Chapter 1
Trauma in the Trenches

Near the Belgian border in October 1914, an artillery shell exploded close to R., a thirty-six-year-old French infantryman, throwing him a distance.[1] He was quickly taken to a medical station, where his condition was evaluated. Blood was seen coming from his mouth, and he was unable to speak. Nevertheless, he somehow indicated that he felt weakness on his right side. R. was transported to a hospital behind the lines, where he stayed for three weeks. Doctors there diagnosed him with right hemiplegia (paralysis of his right side), contracture (a tightening or shortening of a muscle), and mutism (the inability to speak). R. was subsequently transferred to another hospital, where he was given electrical stimulation to try to revive his right side. Gradually, he recovered the use of his right arm, but his leg continued to exhibit contracture and anesthesia (loss of sensation). The leg problems and mutism were subsequently deemed "functional"; that is, the disturbances seemed to disrupt functioning, but no organic injuries could be found.

Functional illnesses, whose symptoms ranged from paralysis and anesthesia to mutism and deafness, plagued French neurologists and psychiatrists from the beginning of the war. While some doctors believed that these strange disorders were the result of physical injuries due to nearby explosions, such as the one R. endured, others contended that they were fictions generated in the minds of malingering men. Some British doctors lumped these troubling conditions into a syndrome called "shell shock," since their initial impression was that symptoms were correlated to the physical effects of shell explosions. The French, meanwhile, concocted their own labels, including *obusite* (from *obus*,

meaning “bomb”), “commotional syndrome,” “war neurosis,” and “battle hypnosis.” Some French doctors (like many of their German counterparts) simply referred to functional illnesses as “hysteria”—a term with a long history whose use during the war reignited medical debates about the disorder, and also served to humiliate soldiers.

Hysteria, which straddled the line between neurological and psychiatric disorders, was not the most prevalent neuropsychiatric condition among the troops. Psychiatrists saw cases ranging from depression, anxiety, and mania to precocious dementia, mental retardation, and alcoholism (which was included among mental illnesses). Neurologists meanwhile observed a wide variety of confirmed, physical injuries of the head and nervous system. Hysteria was, however, one of the more challenging disorders that doctors faced. In the first place, it was difficult to distinguish from other illnesses. The symptoms of hysteria could mimic the symptoms of a number of neurological and psychiatric disorders. Moreover, in many cases, the symptoms of hysteria appeared along with true, confirmable physical injuries.

Hysteria also had the potential to become contagious. Many neurologists and psychiatrists believed that hysterical “suggestions” could spread among troops at the front, weakening morale, destroying discipline, and inspiring an epidemic of neuropsychiatric cases. Doctors and military administrators alike understood that halting the spread of hysteria was crucial to retaining the maximum number of soldiers who were fit and ready for battle.

With his symptoms persisting, R. was transferred again, this time to the Salpêtrière—a large and old public hospital in Paris that had been the professional home of Philippe Pinel, the early nineteenth-century founder of French psychiatry, and Jean-Martin Charcot, the late nineteenth-century neurologist and expert on hysteria. In the 1870s and 1880s, Charcot attracted students from across France and beyond, who came to observe his theatrical presentations of hysterical patients. Hysteria had once been considered an affliction relegated to women, whose womb was thought to wander physically throughout the body, causing contortions, spasms, and other strange behaviors. But Charcot and his students came to understand hysteria as an essentially neurological illness to which individuals (male or female) could be predisposed through inherited weaknesses. At the Salpêtrière, Charcot defined the disease precisely, enumerating observable, regular phases of hysterical attacks. Charcot had his detractors, but under his direction the Salpêtrière became a renowned center for the investigation of hysteria and a range of other neurolog-

ical disorders. The Salpêtrière was a civilian hospital in peacetime, but it was one of many civilian institutions to open its wards to military men early in the First World War. In January 1915, administrators doubled the number of beds available for soldiers afflicted with nervous disorders, from 72 to 144. Just one month later, 250 additional beds were requisitioned to accommodate the rising tide of patients.[2]

At the Salpêtrière, R. was evaluated by Joseph Jules Dejerine, chief of the hospital's neurology clinic. Dejerine held Charcot's former chair as professor of neurology, but he rejected the master's standardized model of hysteria, instead favoring a more individualistic approach.[3] According to Dejerine, the symptoms, signs, and causes of hysteria were subtly different in each patient.
Dejerine also stood opposed to one of the more popular notions of hysteria among wartime neurologists. Joseph Babinski, a former student of Charcot, had tried to overturn his master's views in the early 1900s. Babinski attempted to convince his fellow neurologists that hysteria had effectively been "dismembered." He held that doctors had attributed most hysterical symptoms to other disorders, ranging from organic, neurological diseases to psychological syndromes. What remained was tantamount to malingering. Babinski renamed the rump of the disease "pithiatism," meaning "curable by persuasion." For Babinski, pithiatism was the result of false suggestions implanted in the minds of patients. It was not the result of organic lesions, nor did it affect the nervous system physically. According to Babinski, pithiatic symptoms could be forced to disappear by strong counter-suggestions made by an imposing, authoritarian doctor. Babinski had tried for years before the war to supplant hysteria with pithiatism. By the outbreak of the war, pithiatism was still not universally accepted in the medical community, but the wartime crisis of functional illnesses encouraged many neurologists to reconsider the value, if not the validity, of the model.

Dejerine shared neither Babinski's causal assessment of functional disorders nor his recommendations for their treatment. Dejerine argued that emotions, not suggestions, were at the center of hysteria and other neuropsychiatric disorders. He believed that sudden emotional shocks, such as those frequently suffered by soldiers, could trigger the development of hysteria, though only in predisposed individuals. He thus saw little utility in using counter-suggestion, or "persuasion," in treating patients, believing it was potentially abusive. In fact, Dejerine found that most physical, pharmacological, and hypnotic therapies were useless against hysteria.

Dejerine's recommended treatment regime for hysteria began with isolation—a tactic that had been used to treat the mentally disturbed for more than a century. The patient was removed from the stimuli that evoked the extreme emotional reaction. The doctor then began a form of psychotherapy. Doctor and patient met and, through conversation, rooted out the underlying causes of the disease. For Dejerine, this doctor-patient interaction was meant to be similar to a religious confession, in which the patient "confessed his entire life."[4] The doctor was supposed to spend adequate time with each subject, listening attentively and gaining the patient's confidence. According to Dejerine, this method was more likely to prevent relapses than the methods advocated by Babinski and his supporters.

The type of psychotherapeutic treatment applied by Dejerine was rare in France during the First World War. While the idea of psychotherapy was not foreign to French medicine (Pierre Janet had introduced analytic therapy before Freud), in-depth psychotherapy did not serve the needs of the military. It was not a rapid cure, and the military needed French doctors to send men back to the front as quickly as possible.

When R. arrived at the Salpêtrière, Dejerine ran a battery of physical tests to evaluate the soldier's injuries. For R.'s leg, Dejerine tested range of movement, muscular strength, reflexes, and sensitivities (that is, the ability to feel pressure, pain, and temperature). The cutaneous reflex on the sole of R.'s allegedly anesthetized foot was absent—a fact that signaled the possibility of an organic injury. A lumbar puncture was performed, but the results of tests on the spinal fluid were negative. Another doctor then examined R.'s vocal cords with a laryngoscope and found them to be functioning normally. The laryngeal reflex was absent, however. The examining doctor could touch R.'s larynx without provoking the slightest pain or cough.

Dejerine also collected personal information from the patient, which he believed could offer clues to R.'s functional leg paralysis. The interview was conducted despite R.'s continued inability to speak. Dejerine noted: "The patient is completely aphonic, unable to emit a single word, a single sound, but only a halting wheezing, a sort of noise of a jet of vapor, corresponding to the words that he wants to pronounce. . . . He writes all of his history and responds to questions by writing."[5] Dejerine learned that R. was a farmer, husband, and father of three children, all of whom were in good health. There were no specific personal antecedents that might have suggested R. was suffering from a purely psychological disturbance, but the doctor did note that R.'s father had been an

alcoholic, and that R. and his mother (perhaps consequently) had led "a rather unfortunate life." Moreover, R. admitted that he had always had a "nervous, impressionable temperament," a fact that Dejerine believed was connected to his functional disturbances.[6] As Dejerine described him, R. was "very emotive, crying easily, and trembling all over when he speaks [sic] of his wife and his children."[7]

The patient was isolated and treated by psychotherapy for two months with no effect. Then, during the third month, there was some improvement. R.'s symptoms began to disappear, and both his cutaneous foot reflex and laryngeal reflex returned. By the end of the third month, R. was cured of his "hystero-traumatism," as Dejerine called it, and was able to leave the hospital. He was probably sent back to the front.

This case history, which Dejerine presented to the Neurology Society of Paris in February 1915, along with four others that featured the abolition of the cutaneous plantar reflex, provoked an immediate and acerbic response by Babinski. An authority on the cutaneous plantar reflex who developed a reflex test that still bears his name, Babinski said Dejerine's study was "far from being convincing."[8] It was a typical comment from Babinski, whose firm, authoritarian style of treating pithiatics was a reflection not only of his medical ideology but also of his personality.[9] According to Babinski, Dejerine failed to distinguish reflex movements from voluntary ones. Consequently, he did not successfully show that the reflex had been abolished and did not prove that hystero-traumatism could cause that abolition. Dejerine offered a rebuttal, but the debate was far from settled.

In R.'s specific case, many questions were left unanswered. Were R.'s disturbances truly the result of physical injuries caused by an explosion? Were they instead physical manifestations of the emotional, psychological shock that he no doubt also suffered? Or was R. faking to win a reprieve from the front line? Did R.'s emotional character contribute to the development of his symptoms? And what was responsible for his cure?

Neurologists and psychiatrists faced similar questions on a daily basis. Confronted with an apparent epidemic of functional disorders as well as a full array of other maladies, doctors struggled to understand the role of the war in the genesis of illness. Could the war trigger illness in soldiers? Did it only do so in certain individuals? How prevalent were war-induced diseases? Did those diseases constitute new types of illness? What should be done to cure them? What was the responsibility of each individual in the emergence of disease?

Doctors believed that providing answers to those questions was essential in assisting with the war effort and achieving a range of professional goals.

Psychiatric War Aims

Doctors' eagerness to serve their state at war should not be surprising. The war was greeted with great enthusiasm by many Europeans. Some believed that a little fighting would provide a revitalizing experience that could help civilization overcome its perceived exhaustion and decline. The war might simultaneously help to cull the weak and degenerate, since only the strong would survive. It also strengthened nationalist sentiments that had been percolating over the course of the nineteenth century. In France, those sentiments had contained a strong anti-German element ever since the country's humiliating defeat in the Franco-Prussian War of 1870–71.

Doctors were in no way immune to this nationalistic outlook. The writing of French neurologists and psychiatrists before, during, and after World War I betrayed strong nationalistic attitudes. An editorial published in 1915 by Victor Parant presented the extreme example. Parant wrote that even before the Germans had invaded French territory, "Germany had for a long time tried to invade the world of ideas, to submit [the world] to what it called its culture, superior culture. . . . It wasn't far from having succeeded."[10] According to him, German psychiatry took part in that invasion: "German psychiatry was constituted suddenly, abruptly. Abruptly, it burst onto the scene, trying to substitute itself . . . for all that existed before it. These behaviors were analogous to those of the military attack. . . . And like the military attack . . . [German psychiatry] amassed ruins around itself, it gave birth to anarchy, psychiatric anarchy."[11] For Parant, the war against Germany presented a critical moment for French psychiatrists: "Has not the moment come for those [psychiatrists] who have let themselves be influenced and seduced by German doctrines to examine whether they have not been in error?"[12] Has not the moment come to "cut short the invasion of German psychiatry and to bring back French culture and psychiatry?"[13]

Even those who did not adopt the same sort of dramatic language held similar attitudes. French doctors were well aware that French science and medicine had been eclipsed by German science and medicine through the second half of the nineteenth century. Of course, most French psychiatrists did not believe that German psychiatry had appeared out of the blue, as Parant sug-

gested. Instead, they claimed that the roots of German psychiatry could easily be found within French psychiatry. For example, when the German psychiatrist and professor Emile Kraepelin defined dementia praecox as distinct from manic-depressive psychosis (an important moment in the history of psychiatry), many French doctors claimed he was offering nothing new to the field.[14] French categories such as "*démence précoce*" and various versions of "degenerative folly" had already captured the sense of dementia praecox. Moreover, manic-depressive psychosis, said French doctors, had long been understood in France. Referring to the "truths that come to us from beyond the Rhine," two French doctors wrote that "manic-depressive psychosis is, one should say, the most French of the conceptions from the professor of Munich."[15]

In addition to serving the practical aims of a state at war and supporting a national endeavor, doctors had several additional motivations for participating in the war effort. First, neurologists and psychiatrists hoped to use the soldiers that they encountered as material to study disease and to contribute to medical knowledge. The war provided a seemingly endless supply of cases, and doctors used those cases for hundreds of medical studies presented at professional meetings, published in medical journals, and collected in monographs. According to Gustave Roussy, who supervised a regional collection of neurological and psychiatric centers during the war, the abundance of functional nervous disorders presented important opportunities for study and experimentation. In the short term, he believed, this profusion of disorders would enable doctors to fine-tune their treatment methods and therapeutic environments to optimize results. In the long term, it would help doctors better understand the causes of hysteria.[16] In a study on anxiety, the doctors Albert Devaux and Benjamin Joseph Logre wrote that the war's violence, duration, and simultaneous impact on millions of individuals allowed for "incomparable psychological experimentation."[17] Paul Voivenel, a doctor who studied the psychology of soldiers, wrote in reference to his own study of morbid emotivity that the war provided a "grandiose laboratory experience."[18]

As Roussy suggested, doctors were eager to try new concepts for the organization of their medical facilities. Neurologists wanted to test whether separating men within specialized centers according to the type and severity of their injuries would help streamline therapeutics. Psychiatrists hoped to show that "open" psychiatric services, which operated more like medical hospitals than locked asylums, could offer benefits to patients by providing active treatment and removing the social stigma of commitment. Both neurologists and psychia-

trists hypothesized that treating men early, near the front, before symptoms became too deeply rooted, would improve cure rates.

In many cases, scientific pursuits were driven by the quest to provide additional support for individual etiological (causal), diagnostic, and therapeutic positions in long-standing debates. For Babinski, the war provided an opportunity to revive his notion of pithiatism. Babinski had first attempted to redefine hysteria as pithiatism in a paper presented to the Neurology Society of Paris in 1901.[19] But by 1908, when the society finally voted on the matter, Babinski had not won over his peers.[20] The society pronounced that while hysteria was often produced by suggestion, the term "pithiatism" should not be adopted in place of hysteria.

In the years following that decision, Babinski did not give up his quest. His unflagging commitment to pithiatism was probably driven not only by steadfast medical beliefs but also by deeper, more personal, motivations. He had been one of Charcot's favorite students, but after Charcot's death, he lacked the requisite support from prominent doctors to succeed at the competitive examination that would have enabled him to teach at a university. Consequently, he was never eligible for Charcot's chair in neurology, though he might have felt entitled to it.[21] Babinski claimed to have harbored critiques of Charcot's ideas while he was still a student,[22] but his ongoing battle to supplant hysteria with pithiatism might very well have been motivated by a determination to distance himself from Charcot's intellectual lineage or to build his legacy in neurology outside of academia.

The prevalence of functional disorders among troops breathed new life into Babinski's campaign. He now had hundreds of cases that he could use to support his claims. More importantly, the war provided urgency to the discussion. While it had taken six and a half years for the Neurology Society to vote on Babinski's 1901 proposal, there was now no time for delay. Quickly defining the causes and proper treatment of functional disorders was essential for the war effort.

The war also provided opportunities for neurologists and psychiatrists to bolster the status of their medical specialties. Psychiatrists in particular were eager for those opportunities. Largely relegated to tending to incurables in public insane asylums, psychiatrists desperately wanted to prove that they could address important practical questions—such as the influence of the war on mental illness—and then create institutions and therapies that could effect cures. Both neurologists and psychiatrists hoped to strengthen the ties

between their fields and scientific medicine. Decades earlier, European physicians and scientists, including Louis Pasteur, Joseph Lister, and Robert Koch, had shown that the application of germ theories to medicine could help protect individuals—and nations—from disease. French neurologists and psychiatrists hoped to show that their fields could similarly help their nation by recouping as many men as possible for the war.

The Neuropsychiatric Community

Psychiatrists and neurologists often worked side by side during the war, but neurology and psychiatry had developed distinctly in France and, despite prewar efforts toward integration, important divisions continued to separate the fields.[23] Psychiatry in France was born in the first part of the nineteenth century, when doctors such as Pinel and his student Jean Étienne Dominique Esquirol began to medicalize the charitable hospices and prison-like hospitals that housed the insane.[24] Previously, institutions such as the Salpêtrière and Bicêtre in Paris were little more than permanent holding pens for vagrants, drunks, and idiots. Pinel and his followers segregated the insane from the other inmates, unchained them (symbolically, if not literally),[25] and began to provide individualized treatment, which they insisted could cure patients who previously had been considered hopeless.

Pinel's treatment model promised a new gentleness toward patients, in clear contrast to the chains that had previously bound them. Yet as the philosopher Michel Foucault and others have argued, Pinel's *traitement morale* may have simply traded physical confinement for psychological manipulation.[26] In Pinel's method, the doctor acted as an authority figure, constantly monitoring his patients' behaviors and helping guide them back to self-control and civilized behavior by requiring them to internalize socially acceptable values.[27]

Though the therapeutic benefits and ethics of the *traitement morale* now seem questionable, its practice clearly helped doctors colonize the madhouse, which previously had been the domain of clergy and civil administrators. As the historian Colin Jones wrote, "The doctor had gained admittance to the asylum not because of the power of his drugs but because of the strength of his personality in applying the so-called 'moral treatment' held in awe by the disciples of Pinel."[28] In establishing an outpost in asylums and claiming the mad as their clientele, these doctors made significant steps toward establishing a distinct medical specialty.

National legislation helped to solidify the relationship between doctors and the insane. The asylum law of 1838 mandated the creation of a nationwide system of institutions dedicated to the treatment of mentally troubled citizens. "Asylums," as they would be called, would no longer mix the insane with prisoners or indigents. The law of 1838 also specified that doctors—rather than monks or nuns—would direct asylums. Furthermore, doctors would assume legal responsibility for admissions to asylums—a duty previously bestowed on the courts.

The specialized medical field that those doctors formed was called "alienism," referring to their clientele of "mentally alienated" patients. The insane had formerly been called crazy or mad [*fou*], but doctors increasingly insisted that they be referred to as *aliénés*, a term that doctors believed had fewer negative connotations. *Aliénés* were said to be alienated from society, from themselves, and from reason.

Alienism (also called mental medicine and other names) strengthened its place as an autonomous medical specialty through the nineteenth century. In the middle of the century, even as general medical practitioners remained somewhat unorganized outside of university faculties, alienists founded academic societies and journals. They also offered courses on mental maladies to medical students and conducted clinical teaching rounds in the wards of asylums. Toward the end of the nineteenth century, alienism was operating as a distinct medical specialty.

By most accounts, neurology was born later than psychiatry.[29] Although nervous disorders had long been identified in medicine, they were known primarily through observed signs and reported symptoms, not through a deep understanding of the structures and functions of the nervous system. The first steps toward that deeper understanding were taken in the early nineteenth century, when the convergence of medicine, surgery, teaching, and research in large Paris hospitals gave "birth" to clinical medicine.[30] In those institutions, doctors developed the anatomo-pathological method, in which they carefully recorded clinical notes during a patient's illness, performed an autopsy after the patient's death, and then attempted to correlate the post-mortem findings with their recorded observations. The knowledge doctors gained allowed them to improve their interpretation of clinical signs in future patients. Through the mid-nineteenth century, advances in microscopy, along with improvements in laboratory techniques and experimental methods, enabled doctors to enhance their understanding of neuroanatomy and neurological disease.[31]

By midcentury, however, there had been no real effort to consolidate knowledge about nervous disorders or to organize a separate branch of medicine around that knowledge. It was not until Charcot began his work at the Salpêtrière in the 1860s that neurology truly began to develop as a distinct medical specialty in France.[32] Using an anatomo-clinical method, which privileged clinical observation above post-mortem dissections and microscopic research, Charcot precisely defined nervous illnesses that previously had been only vague diagnostic categories. He also gathered around him a coterie of students who helped extend neurological knowledge beyond the Salpêtrière. They lectured and taught abroad, and they worked with Charcot to establish medical journals and to found a neurology society. In 1882, Charcot was elected to the first-ever chair in nervous diseases in the Paris Faculty of Medicine, solidifying the place of neurology in medical education.

Alienists and neurologists were already collaborating by the mid-nineteenth century, but the intensity of efforts to share information increased toward the end of the century. Many of those efforts were undertaken by alienists who hoped to attach themselves to a more prestigious and scientific medical specialty. Even as alienists were constructing their medical specialty, the practice of mental medicine was floundering. The initial optimism that had fostered the creation of asylums and the development of alienism had faded, and alienists proved unable to demonstrate the medical value of their specialty. They could not find the physical lesions or somatic processes that some initially believed were the causes of mental illnesses. Nor could they produce the cures they had promised. Consequently, their treatment of the insane did not seem to offer decided advantages over the charitable care of the Catholic Church. In the face of etiological frustrations and therapeutic impotence, the specialty deteriorated and morale among alienists plummeted. By midcentury, alienism had become the lowest-paid medical specialty with some of the fewest medical responsibilities.[33] Asylums fell into disrepair, and asylums' chronically ill residents went neglected.

When censorship laws were relaxed in the 1860s, mental medicine also suffered frequent attacks from journalists, who criticized doctors' therapeutic failures and the arbitrary power bestowed on alienists by the law of 1838.[34] Presenting scandalous cases as examples, journalists claimed that asylum doctors too frequently sequestered individuals without good cause. Legislators responded to those critiques by proposing to strip asylum doctors of their legal authority. Alienists were inappropriate judges for such legal matters, said these

politicians, adding that they were incompetent at their own profession.[35] In the 1890s, deputy Joseph Reinach stressed the immaturity of psychiatry as a science, insisting that the alienism was "still in its infancy, by its own admission." He asserted that it was "not at all certain in its conclusions" and was often susceptible to "erroneous diagnostics."[36] Reinach believed he was not alone in his opinion: "The negligence of asylum doctors has been denounced for fifty years by all the adversaries of the law of 1838 as one of the most frequent causes of abuse and errors."[37]

To address the problems facing their field, alienists of the late nineteenth and early twentieth centuries sought to realign their specialty with medicine proper. Forging an alliance with neurology, a neighboring field that was already immersed in microscopy and organic diseases, was an important step toward improving the status of the psychiatric specialty.

The association between neurology and alienism was a natural one in several respects. Neurologists and alienists generally had similar medical training. In France, specialty training in medical education had begun in the late 1800s and training certificates were awarded for "legal medicine and psychiatry" beginning in 1903, but true certifications for major medical specialties were not created until after World War II.[38] Before then, doctors had few impediments for switching from one field to another over the course of their professional careers. Throughout the nineteenth century, many of the alienists who worked in the asylums of the Seine department had studied neurology at the Salpêtrière before assuming their psychiatric posts. Up to the 1950s, professors of mental maladies at the Paris Faculty of Medicine were all trained neurologists.[39]

Alienism and neurology also overlapped in the study of several disorders. Doctors from both fields found that patients with neurasthenia (general nervous weakness or exhaustion), general paralysis (a disorder later linked to syphilis), and certain traumatic injuries (such as those that followed railway accidents) expressed both neurological and psychiatric symptoms. Even patients with hysteria and epilepsy (diseases claimed for neurology by Charcot) displayed psychological impairments that sometimes led to their internment in mental asylums.

Neurologists and alienists began to hold joint conferences regularly in the 1890s. Meanwhile, alienists and psychologists (whose study of the mind had a more philosophical bent) contributed to meetings of the Neurology Society of Paris while neurologists contributed to meetings of psychiatric societies.

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