Shock Therapies as Intensification of the War against Madness in Hamburg, Germany: 1930-1943

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Abstract. German psychiatric practice between 1930 and 1945 was characterized by the interplay of different technologies that aimed to influence the conduct of the patient. Nurses, as the delegated representatives of the psychiatrists’ power, were strategically positioned to influence patient behaviour using a broad range of disciplinary measures. An in-depth qualitative analysis of a medical record from a Hamburg asylum highlights the different shock treatments used on the patient, demonstrating that they were used randomly and primarily as a means of discipline for “bad” behaviour, sometimes leading to patient deaths. The article connects the results of the analysis with the international discussions among psychiatrists on how shock therapies were presumed to operate.

Keywords. Nursing, Germany, shock therapies, psychiatric practice

Résumé. La pratique de la psychiatrie en Allemagne entre 1930 et 1945 était caractérisée par l’usage de différentes technologies visant à infléchir la conduite des patients. Les infirmières, à titre de représentantes de l’autorité du psychiatre, étaient en position d’influencer le comportement du patient à l’aide d’une large diversité de mesures disciplinaires. Une analyse qualitative approfondie d’un dossier médical trouvé dans un asile de Hambourg montre que différents traitements de choc ont été utilisés sur le patient, au hasard et surtout en tant qu’outils disciplinaires lorsqu’en présence de « mauvais » comportements. Parfois, ces traitements ont causé des décès. L’article s’inscrit dans les débats internationaux entre psychiatres concernant la façon dont les thérapies de choc étaient censées agir.

Mots-clés. Services infirmiers, Allemagne, thérapies de choc, pratique psychiatrique

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INTRODUCTION

In May 1937, the international conference of the Swiss Psychiatric Association in Münsingen was devoted to “The Treatment of Schizophrenia: Insulin Shock, Cardiazol, Sleep Treatment.” The founder of the hypoglycemic insulin convulsant therapy of schizophrenia, Manfred Sakel, described the interplay between epileptic seizures and hypoglycemic coma. “The epileptic attack is the artillery [and] the hypoglycemia is the infantry in the battle against the disease. According to military theory, the artillery never conquers and occupies hostile territory. It can only open the way for the infantry.” As he continued, “the artillery might be able to create a breach in the walls of the city. However, at this stage, the battle is not finished. The city must still be occupied and pacified. The besieging troops must penetrate the city and must establish an intelligent and coordinated system of occupation that assures the return to the normal. The restoration of normality needs very subtle means able to reach the damaged parts and the finest mental processes in order to restore larger clarity in the mental and emotional spheres.”

The military vocabulary used by the Austrian-born Sakel was a precise description of the rationale behind the deployment of shock treatments in psychiatry. As I argue below, shock therapies incorporated the strategic power field of psychiatric practice and were used as an effective tool to implement the will of psychiatrists and nurses deep into the core of the patient. In an attempt to decipher this rationale, I use the notes of psychiatrists, and particularly of nurses, that were kept on Anna Maria Buller, who was admitted to both the Langenhorn and Friedrichsberg asylums in Germany between 1931 and 1943. This one specific patient record, used as a kind of “microstorie [sic],” highlights the fact that shock therapies were used more or less randomly by asylum staff as a means of disciplining this patient’s behaviour.

In an attempt to contextualize German psychiatric practices, this paper will also touch on international discussions among psychiatrists that took place during the 1930s and 1940s on how these therapies were presumed to operate. Although Buller was in these asylums over the period of the Nazi regime, and without denying or downplaying cruelties committed during the Nazi era, I contend, along with some historians writing currently in the field, that German psychiatric practice demonstrates more continuity than discontinuity from the First World War into the post-Second World War era. Conventionally, historians writing after the Second World War have subdivided the history of German psychiatry into three fairly distinct stages, paralleling German political history. Written for the most part by psychiatrists themselves, this traditional historiography was an attempt to create a respectable self-image by distancing themselves from their past and presenting the
Nazi era as exceptional and German psychiatry as the victim of political circumstances. The first decades after 1900 were characterized by the development of an academic psychiatric discipline and the development of nosology, classification, and neuropathology based on the work of Emil Kraepelin or Alois Alzheimer. The advent of Nazi rule marked the beginning of the second phase, which lasted from 1933 to 1945, when psychiatrists were purportedly forced to adhere to Nazi racial ideologies. The third stage that began after the Second World War was characterized “by a slow but more or less successful ‘normalization’ of German psychiatry,” and German psychiatrists adjusted to international developments in psychiatry.

This compartmentalization of the German history of psychiatry began to be contradicted by historian Klaus Dörner as early as the 1970s when he points to the continuities in mental health care, and particularly the treatment of chronic patients, since the 1920s. Historian Heinz Faulstich’s work points out that psychiatric patients had been killed both before and after the Nazi regime. Newer research on the history of military psychiatry in Germany highlights that the treatment of “war neurotics” arose during and after the First World War, and heralded the era of “heroic therapies,” where psychiatrists began to search for therapeutic success regardless of the risk that these treatments posed for patients or how much they exposed them to pain or fear. And preliminary results from my research on the Ontario Hospital Toronto, Canada, suggest that shock treatments and other chemical and physical measures employed there in the 1930s and 1940s were not that different from those given in German psychiatric asylums. Some nursing practices at the Toronto hospital, and especially the way that nurses perceived their patients, also appear to be comparable to German nursing practices of the same time period.

While my research perspective is much more aligned with that of this new generation of historians of German psychiatry, I assert, nevertheless, that even these newer approaches are not far reaching enough. Although historian Volker Roelcke, for example, suggests that the interests of the profession drove the development of German psychiatry, his focus remains on reasons exterior to psychiatric practice and to psychiatric knowledge as such. In contrast, this article is based on Michel Foucault’s work, which argues that psychiatry at its very core is a discriminatory practice, and that the Nazi exclusionary practices were extreme variants of scientific, social, and political exclusionary practices that were already in place. German psychiatrists, whether before or after the extremes of the Nazi era, were following a rationality that was part and parcel of psychiatric practice (termed a practice by Foucault and not a discourse because the asylum cannot be understood by scientific discourses alone). As Foucault notes, these exclusionary practices
are necessarily bound to symbolic and physical violence, which begins with the differentiation between those considered “normal” and those defined as “abnormal, and the definition of madness as the absolute ‘other’ of reason.” Once these distinctions were in place, lunatics could easily be identified without any doubts by psychiatric experts because of their difference, even if the causes of their lunacy could not always be determined. When the theory of degeneration allowed psychiatrists to link deviant behaviour with theory, and when the idea that the degenerated person was abnormal became the foundation of biological psychiatry, psychiatry was able to extend its power beyond its traditional focus on curing. The idea of incurability had formerly represented a kind of psychiatric horizon, since it defined the effective limits of treatment for diseases that had been perceived as essentially curable. However, from this moment on, madness appeared to be more the technology of the abnormal, and when that status of abnormality was fixed by heredity onto the individual, the project of curing no longer made any sense. Foucault also argued that as the pathological content of the psychiatric domain disappeared, so too did the therapeutic dimension of psychiatry. The German psychiatrist Kankeleit made this correlation visible in 1925 when he argued that, although it would be easier and less expensive to “re-integrate the inferiors as viable members into society,” the power of psychiatry was insufficient to achieve this goal: “however successful the care, it can only reform but it can never transform inferiors into normal humans.”

If the insane could not be cured but only influenced by the rationality of psychiatry, then, Foucault argues, psychiatric practices could best be described as disciplinary, aiming to influence the conduct of the patient and basing themselves on a power structure that hierarchically placed the psychiatrist at the top. Admission to the asylum was a demonstration of the medical power that ruled the asylum, conveying to patients that they had entered a specific space where the distribution of power had nothing in common with the “ordinary world.” Using a Foucauldian discourse analysis approach to history thus enables one to analyze this very specific distribution of power and the way psychiatrists conceptualised their interventions, in this case, shock treatments. The underlying question is to analyse how humans govern themselves and others through the production of a specific truth. This kind of historical analysis can help to decipher the ways in which certain practices were justified as well as the intentions and evidences of these practices.

PSYCHIATRIC PRACTICE

To analyze the strategic power field of psychiatric practice means grasping the intricate connections between a myriad of “technologies
of power” that are directed onto the bodies of patients and are aimed at profoundly transforming them. Technology approaches the forces of the body and the aptitudes and capabilities of individuals in order to shape their behaviour. It is invested with a strategic rationality that seeks to subsume the patient’s conduct to the requirements of psychiatry, to introduce the will of the psychiatrist into the patient’s very being.

The asylum can thus be perceived as a kind of machine and psychiatric practice as a complex interplay between discourses, technologies, architecture, and institutions—in other words, a dispositif. As German psychiatrist, Carl Schneider, best described it in the 1930s, to “biologically influence sick persons” a strategic interplay of different psychiatric interventions is necessary. Work therapy is only one component and must be combined with other biological treatments such as shock treatments. Schneider emphasized that these different interventions were mechanisms aimed to “make the sick persons realize the superiority of the healthy [that is, psychiatrists and nurses], [their] greater quick-wittedness, greater flexibility and [their] greater cautiousness.” In order to achieve this goal, Schneider emphasized that it was necessary to carefully block every possibility to withdraw. Partly as a matter of fact (by locking the doors of sick persons who want to get out of their rooms), and partly through figurative indications or through orders to the personnel to shut down possibilities that would enable the sick person to draw back into his symptoms. If necessary everything the sick person does or how he behaves must be regulated through the constraint of being always observed, accompanied and being subjected to the healthy.

Schneider called this strategy a “psychological pair of tongs” and emphasized that “many persons are needed in order to regularly affect the sick person.” These persons [psychiatrists and nurses] must pursue the same goal: “to fight against a symptom, to achieve certain indoctrination, or to force the sick person to make a specific decision.”

The psychiatrist attempted to transform all parts of the asylum into a therapeutic apparatus solely through his presence; he made rounds through all departments every morning in order to transform discipline into therapy, to control all the small wheels of the system, to inspect all disciplinary mechanisms. According to Eugen Bleuler, an influential Swiss psychiatrist who introduced the concept of schizophrenia at the beginning of the 20th century, the physical appearance of the psychiatrist alone should be sufficient to convince the patient that any resistance to the asylum was futile. As he stated: “One cannot forget that it is very rare to persuade the sick person to back down through logic itself, but rather through the appearance of the one who applies the logic.”

Since the asylum itself could be understood metaphorically as the body of the psychiatrist, with every part of the asylum and everyone
working within the asylum functioning as an extension or part of his body, the “logic” of the asylum writ large was physically imposed on the patient, hinting at the rationale behind psychiatric practice. Psychiatric practice was never founded on scientific discourses but was based more on the play of this disciplinary power, what historian Jean-Noël Missa calls the “therapeutic empiricism” of psychiatry. The psychiatrist can only take on the role of doctor if the patient demonstrates symptoms of a recognized illness, and only transforms from jailer to physician when the patient plays out the symptoms of a mental illness. This aspect was a crucial part of the admission ritual that aimed to provoke a situation in which patients could not avoid acknowledging their madness. Admitting madness meant that patients also admitted that they were actually ill, in need of a physician and of being interned, and that they were the kind of patients for whom psychiatric asylums were built. Foucault calls this moment the “double enthronement” (double intronisation), when the interned individual was “enthroned” as a sick person, while the interning individual was “enthroned” as psychiatrist and physician. This is also the reason why psychiatrists regularly carried out interviews with patients to interrogate them about events recorded in their medical chart. Only if patients were able to recognize themselves in the written case history of the record was there a chance of being released and being considered “cured” or in “remission.” The desire to find a way out of madness implied acknowledging this medical power as all powerful, renouncing the omnipotence of madness, and accepting the documentary-biographical identity.

This strategic power imbalance erected one kind of a reality within the asylum, but caused an endless battle with patients because it had nothing in common with their reality. The insurmountable, disciplinary power of psychiatry confronted the “absolute” power of the insane—absolute because patients tried to force their own reality onto their surroundings by, for example, claiming that “somebody is talking to me.” By imposing their own “rules,” patients attempted to oppose the “reality of the asylum.” Bleuler described the negativistic logic of the “sick person”:

When the sick persons ought to get up, they want to stay in bed; if they ought to stay in bed, they want to get up. They neither want to dress nor do they want to undress, whether or not they are complying with an order or doing this according to the asylum’s rules. They either refuse to come to eat, or else refuse to leave the table; if they can do all these actions beyond the desired time or if they can somehow do it against the will of those surrounding them, they will do it. They will not use the toilet spontaneously if they are accompanied there, they withhold their excrement in order later to soil their beds or their clothes. They eat soup with a fork or with a dessert spoon, the dessert with a tablespoon. Many resist with might and main (Leibeskräften) against any influences, often
with agitated insulting and swiping … It can develop into a real harassment (Chicanose), into an active desire to always annoy those surrounding them in a provocative manner.\textsuperscript{24}

The only possibility of influencing madness was through “purposeful education,” especially for people considered to be chronic who were “for the most part to be trained to normal behaviour and work.” Nurses had a specific part to play in this education. As the delegated representatives of the psychiatrist’s power, nurses were strategically positioned “beneath” the patient, because only from this position was it possible for them to understand the patient in every detail and to influence his or her behaviour in depth. German psychiatric nurse Heinrich Becker specified that the function of nursing was “to find out in all patients how they are best to be influenced.” But in order to be able to do so, the nurse had to “try to infiltrate the trains of thoughts or peculiarities of the sick persons, and when he succeeds, to act out of this knowledge.”\textsuperscript{25} The following analysis highlights the strategic interplay between different actors and the specific rationale behind the use of shock treatments in the case of Anna Maria Buller.

**ANNA MARIA BULLER**

Eighteen-year-old Anna Maria Buller\textsuperscript{26} was first admitted to the psychiatric hospital in Friedrichberg, Germany, in 1931. Although originally admitted to the general hospital on a suspected diagnosis of influenza, she was transferred to Friedrichsberg within the first week because her behaviour was classified as “abnormal.” Apart from short stays in her parental home, she spent the rest of her life, until 1943, between Friedrichsberg and the other nearby asylum of Langenhorn. Her diagnosis during her admissions swung among schizophrenia, amentia, dementia praecox, and feeblemindness. Any and every available medication and shock therapy was tested on her: Cardiazol, Insulin, Eugenozym (an unlicensed medication) combined with Digitalis, Morphin-Scopolamine, and Paraldehyde, and she endured continuous baths, isolation, and forced bed rest, among other “treatments.” She was sent on 25 June 1943 to Hadamar. Although Hadamar had been a gassing facility for so-called euthanasia killings between 1940 and 1941, patients admitted after those years continued to die there through starvation, medication, and neglect. Anna Maria died there 11 days after she was admitted.

Buller’s medical record comprises more than 200 pages of primarily nursing and physician notes. Her record was chosen because she had a very long “asylum biography” that started before the Nazi regime and ended in the gas chamber at Hadamar, covering more than 10 years (1931-1943). This record therefore enables me to compare the nurses’ notes from before the time the Nazis came to power with the notes
Photographs of Anna Maria Buller taken by her psychiatrists.

taken during World War Two, and to determine similarities and differences in the nurses’ and psychiatrists’ perception of Anna Maria Buller. This kind of micro-research allows for a kind of “debunking” because it challenges the “history of ideas and institutions,” and is “an important correction to the ‘Big Picture’ history of psychiatry.”

The notes in Buller’s record document an escalating fight over the course of her admissions between the professional staff and her madness. The nurses’ notes appeared to detail Buller’s “education,” because every time she behaved in a way deemed illegitimate, the nurses
intervened with a whole range of disciplinary measures that became more and more severe. On her first admission in 1931, nurses focused on detailed descriptions of Buller’s behaviour that they attempted to “correct” through forced bed rest and the application of the sedative Paraldehyde. Her behaviour, however, became more unpredictable. On 13 April 1931, one nurse wrote:

13.4.: Pat. jumped out of bed at 1.00 a.m., ran to the door noisily and screamed. When pat. was taken back to bed she insulted the nurse saying: “bitch with the red cross, you Satan.” Pat. spat at the nurse, scratched her and tried to bite her. Pat. was very resistant. After the injection, the patient got up again, went to the bathroom, said then, “Oh I feel so sick to my stomach.” Lay down flat on the floor, was persuaded to get up, went to the dormitory and lay down in patient Kuscher’s bed, propped herself up with both feet against the bed, so that it was very difficult to get her out. At 2:00 a.m. patient fell asleep again. This disruption woke up all the other patients. (Wa.)

The nurses’ reactions to this unpredictability and perceived dangerousness escalated over the following years, and they began to administer continuous baths (often over periods of whole days), inject her with Morphine-Scopolamine, confine her to an isolation cell, apply cold wet sheet packs, and administer shock treatments. The record reads like a continuous struggle in the “war against madness” and with every admission to the psychiatric hospital the range of disciplinary means used on Buller was gradually broadened. Nurses had a decisive function in this war, because not only did they command most of these disciplinary means but their descriptions of Anna Maria Buller in her medical record also determined how she was perceived and how her prognosis would evolve.

Before her death in 1941, however, her therapy had taken a radical twist. To begin with, her diagnoses changed dramatically from schizophrenia, which carried hope for amelioration, to “dementia praecox,” which implied an escalating process of stupefaction with no possible cure, through to “schizophrenic final state.” The record contains the medication plan kept by the nurses in order to record the multiple Morphine-Scopolamine injections and the Paraldehyde that she was receiving. However, on her final admission in 1940, she started receiving a new drug, Cardiazol (or Metrazol), that she had never received before. Furthermore, the Cardiazol treatment was combined with an “Insulin deep coma” therapy.

According to procedures in the asylum in Friedrichsberg, Cardiazol treatment, which was meant to induce seizures in patients, was to follow a precise scheme of two shocks per week at intervals of two to three days. Buller’s Cardiazol injections started on 26 April 1940 with the usual dose for women, but the psychiatrists considered this treatment...
ineffective and the injections were repeated one day later with a slightly larger amount, eventually leading to a seizure. From then on, the nurses reported only from time to time on Buller’s Cardiazol injections, and the psychiatrist did not mention them again until 12 June, more than two months after they began. In Buller’s case, however, the medication plan shows that no regular schedule was employed (see Figure 2). She received these injections on an irregular basis; in June, for example, she was given seven while in July, she received none. The Cardiazol injections were combined with insulin injections from 6 May to 16 May 1940. Nowhere in the record were the Cardiazol injections defined as a “therapy,” whereas the insulin injections explicitly were.

Comparing the medication plan with the nurses’ notes and the descriptions of Anna Maria Buller’s behaviour, it is clear that the Cardiazol injections were used as a disciplinary measure against what the nurses (and through them, the physicians) deemed bad behaviour. On 29 October 1940, the nurses wrote:

29.10. Pat. [patient] is very inhibited, stands around and must be urged to eat. Nurse Olga

Pat. was very blocked. In the evening beat another patient with her slipper. Cried a little. Got Paraldehyde.

Night Restless, often out of bed, disturbs other sick persons, pinched them. (Inj.) [Morphine Scopolamine]

31.10. Pat. was restless in the morning, ran around crying, got Cardiazol +, became quiet afterwards. Nurse Olga

Medication plan Anna Maria Buller from April 1940 to February 1941. The Cardiazol injections are marked with a square, the insulin injection with a dot. The other entries are about Morphine-Scopolamine injections and Paraldehyde.32
Between 24 and 28 November, Buller received both Paraldehyde and Cardiazol at least once and was also strapped to the bed several times for her restlessness. The entry on the afternoon of 28 November demonstrated well the aim of “treatment” and the type of behaviour that the nurses desired. During the periods that Anna Maria seemed to “behave well,” according to the nurses’ perceptions, she received no Cardiazol injections. Cardiazol was only applied when nurses and psychiatrists estimated her behaviour to be disruptive.

**Night**

25.11. Pat. [patient] stood always in front of the window, slept after she received Paral [Paraldehyd]. Pat. ran around sobbing, came into the belt. Nurse Olga

26.11. Pat. got Cardiazol. Was very restless, always out of the bed, talked quietly to herself.

**Aftern. The same**

27.11. Pat. was very restless, was put into the belt.

**Aftern. Pat. was very excited during visiting hours, transferred to ward #13. Nurse Lotte**

28.11. Pat. got Cardiazol, very restless.

**Aftern. The same**

30.11. Pat. was nice and friendly.

By January 1941, Buller had received Cardiazol injections, however irregularly, for nearly one year. Within a psychiatric dispositive, even medications that were initially prescribed according to a certain conception of the etiology of mental illness or its organic correlations were re-utilized in a directive system. As one psychiatrist reported, a “young schizophrenic male patient” had been “threatened by his physician [that] he would get [Cardiazol], the ‘shaking treatment,’ (accompanied by a demonstration of it), if he [did] not soon wake up, get peppier and work faster and with more interest. Immediately he [began to defend himself against [Cardiazol]], worked with more zest, looked brighter, and when he saw his doctor approaching he busied himself where he could not be overlooked.”

**SHOCK TREATMENTS AND PSYCHIATRIC PRACTICE**

Although Cardiazol was not used until the end in Anna Maria’s case, it was part of what Bleuler called “the active therapy” that complemented
the “educational therapy of schizophrenia,” or what was known as “psychotherapy” at the time. Cardiazol shock therapy—intravenous injections of pentamethylenetetrazol, a camphor-like substance used to provoke an epileptic seizure—was introduced by neuropathologist and neurologist Lazlo (Ladislaus) Meduna in 1934, and from June 1936 on, insulin and Cardiazol shock therapies were carried out at Friedrichsberg. In the US, Metrazol/Cardiazol therapy was introduced in 1937, and in Canada, at the Ontario hospital in Hamilton, in September 1938. Meduna’s theory was that genuine epilepsy rarely occurred in combination with schizophrenia, creating what he called a “biological antagonism” between these two diseases. Because the two diseases were mutually exclusive, he contended that synthetically provoking artificial epileptic seizures should positively influence schizophrenia. However, this theory was immediately challenged. As an international debate highlights, practitioners like military psychiatrist Hirsch Gordon identified 50 different shock therapy theories. Psychiatric journals published an overwhelming number of studies that tried to discover the exact mode of action and the impact of different shock therapies on patients’ behaviour, but they were less interested in finding theoretical underpinnings for the causes for schizophrenia and how shock therapies influenced them.

American psychiatrist Louis H. Cohen emphasized that the Cardiazol procedure was relatively simple, economical, and did not involve restraint. Whereas all conventional forms of treatment, such as continuous baths, packs, seclusion and chemical sedation, were effective only during the immediate period that they were applied, shock therapies appeared to last longer over time. Cohen stated that even after shock treatment was discontinued “most patients remain[ed] quiet and cooperative” and many of them “for the first time in years, [were] capable of doing productive work.” Cardiazol therefore was considered one solution for administrative problems concerning the handling of “chronically disturbed patients.” Another American psychiatrist summarized that the duration of the illness was shortened and that “some of the others [patients who could not be discharged] became better hospital citizens.” Even if patients remained unchanged, most of them improved regarding their over-activity, aggressiveness, and destructiveness. “Necessary sedation has been diminished to practically nil.”

These considerations were also sometimes closely related to eugenic arguments. For example, Professor H. Mouttet at the Swiss Psychiatric Association meeting in 1937 mentioned at the beginning of this article that “We officers of the state who are concerned with prosperity, the health and the well-being of our fellow citizens expect from you the transformation of useless human beings into individuals useful to society.” Leading psychiatrists like Carl Schneider in Germany
emphasized on the one hand the necessity “to furnish the new times with new humans” and underlined, on the other hand, the connection between curing and devastation.43 “Psychiatric patients should receive intensive ‘biological’ therapy, but if they were incurable and could not be integrated into society, they lost their reason for existence in the biological sense as well.”44

No consensus among psychiatrists existed as to exactly how the therapy should be carried out or for how long. Higher doses of the drug were to be administered within a couple of minutes if any seizure occurred, but if no seizure could be provoked, further injections were to be held off until the following day. According to Bleuler, who followed Meduna’s recommendations, patients would ideally receive two shocks per week—15 to 20 in all.45 But a look at the international literature shows that the suggestions regarding the duration of the course and the frequency of injections were quite arbitrary.46 Sometimes the injections were given daily,47 sometimes every second day.48

Psychiatrists usually gave the intravenous injections. Because patients often vomited following the injection, they were fasting and placed in bed with a piece of rubber hose inserted between their teeth to prevent them biting their tongues.49 As was the case with epileptic seizures in general, induced seizures also left patients unconscious, although they often suffered dislocations of joints, bone fractures, and other surgical complications. Ten to 15 seconds after the injection, a so-called pre-paroxysmal phase occurred that was characterized by a short interval of coughing, which watchers stated was “followed by [an interval] usually lasting not more than ten seconds during which the patient [made] thrashing movements and [flailed] his arms and legs about, his facial expression closely resembling terror.”50 The assistant physician at the Illenau asylum in Achern, Germany, explained that “most sick persons oppose the Cardiazol treatment, because in the short interval that lasts only several seconds … [they] experience a displeasing feeling, especially in the cardiac region, that can bring on a mortal fear. Nevertheless, it is just a misperception that is not based on a real specific danger.”51

This “misperception” is worth analyzing in more detail. Psychiatrists generally agreed on the fact that the fear provoked in patients during the therapies (especially in the case of Cardiazol shock therapy) had an impact on the outcome of the treatments. They disagreed only to what extent. From 1937 to 1939, a large number of studies carried out in U.S. asylums tried to determine the impact of fear in shock therapies, for example, by artificially provoking prolonged sequences of fear that sometimes lasted up to three hours. Cohen described the fear experienced by patients as a “threat to the self which arises out of the experiences of impending catastrophe.”52 Humbert and Friedemann

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described this feeling as a “falling into non-existence,” which invoked in the patient “the primitive complex of the association of life-death … that appeared to have cumulative effects.”

Psychiatrists who studied the impact of fear agreed on the fact that the “animal-like expression of fear” was a sign of a kind of fear articulated at a lower biological level, and they differentiated this kind of fear from that consciously expressed by patients, which often led them to resist treatment. As two researchers asserted, a patient “suddenly and in the course of a few seconds after the injection of [Cardiazol] receives a terrific assault upon his entire economy including [his] consciousness and his instinct of self-preservation. He almost dies but does not.”

Schilder described this condition as a “threat of annihilation and death and indeed during the epileptic fit and the following coma the patient comes very near to death.” The patient is “dead for a minute or so in an average attack. He goes through a terrifying experience of which he is aware, in active consciousness or in a subconscious state, only for a short time.” The fear of impending death is “probably more real than that of the angina patient.” This profound fear on a “lower biological level” was only experienced if it was followed by seizures. However, it was possible to produce a less profound kind of fear by provoking “abortive seizures,” which occurred if the dose of Cardiazol was too low or if it was injected too slowly. Patients clearly remembered the fear brought on by these abortive seizures, leading to speculations by historians that the injection of lower levels of the drug or injecting it too slowly had the potential to be used deliberately. Cohen regarded shock therapies as “the twentieth-century variety of shock treatments of the past, in which fear [was] instilled [for a] therapeutic purpose.”

This suspicion is pertinent in Anna Maria Buller’s case, because the medication plan (see Figure 2) clearly indicates that, in the course of her treatment, “single shot injections” became more frequent. For some of these injections, she successfully experienced a seizure (in these cases, a + sign is marked beside the entry) but some injections obviously did not provoke seizures. According to standard procedures, in these cases the injections had to be repeated until a seizure occurred (or the injections had to be resumed on the next day), but in Buller’s case, this did not happen. It seems as if the rationale behind these single injections was to discipline specific behaviour that the nurses reported in order to obtain permission from the psychiatrist for another injection.

Shock therapies were enthusiastically received in Germany and abroad. An overwhelming number of case studies were published that demonstrated astonishing results for patients who had successfully recovered from schizophrenia. It must be emphasized that psychiatrists referred only to “remissions” of patients, not to cures. Bleuler believed that heredity or “congenital disposition [was] of critical importance” and
considered schizophrenia to be a “heredodegeneration,” even though he admitted that no medically sound idea existed for its causes. The term heredodegeneration, a combination of “heredity” and “degeneration,” implied that the cause was to be found in the patient’s family history, and that it was possible to locate the reason for the illness in former events that had induced a degeneration of a family member and was later passed on. The inability to find an organic cause of illness could be balanced by a kind of “virtual body,” the “body of the family.” Through heredity, it was possible to re-introduce a pathological “material substratum” and give the illness certain physicality.

From this perspective, the course of the illness could be influenced only through psychotherapy, meaning that patients could be educated, but not really cured. Psychiatrists internationally thus tried to define the success of therapies through classification of patient behaviour. The psychiatrists L.v. Angyal and K. Gyárfás distinguished four forms of “remission”: “complete (A), good (B), social (C), and none (0).” People with complete remission, it was thought, had gained complete insight into their illness, were able to work, and were thought to have attained a complete cure by those close to them. In the everyday life of the asylum, patients were judged according to how they were able to adjust to the regulations of the institution.

To reduce the purpose of shock therapies to produce only more manageable patients, however, is too simplistic. As the quote from Angyal and Gyárfás highlights, patients who were considered in complete remission were said to have complete insight into their illness. Solomon et al. described in his case study how patients who were “hostile to questioning” about their mental illness before shock treatment exhibited “a cooperative cordial attitude towards” the psychiatrist after they recovered. They were able to give an “objective outlook and an apparently adequate rationalization” of their problems. The authors defined “psychologic resistance” as a “hostile, angry, disputing attitude towards the examiner.” Psychiatrist Hamlin A. Starks carried out interviews on the subjective experiences of patients receiving insulin and Metrazol therapy. As one patient stated, “Before the treatment, I was in a little world by myself, having bad feelings. After I got the treatment, I felt rather the reality [became more aware of his surroundings]. Another patient admitted that he had been mentally ill, that he had “imagined things that didn’t exist in reality.” After the treatment “my mind began to look at things realistically again. It made me very reasonable, very rational, and [able to] think clearly.” In contrast, a patient who did not “change” through the treatment “admitted only what she wished to admit, often answering one question by asking another. The patient made no attempt to use the interview to gain insight into her problems.” From this perspective, shock therapy became a means
to achieve these confessions, and could be defined as introducing the psychiatrist’s will into the body of the patient. What happened in these moments was Foucault’s “double enthronement,” when patients acknowledged both the reality of the asylum and their own biography in their case histories as preserved in their patient records. But shock therapies had an even more far-reaching effect because they let patients acknowledge the all-embracing power of psychiatrists and nurses.

Psychiatrists acknowledged that the effects of Cardiazol and insulin were “deeper than the effects of what we call psychic influence. The treatment is an organic treatment reflected in psychological attitudes.” The psychosis was not forgotten, “but the individual changed his emotional attitude.” This was especially true in cases of “degenerative schizophrenia” (classical dementia praecox) in which the “psychotherapeutic influence is forcibly limited to superficial re-education.” These cases that were considered as hopeless appeared to be “responsive to shock treatment either by insulin or by Cardiazol.” Here we find the idea that Sakel developed through his use of military vocabulary, that shock therapies somehow overcame a blockage in patients in order to open them up to the possibilities of “re-socialization” through education.

Shock therapies in general thus had a very specific effect on patients, because they not only changed the way they communicated verbally but also how they acted in front of psychiatrists and nurses. Kerschbaumer described these changes as “a positive transference” leading to a “close patient-physician relationship,” where, for example, “some male patients [saw] in the woman-psychiatrist a sweetheart, wife, beloved sister or mother-substitute.” This “close patient-physician relationship” seemed to be a consequence of extreme fear because patients appeared to almost cling to their rescuers. Schilder noted that after a fit, a patient “experiences … a slow revival of his interest in the world and an enormous feeling of relief in which he grasps for any contact offered to him.” In this final stage of shock treatment the patient perceived psychiatrists and nurses as rescuers and tried to establish close contact with them.

Perceiving the psychiatrist as “rescuer” resembles the description of what Foucault called the “foundational scene” of psychiatry. In what has become a famous scene, Pinel, the French psychiatrist who is considered the founder of modern psychiatry, liberated the furious lunatics from their chains at the beginning of the 19th century in Bicêtre. They had been kept in chains because, it was feared, they would become a danger to all. But, merely by recognizing Pinel as their rescuer and by expressing their gratitude to him, they entered the path to a cure. Similarly, the recovery of patients from their seizures was often accompanied by a kind of “infantile regression in their verbal expressions and gestures, beginning with the most primitive ones like thumb-sucking
and calling frequently for “mamma” (even when hostile maternal complexes were present), then reaching out for support and behaving as if struggling for life, both in the state of torpidity and in the awakening.”\textsuperscript{70} As theoretical considerations developed at the beginning of this article suggest, this part of shock treatment could be interpreted as a sign of an inevitable submission to psychiatric power.

Furthermore, as was the case for Anna Maria Buller, Cardiazol therapy was often combined with insulin shock therapy. The addition of insulin, which had been developed by Manfred Sakel in the 1930s, was based on the theory that insulin antagonized the neuronal effects of products of the adrenal system that were considered the physiological cause of the patient’s illness. Insulin shock therapy was employed on a grand scale in Hamburg and elsewhere. The former medical director of Friedrichsberg, Prof. Dr. Hans Bürger-Prinz, stated after the end of the Second World War, that a quarter of the patient beds had been reserved for insulin shock treatments, or 80 beds out of 320.\textsuperscript{71}

“Deep insulin coma therapy” was extremely rigorous. It was administered in a separate unit, with the patients staying together with the same doctors and nurses throughout the therapy. Comas were induced on five or six mornings a week. Typically, the “therapy” began with an initial dose of 10-15 units of insulin with a daily increase of 5-10 units until the patient showed a severe hypoglycemia. Treatment continued until there was a satisfactory psychiatric response or until 50-60 comas had been induced. In Buller’s case, the “therapy” started with 30 units and with a daily increase of 10 units, reaching up to 100 units on the ninth day.

Experienced therapists in Great Britain let patients spend up to 15 minutes in “deep coma.”\textsuperscript{72} Bleuler believed that one could leave a patient in deep coma for up to an hour with hypotonia and absent corneal and pupillary reflexes.\textsuperscript{73} Hypoglycemia made patients extremely restless and susceptible to major convulsions. Comas were terminated by administration of glucose via a nasal tube or through intravenous injection. Patients required continuous nursing supervision for the rest of the day since they were liable to experience hypoglycemic “after-shocks” and a doctor had to be immediately available.

Bürger-Prinz pointed out that patients experienced these periods of “forced unconsciousness in slow motion,” which caused “panicky anxiety states in them.”\textsuperscript{74} Cardiazol shock provoked a profound fear of death in the patient, but insulin coma therapy was literally a death threat. Although American psychiatrist Jellife believed that innumerable forms of death threats existed, with varying degrees of significance for patients, he asserted that the hypoglycemic death threat was unique. “Genetically considered it may be thought of as a very primordial, primitive and massive type of threat which strikes at the very initial
stages of life” since “carbohydrates were among the first energy transforming substances creating life.” Insulin coma therapy produced, similarly to Cardiazol shock therapy, a reaction on a deep and profound level but the actual mechanisms differed. Insulin has a specific impact because of carbohydrates’ long phyletic history. Hence, “the death threat is a much more vital one coming from this direction than from almost any other.” The death threat experienced by the “withdrawal of glycogen forces a definite withdrawal of libido from the aggressive, hostile anal, oral and other negativistic behaviour patterns” because it strikes at the initial stages of life. It is as if the patient is catapulted into a coma that is comparable to an “intrauterine bath of primary narcissistic omnipotence.”

The insulin units were mostly the sole responsibility of nurses, who administered not only the insulin but also the glucose via a nasal tube. Nurses thus conducted patients systematically into a “twilight state” between life and death. However, as the example below suggests, they were also very concerned in recording patient behaviour, as they did for Anna Maria Buller.

15.5. Afternoon: Pat. got Insulin. Pat. walked around nude. Was drowsy. Must be urged to eat. Ate well then. (Nurse H.)
   Night: Slept (Nurse M.)
16.5. Pat. got Insulin. Is always out of the bed. (Nurse M.)
   Afternoon: Pat. removed her shirt, walked around.
   Night: Slept till morning. (Nurse K.)
17.5. Got Cardiazol (+ [‘seizure’]) afterwards unchanged. (Nurse L.)
   Night: unchanged
18.5. Pat. got Cardiazol. Afterwards quiet. Vomited a bit. (Nurse M.)
   Afternoon Pat. was quiet. (Nurse O.)

The patients not only imagined the possibility of death through these shock therapies, but fatalities were very real, as was reported in all the medical literature of that time. Historian Angelika Ebbinghaus assumes that the increase in the mortality rate in Friedrichsberg before the Nazi regime was due partly to the new “active” therapies. According to her research, patients were already dying from these shock therapies long before the beginning of the planned and systematic assassination of patients. (See Table 1) While the table indicates that the number of admitted patients did not double between 1936 and 1941, the number of deaths more than tripled in the same period of time.
The example of Anna Maria Buller highlights the fact that shock therapy was a technique that embodied the whole rationale of psychiatric practice, that of forcing the reality of the asylum onto the individual. In Buller’s case, for example, Cardiazol and insulin coma therapy was combined with the usual Morphine-Scopolamine injections, with Paraldehyde often given via enema in order to increase the sedative effects, and with a whole array of other disciplinary interventions. All these interventions were aimed at correcting her behaviour, and the nurses’ notes focused only on potential changes in her behaviour.

As the nurses’ notes pointed out, Buller was considered a chronic case. The nurses saw her as increasingly disoriented: “Sitting around and does not know what to do,” or “Pat. sits at one place with her head down for hours.” On 20 February 1941, the psychiatrist noted that “she was completely unchanged and negativistic in character.” Buller remained alternately stuporous and excited, out of touch with her surroundings, and “must be strapped down.” As a consequence, she was diagnosed as “schizophrenic final state.” This state might also have been due partly to the extensive use of Cardiazol and other medications, since Ziskind reported on memory defects in patients who had received this drug: “Persistent amnesia resulting from metrazol therapy resembles the memory impairment noted in organic psychoses” and the more “pronounced forms present in Korsakoff syndrome.”80 These findings coincide with the findings of Platner and Müller who reported Korsakoff syndrome, a brain disorder usually associated with heavy alcohol consumption, as a complication of shock therapy of both insulin coma and Cardiazol shock therapies. Other abnormalities in severely affected patients included “impaired sensorium, silliness, neglect of personal appearance, mental retardation, emotional lability, decreased self-preservation and feelings of familiarity.”81 Ziskind argued that

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of patients treated in the asylum of the University of Hamburg</th>
<th>Number of deaths in the asylum of the University of Hamburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1936</td>
<td>1333</td>
<td>85</td>
</tr>
<tr>
<td>1937</td>
<td>1990</td>
<td>142</td>
</tr>
<tr>
<td>1938</td>
<td>2196</td>
<td>154</td>
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<tr>
<td>1939</td>
<td>2516</td>
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<td>1940</td>
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<td>235</td>
</tr>
<tr>
<td>1941</td>
<td>2391</td>
<td>290</td>
</tr>
</tbody>
</table>
these symptoms were significant because “they are readily recognized as being due to the treatment and not part of the original disease.” He further emphasized that shock therapy augmented memory defects in patients depending on the duration of treatment and the spacing of convulsions.

The psychiatrists and nurses knew very well what they were doing when they employed shock therapies. Bürger-Prinz’s assistant, psychiatrist Fred Kogler, stated that “Insulin shock therapy and especially Cardiazol shock therapy are very brutal somatic interventions.” Patients become helpless and feeble, “which clears the way for psychotherapeutic guidance … The shock itself might perhaps function like a concussion to the core of the personality due to the deep impact on vegetative and other cerebral functions and thereby influences the mysterious biological events of schizophrenia.”

The notes on Buller in her record described her as “mentally dead,” a term coined by psychiatrist Alfred Hoche. Hoche contended that it was not difficult for physicians, especially alienists and neurologists, to identify mentally dead persons, because these people had no clear imagination, no feelings, wishes, or determination. They had no possibility of developing a “world view” (Weltbild), no relationship to their environment, and most importantly, they lacked self-consciousness or the possibility of becoming conscious of their own existence. They had no subjective claim to life because they had only simple, elemental feelings such as are found in lower animals. A mentally dead person, therefore, was not able “to raise a subjective claim to life nor [was] he able to perform any kind of mental process.” Seen against the backdrop of these findings, it does not seem to be an exaggeration to assume that psychiatrists and nurses actively contributed to the “final state” of Anna Maria Buller.

CONCLUSIONS

These kinds of perspectives refuse to assume the idea of progress in psychiatry. The article began with a brief theoretical outline of psychiatric practice to argue that the asylum was organized around the absolute power of the psychiatrist, which created an insurmountable reality to be forced onto the patient. Shock therapies must be analyzed within this frame of reference, since they incorporated the entire rationale of psychiatric practice and can be seen as technologies that were able to reach the inner core of patients. While the supporting evidence for this theoretical perspective was drawn from a patient record that spanned the era of Nazi Germany, I attempt to demonstrate that German psychiatrists were part of an international network whose members viewed the integration of shock therapies into psychiatric practice in similar ways.
But psychiatry and its practices cannot be analyzed through scientific discourses alone. The patient record as historical evidence is useful, on a “microlevel,” to demonstrate the perceptions of patients held by the professional medical staff and to better understand, in a concrete fashion, how they tried to “force their reality” onto their patients. Nurses were profoundly implicated in these practices, since they played a strategic role in influencing the behaviour of their patients through a multitude of disciplinary interventions, including shock therapies. Even if they did not always administer the injections, they were required to report on patients’ behaviour, maintain surveillance over them, and decide whether or not patients “treated” with shock therapies had improved. This analysis thus not only highlights the fact that nurses were powerful, if seen from the perspective of patients, but also complicates the perception of nursing as a benevolent vocation.

ACKNOWLEDGEMENT

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NOTES

2 For the use of “microstorie” for a history of psychiatry and more specifically, for a history of psychiatric nursing, see, for example, Frank Huisman, “From Exploration to Synthesis: Making New Sense of Psychiatry and Mental Health Care in the Twentieth Century,” in Marijke Gijswijt-Hofstra, Harry Oosterhuis, Joost Visselaar, and Hugh Freeman, eds., Psychiatric Cultures Compared: Psychiatry and Mental Health Care in the Twentieth Century (Amsterdam: Amsterdam University Press, 2005), p. 405-23.


10 Foucault, *Les Anormaux*.


12 Foucault, *Les Anormaux*.


16 Power field or “field of power” is a notion introduced by sociologist Pierre Bourdieu in the early 1970s describing an immensely complex web of various forms of social power (Pierre Bourdieu, *The Field of Cultural Production* (Cambridge, UK: Polity Press, 1993).


19 Carl Schneider, *Behandlung und Verhütung der Geisteskrankheiten. Allgemeine Erfahrungen, Grundsätze Technik Biologie [Treatment and Prevention of Mental Illnesses]* (Berlin: Julius Springer, 1939), p. 157. This book was considered ground breaking and influenced psychiatric theory even after the end of the Nazi regime.


22 Foucault, *Le pouvoir psychiatrique*.


26 Staatsarchiv Hansestadt Hamburg 352-8-7, Staatskrankenanstalt Langenhorn, Abt.1-1995, Krankenakte 28338 (hereafter Patient Record (PR), Friedrichsberg Medical Records Section (hereafter FMR), psychiatric notes (hereafter PN). This designation will be used throughout to identify Anna Maria Buller’s patient record; other patient files mentioned in the text will be identified by their unique file number.
The idea of waging war was a trope used by psychiatrists. Psychiatrist and Deputy Physician Superintendent Andrew M. Wyllie of the Crichton Royal, Great Britain, described the rationale behind convulsion therapy: “The introverted schizophrenic or melancholic may be likened to a walled city which has closed its gates and refuses to trade with the rest of the world. Methods of persuasion having failed to get the citizens to open the gates of “Mansoul,” the artillery of convulsion therapy is brought to bear on the walls of autism. A breach is blown in the wall, and relations with the world are re-established. Unfortunately we cannot control the amount of damage done in the bombardment. Evidence of damage is seen in the amnesia so common after even a single convulsion. Happily the process is usually reversible.” Andrew M. Wyllie, “Convulsion Therapy of the Psychoses,” The British Journal of Psychiatry, 86 (1940): 248-59.

Cardiazol was the trade name for pentamethylenetetrazol, a camphor-like substance in Germany. The trade name in the US and Canada was Metrazol.


Schneider, Behandlung und Verhütung der Geisteskrankheiten.


Schneider, Behandlung und Verhütung.


Bleuler, Lehrbuch der Psychiatrie, p. 331.


Cohen, “The Early Effects of Metrazol Therapy.”


Widenmeyer, “Die Insulin- und Cardiazolschockbehandlung.”


56 Clark and Norbury, “A Possible Role of the Element of Fear,” p. 197.
60 Colomb and Wadsworth,” An Analysis of Results,” p. 57-58.
62 Solomon, Darrow and Blaurock, “Blood Pressure and Palmar Sweat,” p. 120.
64 Solomon, Darrow and Blaurock, “Blood Pressure and Palmar Sweat,” p. 131.
70 Humbert and Friedemann, “Critique and Indications of Treatments,” p. 177.
76 Missa, *Naissance de la psychiatrie*.
84 Karl Binding and Alfred Hoche, *Die Freigabe der Vernichtung lebensunwertes Lebens. Ihr Maß und ihre Form* (1920) (Berlin: Berliner Wissenschaftsverlag, 2006).