer imagined by Roetteken, pain was a puzzle that required Aufklärung. This observer no longer mobilized for social action that would help a suffering protagonist, but instead simply waited to see how this protagonist would help him- or herself. As Roetteken claimed: “[S]ehe ich ihn [den Helden] in schwierigen Situationen, so bin ich darauf gespannt, wie er sich herausarbeiten wird [. . .]” (221).

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8 Roetteken, Poetik, xi-xii. Further quotes are in parentheses.
Roetkeken thus inverted the relationship between emotion and pain that characterized sympathy. The ultimate goal of sympathy was to extinguish the pain an observer felt by changing places with a suffering protagonist. Spannung, however, lasted only as long as the sufferings of a protagonist. In an important sense, the observer in a state of Spannung needed the protagonist to continue suffering. Both the sympathetic observer and the observer in a state of Spannung might feel a heightened sense of emotion as the pain of the protagonist under observation increased. However, only the observer in a state of Spannung privileged this emotional state enough to leave the protagonist to his or her own devices in fighting against the cause of pain. For the observer of pain, Spannung was an end in itself, and no longer—like sympathy—a means to an end.

Precisely this observer in a state of Spannung—an observer ready to embrace the pain of others in order to feel a heightened sense of emotion—was targeted by Weiss in Georg Letham. As I have claimed, the way Weiss addressed this observer is especially evident in the parts of Georg Letham dedicated to narrating the murder of Letham’s wife. On this level, Weiss invoked the conventions of the Kriminalroman familiar to readers of his time. My argument is that, ultimately, these conventions were also at stake in the way Weiss narrated experiments with yellow fever in Georg Letham. I will thus shift my attention from the way Spannung was conceptualized in aesthetics around 1900 to the role Spannung played in the notion of experiment developed in the early 1920s by Paul de Kruif, the American scientist and writer who was a significant interlocutor for Weiss in Georg Letham.

Experiment as Lottery

In many ways, De Kruif’s biography embodies both the tensions and productive intersections of science and literature at the heart of this dissertation. He worked as a microbiologist at the Rockefeller Institute between 1920 and 1922, and published several scientific articles during this time. He soon took an interest, however, in producing more than scientific articles, and in the early 1920s began to write about science. His early writings—articles and a book chapter satirizing organized medicine in America—brought him into conflict with his colleagues. As a result of these articles, de Kruif lost his position at the Rockefeller Institute. Shortly afterwards, he began to pursue serious literary activity and collaborated with the novelist Sinclair Lewis on Arrowsmith.

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9 For these articles see de Kruif, “Acid Agglutination”; and de Kruif, “Rabbit Septicemia.”
10 Many of these articles were compiled in de Kruif’s 1922 book Our Medicine Men. See also de Kruif, “Medicine.”
11 De Kruif played a significant role in the writing of Arrowsmith, to the extent that Lewis noted in the book’s dedication: “To Dr. Paul H. de Kruif I am indebted not only for most of the bacteriological and medical material in this tale but equally for his help in the planning of the fable itself—for his realization of the characters as living people, for his philosophy as a scientist.” Arrowsmith, 2. For more on the role de Kruif played in the writing of Arrowsmith, see Hutchisson, “The Composition of Arrowsmith.”
novel featured a bacteriologist who, like Georg Letham, ends up studying an epidemic (in this case plague) on a tropical island. De Kruif, too, wrote his own book on epidemics—Microbe Hunters—after collaborating with Lewis. In this book, he told accessible but thoroughly researched stories about how scientists such as Louis Pasteur, Robert Koch, and Ronald Ross discovered the causes of and cures for diseases such as tuberculosis, anthrax, and malaria.

Among the stories de Kruif told in Microbe Hunters was that of a commission headed by the U. S. Army Surgeon Walter Reed and also including the doctors James Carroll, Jesse Lazear, and Aristides Agramonte. Reed and his commission were sent—in the wake of the Spanish-American war—to Cuba to investigate an epidemic of yellow fever that, as de Kruif claimed, “had killed thousands more American soldiers than the bullets of the Spaniards had killed.” The commission failed to locate the microbe that caused yellow fever. Nonetheless, de Kruif noted, “that failure put them on the right track” (307). Based on incidental observations made during the commission’s initial bacteriological experiments, Reed came to suspect that yellow fever was transmitted by the bite of a mosquito.

To prove this hypothesis, the Reed commission performed a series of experiments on themselves and American soldiers as well as Spanish immigrants in Cuba. These experiments required the test subject to be bitten by a mosquito that had recently fed on the blood of a yellow fever patient. A number of test subjects, including members of the commission, either became sick with or died from yellow fever. This outcome—and the subsequent success of William Gorgas, also a military doctor and the chief sanitary officer in Cuba, in eliminating yellow fever by “making horrid war on the Stegomyia mosquitos” (321)—proved beyond a doubt, at least for Reed, that these mosquitos transmitted yellow fever.

The story of yellow fever told by de Kruif in Microbe Hunters undoubtedly contains many of the elements retold by Weiss in Georg Letham, elements ranging from the experiments performed by the commission to the practical success the commission had in fighting yellow fever. In fact, Weiss borrowed language directly from Microbe Hunters, which was translated into German the same year it was published in English. Nonetheless, Weiss’ retelling of the yellow-fever story in Microbe Hunters was far from straightforward. As Rudolf Käser has noted, Weiss carried out a “substantial

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12 Though beyond the scope of this chapter, a comparison of Arrowsmith and Georg Letham would be worthwhile. Weiss would have been familiar with Arrowsmith. He referred to it in a review of Lewis’ 1917 novel The Job. See Weiss, “Roman einer Amerikanerin,” 333.
13 This account of de Kruif’s career is based largely on Corner, The Rockefeller Institute, 160-161; and Fangerau, “The Novel Arrowsmith,” 82. See also de Kruif, The Sweeping Wind, 3-110.
14 De Kruif, Microbe Hunters, 305. Further quotes are in parentheses.
15 I will quote from this translation when directly comparing the text of Microbe Hunters to Georg Letham.
transformation” of his source material.\textsuperscript{16} He changed the names, backgrounds, and fates of the commission members, and added characters and events beyond the scope of the story narrated by de Kruif.

To give only one striking example of these changes, Weiss placed the celebratory words written by Reed to his wife on New Year’s Eve shortly after a successful experiment in the mouth of a researcher—also named Walter—dying from yellow fever after being bitten by a mosquito. Reed had, on de Kruif’s account, triumphantly proclaimed: “Horch, dort marschieren vierundzwanzig Trompeter zum Abschiedsfeste für das alte Jahr!”\textsuperscript{17} After hearing Walter use this phrase on his death bed, at a time not marked in the narrative as the new year, Letham states that “der Zusammenhang dieser Worte war nicht klar.”\textsuperscript{18} Rather than express triumph, Walter’s reference to the marching trumpeters emphasizes the devastating effects of yellow fever on the body and mind.\textsuperscript{19}

My interest in this section, however, is less in mapping such transformations and their significance than in locating a different kind of affinity between Weiss and de Kruif. This affinity can be found in how they viewed the scientific experiment, and the Spannung it created for both protagonist and reader, as a way of knowing. The knowledge of yellow fever that emerged from the experiments of the Reed commission was by no means—like the research on phagocytes crucial to fighting the plague in Arrowsmith—cutting edge for the science of the mid 1920s when de Kruif published Microbe Hunters.\textsuperscript{20} Yet, the way the Reed commission came to know yellow fever in Microbe Hunters retained currency, at least for de Kruif, as a description of experimental procedure. When Weiss borrowed the specific narrative of yellow-fever experiments from Microbe Hunters, I am maintaining, he thus also engaged with de Kruif’s general understanding of how a scientific experiment was to be conducted.

This understanding of experimental procedure points to a significant way in which Spannung crossed between literature and science in the early decades of the twentieth century. Indeed, like Weiss, de Kruif aimed to train his readers in the art of

\textsuperscript{16} See Käser, “Living with Rats and Mosquitoes,” 195.

\textsuperscript{17} De Kruif, Mikrobenjäger, 319; and Weiss, Georg Letham, 409.

\textsuperscript{18} Weiss, Georg Letham, 409.

\textsuperscript{19} In other instances, Weiss simply borrowed language—often originally in quotes—directly from de Kruif without creating the absurd effect of Walter’s dying words. See, for example, the passage in which the Washington government (de Kruif) and “die hohe Obrigkeit” (Weiss) order the commission “besondere Beachtung den Fragen zu schenken, welche auf die Ursache und Verhütung des gelben Fiebers Bezug haben.” Weiss, Georg Letham, 249-250; and de Kruif, Mikrobenjäger, 303. See also the passage in which soldiers volunteering to be bitten by mosquitos tell Reed: “wir haben nur eine Bedingung zu stellen, nämlich, dass wir für unseren freiwilligen Dienst keinerlei Entgelt bekommen.” Weiss, Georg Letham, 487; and de Kruif Mikrobenjäger, 313.

\textsuperscript{20} Research at this time was centered on the yellow-fever microbe Reed and his commission had failed to discover. See, Strode, Yellow Fever, 18-21; and Plesset, Noguchi and his Patrons, 256-268. For cutting-edge research on phagocytes in Arrowsmith, see Summers, “On the Origins of the Science in Arrowsmith.”
Spannung. In *Microbe Hunters*, De Kruif did not hesitate to characterize the epidemic faced by the Reed commission as a “yellow murderer” who “had a way of crawling through walls and slithering along the ground and popping around corners,” to highlight the “humors” that arose from the twists and turns of microbe hunting, and to praise the “risk” undertaken by the Reed commission. De Kruif’s narrative of the uncertainties and dangers faced by scientists experimenting with yellow fever had, it turned out, much in common with the *Detektivroman* invoked by Weiss in *Georg Letham*. De Kruif did not, however, merely take recourse to literary conventions like those of the *Detektivroman* in order to spice up an otherwise dry story about science. Instead, the Spannung particularly evident in a genre such as the *Detektivroman* coincided in a deeper way with the logic de Kruif saw at work in the scientific experiment and the knowledge it produced. De Kruif had outlined this logic in a 1922 book titled *Our Medicine Men*. In this book, which was largely a compilation of the early essays that lost him his job as a research scientist at the Rockefeller Institute, de Kruif took a harsh stance towards what he saw as the increasing professionalization and corporatization of medicine. To an extent, the satire of modern medical institutions performed by de Kruif had much in common with the critique of medicine undertaken by Benn only a few years earlier. Albrecht—the professor of pathology pedantically obsessed with the color of dyed rat brains and ultimately murdered by his students in *Ithaka*—could have made an appearance as the target of similar, though less murderous, discontent with medicine in *Our Medicine Men*. In fact, de Kruif noted that the science he saw emerging in America during the early decades of the twentieth century was based on “scientific organization in Germany.” He attacked the science of his age as excessively hierarchical and authoritarian. “A scientist makes a discovery of some importance,” he wrote “becomes a Geheimrat, and attracts a horde of followers [. . .]. These disciples come eagerly to the shrine, and sweat earnestly over an arbeit [sic] emanating from the central great intellect of the Herr Direktor” (198). According to de Kruif, this model of centrally-organized research was “antithetical to the spirit of all creative endeavor” (198). A “great brain” dictated its “splendid ideas” to “awe-struck underlings, who then hurry to their laboratories to prove the validity of the concepts of the master intelligence” (201).

The question for de Kruif, then, was how to reintroduce the element of creativity lost with highly organized science. Or, as he put it: “What, then, is to become of the great

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22 Benn had read and taken an interest in the German translation of *Microbe Hunters*. In a 1932 letter, he posed to Paul Hindemith the following “Fragestellung” in relation to de Kruif’s book: “[H]at die ganze Hygiene und Medizin Sinn, [. . .] wenn vor allem die Auffassung vom Menschen und seinem Werte so ist, daß er doch nur als Stück Modder angesehen wird, dem man jede Bindung an Schöpfung, Religion, Kulte ausreden will und sie ihm lächerlich macht und bestreitet [. . .].” *Briefwechsel mit Paul Hindemith*, 62, emphasis in original. Benn also wrote an essay based on a chapter in de Kruif’s 1928 book *Hunger Fighters*. See Benn, “Gebührt Carleton ein Denkmal?”
23 De Kruif, *Our Medicine Men*, 197. Further quotes are in parentheses.
brain, with its volcanic eruptions of ideas?” (201-202). De Kruif maintained that “[t]he answer is clear. Its possessor should work out and test his own concepts” (202). The great brain, for de Kruif, should not take “an attitude of profound abstraction in a secluded cabinet” (201), but instead perform concrete experiments in the laboratory. “Most surprising and unexpected turns of events occur in the course of an experiment,” de Kruif continued. “The French physiologist, Claude Bernard, insisted that his most important discoveries arose from accidental observations made in experiments, the objectives of which were in an entirely different direction” (202). De Kruif emphasized the role of spontaneity in the experiment. The experiment did not simply offer a controlled setting in which to prove or disprove a hypothesis, but instead set a new and unexpected course for productive research.

In an important sense, then, the experiment unfolded according to a logic of Spannung not unlike that driving the narrative exemplified, for a literary scholar such as Depken, by the Detektivroman. For de Kruif, the ideal experiment remained in a constant state of uncertainty—a state that was ultimately in need of explanation. What turn would the experiment take? What kind of knowledge would it ultimately offer? These were not questions the scientist could resolve in advance. Instead, the scientist could only gain knowledge by following the meandering course of the experiment. This knowledge emerged in small pieces, like the sum total of knowledge in a narrative—a sum total that, for Ludwig, “zu erst stückweise gezeigt wurde” and was often accompanied by “ein neues Rätsel.” Indeed, in the experiment imagined by de Kruif, the scientist played the role of epischer Held in Ludwig’s sense. Like this epic hero, the scientist was a Lotteriespieler subject to the contingency of an experiment more likely to take an unexpected turn than to confirm a theory.

The stakes of the lottery in which the scientist participated could be high, particularly in the arena of public health. As de Kruif made clear, scientists studying disease often risked their lives in experiments. He wrote:

American medicine may be proud of the fundamental contributions of some of its sons to the problems of the eradication of disease. This work was animated by the spirit of self-abnegation and passion for truth that led the old German hygienist Pettenkofer to test the validity of Koch’s claim of the discovery of the microbe of cholera by swallowing deliberately an active culture of the virulent organisms. As was case for organized science, Germany modeled the spirit of what de Kruif called self-abnegation characterizing American medicine in its fight against disease. Max von Pettenkofer, who was willing to wager his own life to disprove microbes alone could cause disease, provided a dramatic example of the extent to which de Kruif expected scientists to participate in their own experiments. Death was among the unexpected turns Pettenkofer’s experiment with cholera could have taken. Ultimately, the scientist—as

25 De Kruif, Our Medicine Men, 115-116.
26 Unexpected, at least, for Pettenkofer, who believed miasma caused cholera. In fact, against the expectations of his opponents, Pettenkofer did not die after swallowing the culture with cholera microbes. See Baldwin, Contagion and the State, 166-167.
an epic hero—had to be prepared for this extreme outcome of the lottery he or she played when experimenting.

Given these stakes, it is not surprising that the experiments performed by scientists researching disease would be particularly suited to narration. The risks of such experiments placed the scientists performing them in close proximity to the epic hero as Lotteriespieler envisioned by Ludwig. Narratives recording the experiments of these scientists, in turn, provided especially fertile ground for cultivating Spannung in readers. Readers faced with an experiment such as that of Pettenkofer would be captivated by the twists and turns leading from his ingestion of the cholera microbe to his ensuing survival or death. Ultimately, even the resolution provided by Pettenkofer’s survival or death would lead to further uncertainty—uncertainty that would create in readers a need for, to borrow a term used by both Depken and Roetteken, Aufklärung. Why had Pettenkofer died? What caused the microbe to infect him? Or, why had he survived? Why did the microbe not infect him—and how, then, was cholera actually spread? Readers would thus ask questions about the nature of cholera similar to those asked by bacteriologists. In this way, narrative would dovetail with scientific knowledge.

My hypothetical story about Pettenkofer is much like the story Weiss told about yellow fever in Georg Latham. This story, as I have indicated, was based on an account of yellow-fever experiments included by de Kruif as a chapter in Microbe Hunters a few years after the publication of Our Medicine Men. In Our Medicine Men, however, de Kruif had already noted that the spirit of self-abnegation demonstrated by Pettenkofer had also guided “the army surgeons Reed, Carroll, Agramonte, and Lazear in their dramatic discovery of the mosquito transmission of yellow fever [. . .].”27 The next two sections will be dedicated to this dramatic discovery. Rather than examine how Weiss retold the story of yellow fever already narrated in Microbe Hunters, I will ask how he adopted the model of experimentation outlined in Our Medicine Men—a model in which scientific knowledge intersected with Spannung.

Experimenting with Yellow Fever

Weiss’ Georg Latham is, as I have indicated, a large and complex novel that tells a story of both crime and punishment, and of the measures taken to know and fight yellow fever. The next two sections will not aim for a reading that encompasses these two sides of the novel in their entirety. Instead, the sections will investigate how the scientific experiments narrated by Weiss follow a logic already established in the preceding narrative of murder, a narrative already examined in the section on Spannung in aesthetics around 1900. My argument will be that the observer in a state of Spannung—an observer cultivated in a paradigmatic way by the Kriminalroman—was also the observer to whom Weiss directed his narrative of experiment in the last chapters of Georg Latham.28 To make this argument, I will focus on two moments in which the novel

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27 De Kruif, Our Medicine Men, 116.
28 Recent scholarship on Georg Latham has overlooked this way of connecting the two parts of the novel. For example, Rudolf Käser has located, in these two parts, “different
addresses with particular intensity the risk and uncertainty of scientific experiment: Letham’s anxieties about the complexity of the initial experiments with yellow fever, and the gamble (in a literal sense) taken by one of Letham’s colleagues as these experiments end.

The current section will be dedicated to the first of these moments—that is, to Letham’s anxieties at the start of experiments whose goal is to determine whether the mosquito is responsible for transmitting yellow fever in human populations. Letham and his colleagues decide, after failed bacteriological experiments designed to locate the cause of yellow fever, to shift their attention to the question how yellow fever is transmitted. They turn to an existing but unproven theory implicating the mosquito, and agree to allow themselves to be bitten by mosquitoes that have fed on the blood of yellow-fever patients. These experiments place Letham and the other members of the commission in a position much like that of Pettenkofer on de Kruif’s account. Like Pettenkofer, Letham and his colleagues stake their lives on the outcome of an experiment.

Indeed, Letham acknowledges that he and his colleagues are not the first to take such a risk. “Seitdem die Heilkunde besteht,” he notes, “sind immer von Zeit zu Zeit von Ärzten Experimente an Menschen gemacht worden. Es war nicht gerade die Regel, aber auch keineswegs die Ausnahme, daß die Ärzte an sich selbst zu experimentieren wagten.”

The history of experiment in medicine, Letham recognizes, is closely bound to the fate of the bodies on which experiments are conducted. The willingness of experimenters to sacrifice what Letham calls “Menschenmaterial” for medical knowledge has placed the medical experiment in close proximity to “der Begriff des Mordes” (321). This proximity is not only built into the way Weiss combines stories of murder and experiment in his novel, but also has an immanent reality for the commission studying yellow fever. The commission is aware that their experiments could result in murder. This possibility, like the actual murder Letham has committed, thus generate Spannung for both Letham and Weiss’ readers.

As I have emphasized, however, this Spannung was—for Weiss as for scholars and critics writing around 1900—by no means limited to murder. Murder, and the Detektivroman in which it played a prominent role, offered a paradigm for the logic of Spannung—a paradigm I have examined in the first section. However, as I have claimed, the Detektivroman was only one instance of this logic. Even for a scholar such as Depken, who wrote explicitly on the Kriminalerzählung, Spannung went well beyond the boundaries of a single genre. This mobility of Spannung plays out in particularly dramatic fashion as Letham and his colleagues begin to experiment with the potentially deadly effects of the mosquito bite. The Spannung of these experiments, I am arguing, was not simply at the prospect of murder. Instead, this prospect is only the last in a chain of complicated experimental procedures that create a high degree of Spannung for Letham and, in turn, for Weiss’ readers. The minutiae of these procedures, and the human forms of conduct towards parasites as literary metaphors to criticize National Socialism.” “Living with Rats and Mosquitoes,” 185. See also Metz, “‘Versuche am lebenden Menschen.’ ”

29 Weiss, Georg Letham, 319; emphasis in original. Further quotes are in parentheses.
knowledge the procedures produce, are governed by a logic of Spannung similar to that which resides in the ultimate possibility of the experiment culminating in murder.

The complexity of these procedures, as much as murder, are on Letham’s mind towards the start of the experiments with mosquitos. Letham reports that, as these experiments begin, he “sehr wenig schlief” (325). “Wenn ich auf einige Augenblicke eingeschlummert war,” he continues, “weckte mich der Gedanke an die beste Versuchsanordnung” (325). The prospect of murder takes a backseat, for Letham, to immediate concerns with how the experiment is to be arranged. Though aware that “wir mit dem höchsten Einsatz zu arbeiten hatten” (325), Letham is mainly preoccupied by the unpredictability at every step of the experiments he and his colleagues are undertaking. He notes that “[v]iele konnte mißlingen” (325), and speaks of “wie fast aussichtslos der Versuch ist, alles Voraussehbare eben auch wirklich rechtzeitig vorauszusehen [. . .]” (325). Like de Kruif’s version of Claude Bernard, Letham realizes he cannot control all aspects of the experiments he and his colleagues are about to undertake. These experiments will inevitably entail an element of spontaneity.

Letham attempts, nonetheless, to exert a degree of control over experimental procedure. The complexity of this procedure occupies Letham during his sleepless nights. He describes how “[j]e länger und gewissenhafter ich mir die Sache in diesen schlaflosen Nächten überlegte und nach dieser und dann nach jener Richtung auseinanderfaltete, desto komplizierter wurde das Gebäude unserer Theorie” (326). The possibility that his experiments could unfold in many directions, however, does not lead Letham blindly to embrace the role spontaneity will come to play in these experiments. Instead, he devotes tireless energy to considering, in all its complexity, the theory guiding him and his colleagues, and ultimately claims: “ich atmete auf, als ich zum Schluß einen Arbeitsplan hatte, der sich auch als praktisch durchführbar erwies” (326). Until he has worked out this Arbeitsplan on both the level of theory and practice, Letham does not breathe easily—does not, that is, experience the Entspannung that follows the Spannung of his sleepless nights.

Even after he has carefully worked out an Arbeitsplan, however, Letham acknowledges that the contingency to be expected during experimentation has not entirely been mastered. In fact, Letham expects further contingencies to arise as the mosquito experiment progresses. He remarks that his Arbeitsplan “hatte das eine Gute (oder Schlechte, wie man es nimmt), daß er vom einfachsten bis zum kompliziertesten aufstieg und daß die Fülle der noch ungelösten Probleme mit jedem Zuwachs an positivem Wissen wuchs” (326). The experimental procedure envisioned by Letham proceeds recursively. New knowledge only leads to new levels of complexity. Letham anticipates starting with what he calls “Axiom I,” the claim that “Stegomyiamücken stehen mit der Verbreitung des Y. F. von Mensch zu Mensch in direktem Zusammenhang” (326). This axiom, however, is only “der Anfang, die Grundbasis, die erste Stufe” (326)—that is, a point of entry into the complex experimental procedures required to ensure he and his colleagues have proven their hypothesis and in fact secured a reliable understanding of how yellow fever is transmitted.

In an important sense, then, the dynamic of experiment outlined by Letham mirrors the dynamic of the narratives that—for critics and scholars such as Ludwig and
Depken—created Spannung in readers. Knowledge in experiment for Letham, like knowledge in narrative for Ludwig and Depken, is administered in measured doses. Letham ascribes to his experimental procedures a rhythm of Spannung and Entspannung, a rhythm coupled to increasing gains in knowledge of how yellow fever is transmitted. As such knowledge grows, so does the complexity of experimental procedure. The uncertainties that arise during the course of an experiment will thus, Letham emphasizes, never entirely be resolved. He asks: “Aber welches Werk unter uns unvollkommenen Menschen ist so weit zu fördern—selbst dann, wenn man sich bis zum letzten Lebensrest dafür einsetzt—, daß man sagen kann: So ist es? So bleibt es. Alle Fragen sind gelöst. Alle Rätsel entschleiert” (326). Like the type of narrative exemplified by the Detektivroman, the experiment is ultimately driven by a series of constantly emerging Rätsel. For Letham and his fellow experimenters, as for readers of the Detektivroman, new puzzles arise as old puzzles are solved.

This precarious balance of knowledge and Rätsel, Spannung and Entspannung, and control and contingency becomes evident as the experiments planned by Letham actually unfold. The first of these experiments—performed on a convict named March, who like Letham has been recruited to join the team of yellow-fever researchers—shows the concrete sense in which old Rätsel give way to new. This experiment also shows, in minute detail, how questions of experimental procedure are tied up with the emergence of new Rätsel. Even the procedure of having a mosquito bite March after having bitten a yellow-fever patient raises a number of questions for Letham:

Sollte man die Glasgefäße mit den jungen Mücken in die Krankenzimmer hinaufbringen? Oder sollte man den Kranken heimlich, still und leise in das Laboratorium hinabtransportieren?
Wie würde es gelingen, die Mücke erst einmal richtig zum Ansaugen zu bekommen? Und wie sollte man sie dann dazu bewegen, unmittelbar darauf (oder später?) ein zweites Mal zu stechen?
Sollte man günstigenfalls den Übertragungsversuch sofort an Nummer eins (March) und zwei (mir) durchführen oder sollte man sofort differenzieren? Das heißt, sollte man bis zum Erreichen des ersten positiven Ergebnisses immer die Versuchsanordnung die gleiche bleiben lassen oder dieselbe sofort abändern?
Zum Beispiel mich erst am zweiten oder dritten Tage stechen lassen? (335)

Letham’s questions range from the place in which the experiment should take place to the nonhuman and human subjects of the experiment. The sheer number of these questions, and the speed with which they accumulate, point in concrete terms to the complexity of the experiment Letham and his colleagues are carrying out. This complexity rises in direct proportion to the number of questions Letham asks. Each of Letham’s questions represent moments at which experimental procedure could go wrong and contingency could enter—and thus moments at which Spannung could emerge.

As the experiment plays out, contingency does arise—followed by Spannung—at a number of the moments indicated in Letham’s questions. An Assistentarzt, unaware of the experiments performed by Letham and his colleagues, enters the room of a yellow-fever patient being bitten by a mosquito. Though surprised by the “fremde Ansammlung von Ärzten und Helfern mit Glasgläsern etc. in seinem Bereich, bei seinem Kranken,”
the Assistentarzt ultimately leaves the room. “Er [der Assistentarzt] blickte uns offen an,” Letham remarks, “verbeugte sich sogar leicht vor uns allen, schloß aber dann sachte die Tür von außen und ließ uns ungestört” (337). Though Letham and his colleagues are left ungestört to carry out their experiments, the appearance of the Assistentarzt hints at just how easily these experiments could be plagued by Störungen.

Such disturbances arise shortly after the Assistentarzt departs and his yellow-fever patient is bitten by a mosquito. At this point, Letham notes that “[d]ie Schwierigkeiten, die sich bald in ungeahnten Maße steigern sollten, begannen” (338). The mosquito that has fed on the blood of the yellow-fever patient next has to bite March. This part of the experiment raises a new question—a question Letham explicitly links to the Spannung experienced by the experimenters watching their experiment unfold. “Vorsichtig transportierte ich das Tierchen […] auf Marchs Oberarm,” reports Letham, “und wir warteten alle gespannt […] ob die Stegomyiamücke ein zweites Mal anbeißen würde, um die Keime zu übertragen—aus dem Blut—durch das Blut—in das Blut?” (339). Letham and his colleagues are reduced to waiting in a state of Spannung for the mosquito to bite a second time.

The mosquito thus becomes the intense focus of Letham’s narrative. “Sie saß da,” Letham notes tensely, “das letzte Beinpaar wippte nicht, sie hatte den Kopf gesenkt, der winzige Stachel, feiner als die feinste Nadel, berührte Marchs Haut. Aber stachen tat sie nicht. Beißt sie? fragte immer wieder einer der anwesenden Herren” (339). The experimenters are no longer captivated by the question of whether their experiments will culminate in murder, but rather by the smallest movements of the mosquito—and above all, by the simple question beißt sie? This simple question turns into the point at which Spannung worthy of a murder story intersects with scientific knowledge. As a key component of a carefully orchestrated experiment, the mosquito becomes for Letham and his colleagues a protagonist whose rätselhafter Thun—to borrow a phrase from Ludwig—rivals that of any human protagonist. In order to resolve their Spannung at the rätselhafter Thun of this protagonist, Letham and his colleagues have to know whether it will bite for a second time, and thus whether it will be suited for the experimental procedure they have established.

The answer to these questions is initially no. The mosquitos that have fed on the yellow-fever patient do not immediately bite March. Yet, the experimenters adjust their procedure and—as Letham notes—perform “die Überimpfung durch Mückenstiche in Zwischenräumen von mindestens zwei Tagen, nicht, wie bisher beabsichtigt, in Intervallen von höchstens vierundzwanzig Stunden” (345). He continues by claiming that “[d]iese Versuchsanordnung bewährte sich” (345). March is finally bitten by a mosquito. In this way, the experimenters come to understand the rätselhafter Thun of the mosquito. The mosquito will, in fact, bite twice—and can thus be used to transfer blood from yellow-fever patient to experimental subject. The Spannung that accompanied knowledge in the making is, at least temporarily, resolved into Entspannung. With a reliable procedure in place, experimenters other than March—experimenters including Letham himself—can allow themselves to be bitten.
As Letham has envisioned in his *Arbeitsplan*, however, new knowledge only leads to new *Rätsel*. Once the experimenters have been bitten, the question arises of whether and when they will get sick. When some of the experimenters in turn do get sick, the question arises as to whether and when they will recover. In order subsequently to prove that these cases of the experimenters falling sick are not isolated incidents, and in order to disprove the existing theory that yellow fever is caused by germs found in the excrement of yellow fever patients, Letham and his colleagues conduct large-scale experiments on members of both the criminal and civilian population on the island. Overall, then, the *Rätsel* facing Letham and his colleagues do not end after the initial question of whether the mosquito will bite twice has been answered. These *Rätsel* only increase as Letham and his colleagues proceed from studying the behavior of the mosquito to orchestrating experiments with multiple test subjects in varying conditions.

Even these large-scale experiments, however, are linked to the small-scale experiment on the mosquito examined in this section. Each of these experiments are part of the same chain constituted by the recursive logic of *Spannung* and *Entspannung*—a logic at work, as I have claimed, in the type of narrative exemplified by the *Detektivroman*. My aim in the current section has been to establish how this logic unfolds not only in narration, but also in the production of scientific knowledge in the experiment. Towards this end, I have paid careful attention to the way in which even the minute details of an experiment—in this case, the question of whether the mosquito will bite twice—place Letham and his colleagues in an intense state of *Spannung*. Ultimately, however, my claim is that *Spannung* plays a key role not only in guiding the experiments designed to understand the workings of yellow fever, but also in shaping the institutions designed to fight it. For this reason, the next section will be dedicated to the step Letham and his colleagues take from the late stages of their experiments to public health at the end of Weiss’ novel—and to what this step to public health indicates about the stakes of writing on disease in the early decades of the twentieth century.

**Fighting Yellow Fever**

Letham and his colleagues only turn to public health as their experiments reach an end. In large part, this turn to public health arises as a last resort. When isolated in a single step of experimental procedure, the initially *rätselhafter Thun* of the mosquito could—as I claimed in the previous section—be reduced to knowable behavior. However, the *Rätsel* of whether the mosquito, among all possible environmental factors, exclusively transmits yellow fever cannot be so easily answered even as Letham and his colleagues end their experiments. In order to be solved, the question driving this *Rätsel* has to be tested, as it were, on the entire island population—a test that can only be performed with the public-health resources available to the island’s governor. These practical measures do not, however, simply follow from knowledge gained by experiment, but also shape this knowledge. In this sense, public health extends the logic of *Spannung* driving experiment. The role this logic of *Spannung* plays in the transition from experiment to public health at the end of Weiss’ novel will be the focus of the current section.
The starting point for this transition is in the way Letham and Carolus—a statistician highly esteemed in the scientific community and the only other remaining member of the original research team—aim to bring their experiments to a close. Letham and Carolus lack the funding to carry out “ein neues, umfassendes Arbeitsprogramm” (486) that will prove beyond a doubt the mosquito transmits yellow fever. The Strafverwaltung on the island has “ihre eigene Sanitätsreferenten” (486) and hesitates to support further work by a separate commission. “[D]er oberste Sanitätschef der Gefangenenverwaltung,” Letham maintains, “ignorierte aus Ständedünkel unsere Existenz. Er lebte und arbeitete zwanzig Jahre hier und hatte nichts Nennenswertes gefunden. Was wollten denn wir?” (486). The experiments are only rescued because “Carolus seine bedeutende Geldmittel einsetzte” (486) for “eine Art Bestechung” (486) that sets the island bureaucracy back in motion.

With this detail, Weiss departs in a significant sense from both the account given by de Kruif and from any historical reality of the experiments carried out by the Reed commission. The yellow-fever experiments carried out by the Reed commission were funded by the government, not privately by a member of the commission. By inventing a scenario in which Carolus has to wager his own money, Weiss foregrounds the risks of the final experiments Carolus and Letham are about to undertake. As Letham notes, Carolus “hatte noch sehr bedeutende Geldmittel und seinen Namen, seinen Rang, seine militärische Stellung, seine makellose Vergangenheit in die Waagschale zu werfen” (485). Letham also claims, though in less specific terms, that “[m]ein persönliches Schicksal hing ab vom Gelingen und Mißlingen unserer Versuche” (488). These monetary, professional, and personal risks become inseparable from the twists and turns of experimentation. Ultimately, this juxtaposition of gambling and experiment place Letham and Carolus quite literally into the role of Lotteriespieler invoked in a largely metaphorical sense by Ludwig to describe the intimate relationship between narrative and Spannung.

The final twists and turns of these experiments, I am claiming, lead to public health measures designed to fight yellow fever. Letham and Carolus do not arrive at these public health measures, however, until revisiting—and ultimately dispensing with—the ways of knowing about and responding to disease at stake in the nineteenth-century public health examined in the first part of this dissertation. Letham and Carolus tie these ways of knowing about and responding to disease to a particular theory: what was called, in the time of Reed’s experiments, the theory of fomites.30 In short, the theory of fomites—like the theory of miasma underlying Virchow’s report—claimed that a disease such as yellow fever was transmitted by the air and objects in the surrounding environment. As Letham explains, “[m]an glaubte damals noch allgemein, daß das Y. F. durch die Kleider, das Bettzeug und die übrigen Gegenstände der Kranken übertragen wird. Oder es sollte gar die böse Luft (mal-aria) oder das als Trinkwasser verwandte Regen- und Zisternenwasser die Schuld tragen” (489).

To disprove this theory, Letham and Carolus stage an experiment that could have been taken from Virchow’s report, Hauptmann’s drama, or Benn’s poetry. The subjects

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30 See Reed, “The Etiology of Yellow Fever,” 83-85
of this experiment—two convicts from the island—enter a small house with living conditions to rival those in Upper Silesia recorded by Hauptmann and Virchow, or those of the medical settings shown by Benn in *Morgue*. This house is sealed in such a way that little air can circulate, heated to high temperature, and filled with *Wasserwannen* that increase humidity to the point at which the air becomes “erstikkend feuchtwarm” (489). Heat and humidity, however, are not the only conditions to which the test subjects in the house are exposed. The test subjects are also required to wear the clothes of—and sleep in the sheets saturated by the excretions of—patients who have died from yellow fever.

Unlike Virchow, Hauptmann, and Benn, however, Weiss refuses to dwell on the graphic details of such poor living conditions. Letham breaks off mid-sentence as he describes the contents of “einige dicht vernagelte Kisten” brought into house (489). He reports that “man nahm in ihrer [den zwei Sträflingen] Gegenwart die Kissen, Decken und Bettücher aus den Kisten, beschmutzt von den . . . wozu dies ausmalen? Man veranlafte die zwei Sträflinge, sich zu entkleiden und sich in die beschmutzten Pyjamas zu hülle, sich auf die mißfarbenen Tücher zu legen” (489). Rather than represent in detail the excretions with which the contents of the box are *beschmutzt*, Letham simply trails into an ellipsis and asks what the point of such a representation would be.31 As this question indicates, graphic representations of poor living conditions—and the suffering they cause—have largely become superfluous from both the epistemological and narratological standpoint adopted by Weiss. For Weiss, filth is neither compelling evidence that disease is present nor the basis for a compelling drama that moves observers to feel sympathy.

In fact, Letham and Carolus observe the poor living conditions they have created in their experiments with boredom rather than disgust or sympathy. The only task facing Letham and Carolus is to await the outcome of the fomite experiment they have devised. Once the *Sträflinge* are in the house with fomites, Letham notes: “[w]ir hatten während der nächsten Tage nichts zu tun, als die Leute in ihren schauerlich heißen, übelriechenden Gelassen wie Höllenhunde zu überwachen” (489). When the *Sträflinge* do not get sick, Letham reports, “gab sich der negative Erfolg der falschen These kund” (489). He continues: “Nach drei (nur durch ihre Langeweile qualvollen) Wochen konnte man diesen Versuch als abgeschlossen ansehen” (489). Rather than feel *Qual* at the suffering poor living conditions create for their test subjects, Letham and Carolus simply feel the *Qual* of boredom.

The boredom experienced by Letham and Carolus is in the realm of *Spannung*, even if at the opposite pole. In the eyes of a literary scholar such as Depken, boredom resulted from the failure of a narrative to create *Spannung* for its readers. As observers of the fomite experiment, Letham and Carolus experience a similar sense of boredom. Strangely, the filth to which the *Sträflinge* are exposed has less power to move Letham and Carolus than the question of whether the mosquito will bite twice. This filth—and the suffering it causes—might generate emotion in observers trained to feel sympathy or disgust, but not in observers trained to feel *Spannung*. In an important sense, then, the

fomite experiment captures in miniature a broader paradigm shift for writing about disease I am claiming exists between the historical moments of Virchow and Weiss. Letham and Carolus dispense with the theory that fomites cause disease, and at the same time with the power of suffering to generate emotion in narrative. Their negative thesis about the transmission of yellow fever is, in this sense, also a negative thesis about the power of narrative to create emotion in observers of pain and disease.

This negative thesis is followed by a positive thesis about emotion in both experiment and narrative. After disproving the effects of fomites—and the power of narrating filth—Letham and Carolus stage another experiment. This experiment largely reproduces, with more careful controls, the experiments Letham and Carolus have carried out on themselves. They have the houses from the fomite experiment “umgebaut” in such a way that “[d]ie frische Luft konnte nun ungehindert durchziehen [. . .]” (491). New test subjects—this time sailors stationed on the island—enter the houses “frisch gebadet, so gesund wie es das Klima nur zugelassen hatte, mit einem tadellos desinfizierten Nachthemd bekleidet [. . .]” (491). Into the houses occupied by these sailors, Carolus and Letham set free “fünfzehn Moskitowiebchen [. . .], die infektiöses Blut getrunken hatten” (492). As expected after the early experiments, a sailor “wurde schwerkrank” (493). This experiment not only proves, for Carolus and Letham, that mosquitos transmit yellow fever, but also reinforces the notion that filth plays no role in such transmission. In an irony worthy of the shift from sympathy to Spannung carried out by Weiss, a perfectly sanitary room ends up posing a greater threat to the health of the sailors than a room polluted with the excrement of yellow-fever patients posed to the Sträflinge.

The experiment in the sanitary house, however, is itself not a source of Spannung for Carolus and Letham. After the experiments they have performed on themselves and the other members of their team, it is little surprise to Letham and Carolus when the sailors placed in the same room as the mosquitos to get sick. Letham narrates this experiment quickly, and reaches a conclusion similar to that which he has reached for the fomite experiment: “Ich hielt unsere Aufgabe für gelöst” (496). Yet, this certainty does not remain for a long time. The experiment in the sanitary house ultimately plays out by the law of recursion Letham invokes at the early stages of experimentation. The knowledge, confirmed by the experiment in the sanitary house, that mosquitos transmit yellow fever only brings new twists and turns.

These twists and turns—and the Spannung they create—quickly arise after Letham and Carolus complete the experiment in the sanitary house and are visited by a competing commission. This commission claims to have discovered the cause of yellow fever: a small microbe they call leptospira. Letham notes that he and Carolus

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32 By introducing research on the leptospira, Weiss takes a chronological leap ahead of the Reed story. In the mid 1920s, the Japanese bacteriologist Hideyo Noguchi claimed the leptospira was the cause of yellow fever, but his claim was ultimately disproven. See Strode, Yellow Fever, 15-16; and Plesset, Noguchi and his Patrons, 183-188. De Kruif also referred to the discovery of a “spiralförmige Mikrobe als Ursache des gelben Fiebers,” but cautioned that “die Entdeckung [ist] bei Drucklegung dieses Buches noch nicht genügend bestätigt.” Mikrobenjäger, 321.
“erkannten gerne die Richtigkeit der Forschungen an” (498). They are crushed, however, when the commission “unseren Ergebnissen mit äußerster Skepsis gegenüberstand. Sie wollte uns nicht glauben” (499; emphasis in original). With this skepticism, the commission inverts the relationship between filth and disease Letham has just established. The commission sees the mosquito theory of transmission as an “alten Theorie, die seit Jahrzehnten streng wissenschaftlich widerlegt ist” and instead insists, as Letham notes with dismay, that “die Einatmung der Luft oder der Genuß (oder!!) von infiziertem Wasser sei die Ursache für das Y. F.” (499). This inversion does not, however, restore the emotional, narratological, and epistemological power of filth, but instead sets the stage for Spannung to reemerge.

By rejecting the results of Letham and Carolus’ experiment, the competing commission reintroduces uncertainty into the narrative. Letham feels “Zweifel an der Wahrheit unseres Axiom I” (500) and claims: “Ich sah nichts von unseren teuer erkämpften Resultaten als gewiß an” (500). He also notes: “Ich glaube, daß auch Carolus von Zweifeln nicht frei war” (500). This doubt on the part of both Letham and Carolus represents the point at which Spannung returns. As was the case in the early stages of experimentation, Letham finds himself wrestling with a series of questions: “Und wenn auch alles mit der Wahrheit übereinstimmte, wie sollte man dem Axiom I Glauben verschaffen? Waren unsere Experimente überzeugend? Wir hatten vielleicht doch noch zu wenig Experimente gemacht!” (500). This new set of questions is not—like Letham’s early questions—focused on the minutiae of experimental procedure, but rather on the point at which an experiment becomes convincing. How, Letham wonders, does an experiment end? How does an axiom become knowledge?

Letham’s questions about experimentation, it turns out, are tied to another question—a question that generates Spannung as both the novel and Letham and Carolus’ experiments come to an end. “Wenn die Kommission uns den Glauben verweigert hatte,” Letham asks “war es dann möglich, einen Gouverneur zu überzeugen?” (500). The answer to this question is yes. Letham reports that La Forest—the recently-appointed governor of the island and the former rival of Letham’s father—“ebenso entschieden auf unserer Seite stand wie die amerikanisch Kommission auf der Gegenseite” (502). La Forest offers Letham and Carolus a new arena in which to test their axiom about the spread of yellow fever. Letham claims:


The Gültigkeitsbeweis for Letham and Carolus’ axiom shifts domain from the controlled environment of the laboratory to the practical realm of state administration. The final step of Letham and Carolus’ research program, then, turns out to be a bureaucratic experiment—an experiment in administering the population of mosquitos and people on the island. The ultimate proof of the role the mosquito plays in transmitting yellow fever is to be found in the simultaneous Ausrottung of mosquitos and the disappearance of...
yellow fever in the island’s human population. This proof emerges statistically when, as Letham claims, “die Sterblichkeit, die ein ungeheures Maß erreicht hatte, sank mit jedem Monat” (502).

Weiss thus arrived at public health in the conclusion of his novel by following the logic of Spannung rather than of sympathy. He cultivated readers who would identify not primarily with populations suffering from disease, but instead with the scientists aiming to understand how such disease is transmitted. The stakes of this shifting identification on the part of readers are significant. Rather than support an institution such as public health in its fight against disease, Weiss’ readers were—like the researchers in Georg Letham—passive observers of experimental procedure. The outcome of the experiments performed by Letham and his colleagues, more than the task of fighting disease, is what captivated Weiss’ readers. After these experiments are cast in doubt by the competing commission, only the final experiment—the bureaucratic experiment with human and nonhuman populations on the island—restores certainty and resolves Spannung with an outcome for which readers have hoped.

This outcome plays out on the grand scale of public health much like that emerging in Virchow’s report. Letham and Carolus, in collaboration with La Forest, espouse a humanitarian mission that had much in common with the nineteenth-century public health represented, in this dissertation, by Virchow. Letham describes the “Arbeit” of exterminating mosquitos as “nutzbringend” (503). “[M]an konnte,” he continues “die Lebenslage vieler Tausender von Menschen, die elender als das Vieh vegetiert hatten, wesentlich verbessern” (503). However, this mission of improving living conditions is nearly incidental. Carolus, Letham, and La Forest mobilize public health as an extension of experimentation. Public health serves first and foremost not to alleviate the pain of a population suffering as a collective protagonist, but to resolve the uncertainties suffered by protagonists who have wagered their lives, status, and money on the outcome of their experiments with disease.

Public health is, as it were, the gamble that finally brings big winnings to Letham, Carolus, and Weiss’ readers—big winnings in the form of the hoped-for outcome to the yellow-fever experiments they have conducted and observed. Even this outcome, however, only creates temporary Entspannung. Letham recognizes that he is narrating a brief episode in what he calls a “spannender, jahrelanger, gut verlaufender Kampf” (503) against yellow fever. This fight does not end with the experiments he and his colleagues have performed. “Andere folgten uns,” (503) he notes, invoking the future even in the past tense of his narrative. Though, as Letham claims in the penultimate line of the novel, “[m]eine Person scheidet dabei aus” (503), other researchers will take up his role as protagonist in subsequent experiments with yellow fever.33 The novel concludes, in this sense, by reopening the door to contingency and uncertainty—and thus to continued Spannung.

Significantly, then, the novel promises readers further occasion to feel Spannung at a narrative of disease. Implicitly, at least, this promise actively discouraged readers

33 For a thorough factual account of this research over the course of the twentieth century, see Strode, *Yellow Fever*. 
from fighting against disease by supporting an institution such as public health. In contrast to an emotion such as sympathy, the Spannung cultivated by Weiss did not ultimately bring about its own end by directing readers to social action designed to alleviate pain. Instead, Spannung—much like the emotional and sensory responses to pain explored by Benn, Plessner, and Buytendijk—arose coextensively with disease and the pain it caused. Like Benn, Plessner, and Buytenijk, Weiss acknowledged that this pain could not be entirely eliminated, and thus aimed to cultivate an emotion suited to an ongoing engagement with disease.

For precisely this reason, I am concluding the second part of this dissertation, and the dissertation as a whole, with the role Spannung played in Georg Letham. My choice of Georg Letham is meant to contrast with the typhus report by Virchow with which I concluded the first section. The differing stances towards the pain of disease in these two texts offer an especially powerful lens through which to view the evolving role emotion played in both the history of literature and medicine between the mid-nineteenth and mid-twentieth centuries. The public health to which Virchow helped give birth grew to maturity in a vastly different age than his own—an age in which, as I have observed in the previous chapters of this part, optimism about the potential of science and society to eliminate human misery had largely vanished. Weiss’ novel, like Benn’s poetry and Plessner and Buytenijk’s philosophy, documented the new emotional stances towards pain brought about by these historical shifts. The Spannung Weiss cultivated in his readers testifies, in this sense, to the ways in which resignation to pain produced new forms of emotion whose scope and intensity went well beyond such resignation. Coping with pain in the first half of the twentieth century demanded revolutions in emotion equal to—though vastly different in kind from—the revolutions in scientific knowledge and practice embraced by a doctor such as Virchow in the first half of the nineteenth century.
Conclusion

Pain Policy: From the History of Literature and Medicine to the Future of the Humanities

In 2011, the Institute of Medicine (IOM) published a 364-page report titled *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research.*\(^1\) The IOM report represents a strange amalgam of the stances towards pain examined in both parts of this dissertation. Like the philosophers, doctors, and writers examined in the second part of the dissertation, the report dedicated attention to pain on its own terms. Pain had become, according to the report’s authors, “a disease in its own domains and dimensions.”\(^2\) Admittedly, this pain differed greatly from the pain caused by typhus, hunger, or poverty examined in the dissertation’s early chapters. The IOM report focused largely on the less spectacular effects of chronic pain “arising from an illness, injury, or an array of other factors” (19), including unknown causes. Cumulatively, however, these effects could be nearly as devastating as typhus. “Severe chronic pain,” the report emphasized, “can engender a range of significant psychological and social consequences, such as fear; anger; depression; anxiety; and reduced ability to carry out one’s social roles as family member, friend, and employee” (32).

Chronic pain, for the authors of the IOM report, was all the more insidious precisely because it was largely invisible. The authors of the report maintained that pain not resulting from a clearly defined disease or injury was “less acceptable and more ascribed to overreaction, emotional instability, or worse” (x). “Because the pain could not be seen or measured ‘objectively’ or interpreted within the context of the known,” the report continued, “it was more likely to be dismissed, diminished, or avoided. The irony is that this pain and suffering, just like that of the patient with a known disease, could be life dominant—a disease in its own right” (x). Calling pain a disease, in this sense, was a first step in fighting it. The authors of the IOM report—much like Benn, Buytendijk, or Plessner—might have aimed to understand pain on its own terms. Yet, this understanding

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1 The IOM is a nonprofit institution that, in its own words, “acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education.” Committee for Advancing Pain Research, *Relieving Pain*, iv. In this case, the IOM was required to prepare its report on pain by the Patient Protection and Affordable Care Act—a point that will be discussed further in this conclusion. The conclusion owes a debt to recent work by Jay Clayton, who points to the ways scholars of literature can engage with policy documents such as reports by the IOM. See Clayton, “Victorian Chimeras.”

2 Committee on Advancing Pain Research, *Relieving Pain*, ix. Further quotes are in parentheses.
was ultimately part of a broader public-health campaign against pain, a campaign much like that undertaken over a century ago by Virchow against typhus.  

Indeed, a key component of the strategy developed by Virchow, Schneer, and Hauptmann to fight the pain of an epidemic—and of the poverty ultimately causing this epidemic—resurfaced in the IOM strategy to fight an epidemic of pain. Like Virchow, Schneer, and Hauptmann, the IOM report aimed to train observers to see an invisible social disorder. The authors of the report emphasized that “the medical community is [not] uncaring and unwilling to help people with pain” (xi). Nonetheless, the report acknowledged:

Un fortunately, many health care providers lack a comprehensive perspective on pain and not infrequently interpret the suffering of others through their own personal lens. Misjudgment or failure to understand the nature and depths of pain can be associated with serious consequences—more pain and more suffering—for individuals and our society. (xi)

Given these failures to understand the nature of pain not only by health professionals, but also—as the report noted—by family members, employers, and the public at large, the IOM saw a “need for a transformed understanding of pain” (xi). The report thus called for “[k]nowledge of pain” at the “molecular and genetic to the cellular, neural network, and systems levels” (xi), and for a “cultural transformation in the way pain is perceived and managed on both the personal and societal levels” (xii). Pain was not only a biological problem, but also a problem of perception.  

This imperative to reshape perceptions of pain, it turns out, had been a longstanding one for the IOM. The authors of the IOM report noted that it “builds on and reinforces recommendations regarding ways to improve pain care, education, and research [. . .] made by the IOM in past reports, as well as by other entities” (23). These past reports—by the IOM, Mayday Fund, Harvard Medical School, and National Institutes of Health (NIH), among others—dated as far back as 1987. Yet, as the authors of the IOM report emphasized, “the committee generally saw little evidence of progress” towards improving pain care (23). Inspiring such progress, of course, was the goal of the 2011 report. Yet, the report also had a more concrete origin in recent legislation. “Section 4305 of the 2010 Patient Protection and Affordable Care Act,” the report’s authors noted, “required the Secretary, Department of Health and Human Services (HHS), to enter into an agreement with the Institute of Medicine (IOM) for activities ‘to increase the

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3 For more on pain as a public health issue, see Committee on Advancing Pain Research, *Relieving Pain*, chap. 2.
4 For the report’s findings on how to address both of these problems, see Committee on Advancing Pain Research, *Relieving Pain*, chap. 3-5.
5 For a list of past reports on pain, see Committee on Advancing Pain Research, *Relieving Pain*, 23. For ongoing pain research in institutional settings such as the Department of Veteran’s Affairs and the Department of Defense, see Committee on Advancing Pain Research, *Relieving Pain*, 158-161.
recognition of pain as a significant public health problem in the United States’ " (20).6 Training observers to recognize pain has thus recently, as this mandate from the US government to the IOM suggests, become a national policy priority.

These efforts on the level of policy to encourage the recognition of pain, however, are plagued by their own failures in recognition. What Jay Clayton has maintained to be the case in relation to genetics policy also holds true in relation to emerging US pain policy: input from scholars of literature has largely been ignored.7 An institution such as the IOM might aim to reshape cultural perceptions of pain, but nonetheless largely overlooks how these perceptions have been—and continue to be—shaped in literature as a major product of culture. The IOM report briefly refers to literature, only to dismiss it. “Through the ages,” the report claims, “pain and suffering have been the substrates for great works of fiction, but the reality of the experience, especially when persistent, has little redeeming or romantic quality.”8 As I have aimed to show in this dissertation, literature can do much more than romanticize pain. Romanticizing pain, or at least sensationalizing it, might be part of a broader literary strategy to generate emotions such as sympathy or disgust. However, the ultimate goal towards which these emotions have been mobilized by doctors, writers, and philosophers reveals a common—and significant—engagement with pain as a lived reality and as a pressing social question.

The failure to recognize this shared engagement with pain across the boundaries of medicine and literature reflects, to a large extent, the backgrounds of the committee charged with producing the IOM report. This committee, the report notes, “included experts in pain research, pain management, pharmacology, clinical specialties (pediatrics, oncology, infectious disease, neurology, neurosurgery, anesthesiology, pain medicine, dentistry, psychology, and complementary medicine), chronic disease, clinical teaching, chronic disease, clinical teaching,

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6 The relevant text of the legislation reads: “[T]he secretary of Health and Human Services shall seek to enter into an agreement with the Institute of Medicine of the National Academies to convene a Conference on Pain. [. . .] The purpose of the Conference shall be to—(a) increase the recognition of pain as a significant public health problem in the United States; (b) evaluate the adequacy of assessment, diagnosis, treatment, and management of acute and chronic pain in the general population, and in identified racial, ethnic, gender, age, and other demographic groups that may be disproportionately affected by inadequacies in the assessment, diagnosis, treatment, and management of pain; (c) identify barriers to appropriate pain care; (d) establish an agenda for action in both the public and private sectors that will reduce such barriers and significantly improve the state of pain care research, education, and clinical care in the United States. [. . .] A report summarizing the conference’s findings and recommendations shall be submitted to the Congress not later than June 30, 2011.”

Patient Protection and Affordable Care Act, Section 4305.


8 Committee on Advancing Pain Research, Relieving Pain, ix. Further quotes are in parentheses.
epidemiology, ethics, and consumer education [. . .]” (20). Strikingly absent from this list were representatives from any humanities field.

Without a humanities perspective, the IOM report fails to account for what it calls “the complexity of the problem at hand” (20). Research on pain might, as the diverse backgrounds of the report’s committee members suggest, cross a wide range of medical disciplines and industries. Yet, as I have claimed in this dissertation, medicine has long shared a vast hidden terrain with literature—a terrain to be found in the literary strategies a doctor such as Virchow deployed in a report crucial to the origins of public health, or in the new program for medicine outlined in poetry such as Benn’s Morgue. By overlooking where this hidden terrain might exist in the present, the IOM report risks depriving medicine of an ally that—as history attests—has been crucial to developing knowledge of pain.

The IOM’s oversight, however, represents an opportunity for scholars of literature. This opportunity does not primarily lie in Clayton’s claim that scholars of literature should “step forward as experts in our own fields” in the policy arena. Clayton’s goal is certainly admirable, but whether it is realistic remains an open question. Scholars of literature face not only theoretical challenges in articulating exactly what they can bring to policy discussions. They also face practical question of how to build networks with policymakers, and of how to be more than simply token figures who—to quote a policymaker interviewed by the historian Virginia Berridge—“are there for entertainment.” These challenges, however, are only corollaries of what I see as the main opportunity for scholars of literature in the shortcomings of the IOM’s approach to pain: to articulate the value of the humanities, especially at a time when they are

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9 For full committee and staff biographies, see Committee on Advancing Pain Research, Relieving Pain, appendix D. The committee also included a journalist. See Committee on Advancing Pain Research, Relieving Pain, 346.
10 Some representatives of humanities disciplines were invited to speak on a panel dedicated to “Cultural Views of Pain” at a meeting convened during the early stages of the IOM study. These speakers included the emeritus professor of literature David B. Morris and professor of anthropology Linda Garro. See Committee on Advancing Pain Research, Relieving Pain, 288.
12 Clayton has taken meaningful steps in this direction. See Clayton, “Victorian Chimeras,” 586-587. More work could be done, however, to develop detailed policy suggestions.
13 See Berridge, “History’s Role in Health Policy,” 324 and 317, respectively. Historians might offer a model for literary scholars on adapting scholarship in meaningful ways for policymakers. See Szreter, “History and Public Policy.” See also the website historyandpolicy.org. A literary scholar such as Clayton, however, has started building interdisciplinary networks with an eye towards shaping policy. See Clayton, “Collaboration Across the Disciplines.”
This value, I am claiming, can be found in a middle ground between the claim that the humanities have an instrumental value for policy and the claim that the humanities ultimately have no utility. My aim in this dissertation has been to move the humanities towards such a middle ground. The dissertation has located a common culture in the emotions observers of pain were made to feel in both medicine and literature between 1848 and 1945. This common culture of observing pain, however, does not belong exclusively to history. The challenge for humanities scholars today is to rediscover a common culture of pain that brings the humanities into meaningful conversation with medicine. Locating this common culture, I am maintaining, is necessary for a truly complex understanding of pain to emerge in the present—an understanding of pain that encompasses biology and culture in precisely the way the IOM report claims to do.

It is beyond the scope of this dissertation to outline how such an, admittedly difficult, task would be accomplished. My hope has been, however, to provide a history that will inspire future work in this direction. Ideally, this work will build both intellectual and institutional bridges between the humanities and medicine based on patterns I have aimed to uncover in the past. As the IOM report suggests, scholars and practitioners in the field of medicine are already engaging the cultural side of pain—even if this engagement at the moment excludes scholars who deal largely with culture. Scholars in the field of literature need, in turn, to start engaging in their own practice with the medical side of pain. My hope is that scholars of literature who articulate the terms of this engagement—above all within their own field, but also to scientists, policymakers, university administrators, funding agencies, and to the general public—will establish the practical value of the humanities in precisely the scholarly practices often dismissed as impractical.

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14 The debate on the value of the humanities has become especially urgent in the UK, where recent drastic changes in funding policy have practically threatened the existence of the humanities. For these debates and their context, see Belfiore and Upchurch, *Humanities in the Twenty-First Century*; and the articles in Benneworth, “Arts and Humanities Research.” Similar debates are taking place in Germany on measuring the value of the humanities. See Lack and Markschies, *What the hell is quality?*; and Wiemer, “Ideen messen.” For the state of the humanities in the US, see Modern Language Association, “Doctoral Study.”

15 See Bérubé, “Utility of the Arts and Humanities.”
Bibliography


Benn, Gottfried. Ithaka. In Die weißen Blätter: Eine Monatsschrift 1, no. 7 (1914): 672-680.


Dyck, Joachim. “Requiem.” In *Gedichte von Gottfried Benn*, edited by Harald Steinhagen,


Harrington, Anne. *Reenchanted Science: Holism in German Culture from Wilhelm II to
Koschorke, Albrecht. “Narrative und Institutionen.” Chap. 5 in Wahrheit und Erfindung:


Kurella, Alfred. “‘Nun ist dies Erbe zuende...’” In Hohendahl, Benn—Wirkung wider Willen: Dokumente zur Wirkungsgeschichte Benns, 200-204. First published 1937.


Lack, Elisabeth, and Christoph Markschies, eds. What the hell is quality? Qualitätsstandards in den Geisteswissenschaften. Frankfurt am Main: Campus Verlag, 2008.


Plessner, Helmuth. Die Stufen des Organischen und der Mensch: Einleitung in die


Virchow, Rudolf. Die Noth im Spessart: Eine medicinisch-geographisch-historische Skizze; Vorgetragen in der physikalisch-medizinischen Gesellschaft in Würzburg


