Material Configurations of Nursing and their Ethical Implications. The Prolonged Bath Treatment in Psychiatry

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Abstract:

When "prolonged" or "permanent" baths were introduced as a treatment in psychiatric institutions around 1900, special treatment rooms had to be created that utilised medical knowledge of the time (hydrotherapy) and technically progressive features (running water). The nurses, who were co-agents in the treatment regimens, had a high level of responsibility for the patients, as serious accidents repeatedly occurred in the prolonged baths. Technical apparatus was gradually installed and material adaptations were made to the rooms that served to lighten the nurses' workload. This article examines the influence the material configuration of the bathroom had on nursing practice and also explores which insights can be drawn for current issues in nursing ethics.

1 Introduction

On 9 July 1919, the 29-year old patient Anna Schönstein died in the Werneck asylum. The day before, she had suffered scalds during her prolonged bath treatment, a treatment during which patients could spend anything from a few hours, a few days or even weeks in a tub filled with water. A nurse was held responsible for this incident because she had added hot water to the tub while the patient was still sitting in it and having an epileptic seizure at the same time. The nurse's attempts to lift the patient out of the tub were in vain and none of the other nurses heard her calls for help. When she finally noticed that she had not turned off the hot water it was too late. The patient had slipped with her feet into the running water and it had already caused life-threatening scalds on both of her lower legs and also her thighs and buttocks.¹

Anna Schönstein, who suffered from epilepsy, had lived continuously in the asylum since 1910 with only a short break of a few months. After her death the directors of the asylum reported the accident both to the district court at Werneck and the Chamber of the Interior for the state government at Würzburg. In their draft for the letter to the Chamber of the Interior the directors described why accidents during the treatment in the prolonged bath were nearly unavoidable.² The explanations referred both to shortcomings of the technical equipment to mix hot and cold water and to the negligence of the nurses who often ignored regulations that had been created for the prolonged bath treatment. The accident that cost Anna Schönstein

¹ To reconstruct the accident, see the notes in the clinical history of Anna Schönstein and the letter of 10 July 1919 (included in the clinical record) from the Werneck Asylum to the government of Unterfranken and Aschaffenburg, Chamber of the Interior at Würzburg. Schönstein, Anna (1889–1919): Clinical record of the Asylum Werneck, Kingdom of Bavaria, photocopy in the collection Prinzhorn Heidelberg, original at the Hospital for Neurology of the district Unterfranken, Werneck Castle, No. 7709.

² The explanations were taken from the letter by the asylum Werneck to the government of Unterfranken and Aschaffenburg, Chamber of the Interior from 10 July 1919.



her life was no isolated case and the respective reports were not only documented in the clinical files but also published in medical journals.³

Mixer taps that allowed the adding of water at the desired temperature and to help minimising the risk of scalding were only occasionally used at the time of the accident and the nurses were often unfamiliar with handling this new device. Furthermore, mixer taps were not always reliable: even though the Werneck asylum had installed a mixer tap, the chalky water rendered the equipment unusable.⁴ To avoid scalds the nurses were hence forbidden to add hot water to the tub as long as the patient was still sitting in it. The nurse who had to answer for Anna Schönstein's death and was punished with disciplinary action, had not followed the doctors' standard instructions. Instead of removing the patient from the tub, she had simply moved her to the other end of the bath while the hot water was running. The nurse stated that she had been shown this method by a senior nurse who was now no longer working at the asylum. The directors of the asylum explained that the regulation on how to conduct the prolonged bath shared "the same destiny as all regulations that are laborious and hard to fulfil [...], namely they are handled in a more relaxed manner."⁵ They also expressed their sympathy for the actions of the nurse who had not followed the doctors' orders. As the directors of the asylum observed, "it is often very difficult to remove an agitated patient who is finally sitting happily in the tub from it for a few minutes and return him or her quickly afterwards."⁶

Scalds of the skin caused by adding unmixed (hot) water were the negative side effects of a treatment that was introduced together with bed treatment, that is, a medically indicated bed rest, at the end of the nineteenth century. Its goal was to calm the patient. Doctors argued that this new treatment would have both internal and external effects. It was supposed to lighten the nurses' workload and lead to significantly more peace in the wards because restless patients in the bathroom could be separated from their fellow patients. In addition, escaping from a tub was more complicated than escaping from a bed. Patients treated with the prolonged bath were not just stowed away, but were to be subjected to modern medical insights of the time, such as hydrotherapy aided by the technology of running water. These psychiatric departments were no longer spaces to simply contain people throwing fits, there were no cells and privies smeared with faeces, no sheets that had been ripped apart, no dresses made out of tear-proof fabrics, no more straw mats or shoes with screws for a heel,

³ "Berichte über den Tod einer Patientin im Dauerbad" (Reports on the death of a female patient in a prolonged bath), Staatsarchiv Hamburg, Asylum Langenhorn, Holdings 352-8/7, Sig. 146. See also "Verbrühung im Dauerbad," cited after Breslauer Zeitung, in: Psychiatrisch-Neurologische Wochenschrift 8/1906, p. 71.

⁴ Reports on the death of a female patient in a prolonged bath, Staatsarchiv Hamburg, Asylum Langenhorn, Holdings 352-8/7, Sig. 146. Franz Nissl, head of the Psychiatric University Hospital, Heidelberg, also hoped in 1910 that usable mixer taps would be installed. See Nissl, Die psychiatrische Klinik, Heidelberg, 18 November 1910, p. 8, Universitätsarchiv Heidelberg, Sig. H-III, 682/1.

⁵ Reports on the death of a female patient in a prolonged bath, Staatsarchiv Hamburg, Asylum Langenhorn, Holdings 352-8/7, Sig. 146.

⁶ Reports on the death of a female patient in a prolonged bath, Staatsarchiv Hamburg, Asylum Langenhorn, Holdings 352-8/7, Sig. 146.



nor any foul smells.⁷ All of this became dispensable or even extinct through the setting up bathrooms and the use of the prolonged bath. Instead of placing highly agitated patients in isolation cells they were to find peace in lukewarm water according to the doctors, even if this meant accepting the potential of significant risk to the patient – as the example of Anna Schönstein illustrates. The treatment also involved a higher level of responsibility for the nurses.

2 The Issue

In the accident report on the death of Anna Schönstein the directors of the asylum noted that nurses often ignored the regulations that had been created for giving prolonged baths and pointed to the technical equipment that was necessary to conduct the treatment. Even if the reasons for ignoring regulations or for handling them in a "lax" way may have been manifold, the example directs the attention to the material configuration or material arrangement of the treatment. Using the term 'material arrangement' I draw on the sociologist Theodore Schatzki, who in the context of his social ontology and with regards to the question on social phenomena, links material dimensions to dimensions of action: "Indeed almost all practices would not exist or would take different forms were it not for the presence in them of particular material entities. The reverse also holds."8 For Schatzki, material arrangements are "a set of interconnected material entities" that he divides into four types: "humans, artifacts [sic!], organisms and things of nature."9 Practices "are carried on amid and determinative of, while also dependent and altered by, material arrangements."¹⁰ In this sense, practices and their respective arrangements are co-constitutive. This approach can be applied to practices of nursing and the arrangements or configurations in which these are performed and, as I subsequently show using the practice of the prolonged bath, can be expanded by the dimension of ethics. While ethical actions in nursing are mainly discussed as interactive actions between nurse and patient, drawing on the material configuration of the treatment can mediate between room, practice and ethics.

The psychiatric asylums followed the model of general hospitals when they established wards for treatments in bed and bathrooms for the prolonged baths.¹¹ With these "nursing-intensive

⁷ Kraepelin 1909, p. 583; see also Würth 1902, p. 682.

⁸ Schatzki 2010, p. 140.

⁹ Schatzki 2010, p. 129.

¹⁰ Schatzki 2010, p. 130.

¹¹ Since the 1880s prolonged baths or permanent baths were also used in the surgical departments in hospitals. "For patients with visible diseases [...] the surgical departments will provide prolonged baths or waterbeds that will either be placed in a special room or the general ward as the last row of beds" (Ruppel 1899 a, p. 804). At the General Hospital Hamburg-Eppendorf, opened in 1889, a special bath house was built for the various hydrotherapeutic treatments and "permanent water baths". The waterbeds that were installed in these bathrooms were built in such a way that the water constantly renewed itself because fresh water was continuously added. The tubs were equipped with a lifting device in order to be able to lift and lower the stretcher on which the patient was lying. This stretcher was covered with a canvas that had been



forms of therapy"¹² they established for the first time medical treatment rooms in psychiatry that fell under the nurses' responsibility. In both the German Empire and Austria nursing underwent a restructuring of its training by introducing training programmes and a first phase of professionalisation during this time. Using the example of these two treatment methods that depended on the set-up of specific rooms and required training in specific nursing techniques, we can nicely illustrate the interplay between room and nursing practice and uncover their ethical implications. The paper closely describes the material configuration of the prolonged bath treatment before delineating the practical instructions the nurses were supposed to follow when applying it. It concludes with some reflections on the perspectives that might arise from these arrangements for current ethical questions.

With the introduction of prolonged bath treatments psychiatry developed its own (and new) material culture at the interface of objects¹³, rooms, and groups of agents. It required objects (bath tubs) and a material substance (water), rooms (bathrooms) and a technical infrastructure (supply of sufficient amounts of warm water, connection to the water supply system). The treatment could not be reduced to dealing with a single object but, from the nurses' perspective, straddled the "management" of a complex material arrangement (consisting of objects, substances, materials, technical apparatuses etc.), an arrangement which was the result of the particular physical characteristics of water. The nurses had to "master"¹⁴ the treatment in order to apply it to the patients according to the doctor's orders, and they learnt from the implicit knowledge of more experienced nurses, from training courses and service instructions. Yet, they also had some room for action that the materialphysical arrangements prescribed. Water was the central element that had to be controlled and tamed to use it for therapeutic purposes. The treatment rooms, and indeed the whole material arrangement, had to be constructed to enable the therapeutic characteristics of water to be harnessed. The nurses had to familiarise themselves with the qualities of water and the technical devices that were installed both to maximise its therapeutic benefits but also to reduce the potential risks during therapy.

soaked in oil (Ruppel 1899, p. 804; Zuschlag 1897, p. 115). The length of the treatment varied. Gustav Zuschlag, doctor at the surgical department in Hamburg-Eppendorf, talked about a patient who spent 15 months without a break in a waterbed. The treatment was used in a wide variety of ailments, especially in general decubitus, diseases of the central nervous system and marasmus senilis, for inoperable carcinoma of the genitourinary system and the rectu [...], for extended bone and joint tuberculosis, phlegmons, purulence of surgical wounds, tissue necrosis and sepsis, for second and third degree burns, fistulas of the urine and faeces, urinary infiltrations and for ileostomies. The effects of the waterbed were perceived as positive and included weight gain, decrease of pain and improved wound healing. Cf. Zuschlag 1897.

¹² Schott/Tölle 2006, p. 440, cited after Urbach 2017, p. 68.

¹³ On this cf. Kalthoff/Cress/Röhl 2016, p. 12. The authors argue for understanding materiality more broadly and to include in the material dimensions of the social sphere signs, writing, graphic systems, physical phenomena, organisms, artefacts and substances such as air and water.

¹⁴ Artner/Atzl/Depner/Heitmann-Möller/Kollewe 2017, p. 7.



3 Overview over Current Research

Water has been used from the early 19th century in its different states and temperatures to treat psychologically ill people, including as a cold affusion, dousing, splash bath and immersion bath. However, research into water therapy in German speaking countries is limited and the topic is often only marginally addressed. Similarly, research into prolonged bath treatments is also paltry, as historian Elisabeth Dietrich-Daum pointed out in 2013 in one of the few articles that explicitly addresses this treatment method.¹⁵ There are some short explanations of the prolonged bath therapy in general overviews of the history of psychiatry,¹⁶ in publications on the history of institutions¹⁷ and in a small number of doctoral dissertations,¹⁸ but the descriptions are rather generic. One thesis on water treatments in psychiatric institutions in the 19th century that includes some remarks on the practice of the prolonged bath was submitted in 2009 by the medical doctor Friedgard Rohnert-Koch.¹⁹ She describes the prolonged bath system as practiced at Riedstadt-Goddelau by senior physician Karl Osswald, who published them in 1904 in the "Psychiatrisch-Neurologische Wochenschrift". Using six clinical records from the archive of the former mental institution Rohnert-Koch also provides an albeit small insight into the treatment. She demonstrates that prolonged baths were guite frequently performed for twelve consecutive days without a break. In 2004, she published a book chapter on the subject, where she located the prolonged bath somewhere between punishment and therapy.²⁰ Art historians Ingrid von Beyme and Sabine Hohnholz have illustrated how patients themselves reflected on the treatment in the prolonged bath, using personal testimonies from the Prinzhorn collection.²¹

Since the use of prolonged bath treatments was not restricted to German-speaking countries, publications on the history of psychiatry in other countries also contain some descriptions of the technique, mainly in the field of nursing history.²² One example is a study on the development of psychiatric nursing in the Netherlands between 1890 and 1920, published by Geertje Boschma in 2003. She describes in detail the implementation of the prolonged bath treatment and the high level of responsibility that it devolved to nurses.²³ In an article published in 2000, Gunnel Svedberg and Gunilla Bjerén used the nurses' perspective of the prolonged bath in psychiatric institutions to explore the use of the therapy in Sweden.²⁴ They draw on interviews with nurses who worked between 1930 and 1963 in psychiatry and had

¹⁹ Rohnert-Koch 2009, pp. 131–135.

¹⁵ Dietrich-Daum 2013, pp. 117–119. Some of the following notes on publications are taken from Dietrich-Daum's article.

¹⁶ Haenel 1982.

¹⁷ Engelbracht 2004; Putzke 2003.

¹⁸ Wernli 2014; Braunschweig 2013, pp. 72–74; Hermes 2012; Ankele 2009; Grießenböck 2009.

²⁰ Rohnert-Koch 2004.

²¹ The Prinzhorn collection evolved from a former teaching collection of the Psychiatric University Hospital Heidelberg that had collected from the early 20th century a broad array of works by psychiatric patients (drawings, writings, textile works, objects, etc.). Von Beyme/Hohnholz 2018, pp. 67–69.

²² My selection of publications is limited to those in English and French.

²³ Boschma 2003, pp. 72–73.

²⁴ Svedberg/Bjerén 2000.



not received any training. The nurses' memories reveal that their work with patients in prolonged baths was determined by both fear and boredom. Similar views from the nurses' perspective can also be found in Claude Cantini's and Jérôme Pedroletti's book on the Hôpital sur Cery near Lausanne.²⁵ They also focus on the nurses' fear and work overload due to the numerous tasks that had to be considered and managed during the treatment. The German publication on the St. Jürgen Asylum in Bremen contains a brief excerpt of an interview with a nurse who had started her service there in 1929 and who did not have the best memories of working with the prolonged bath. "That was dangerous, and I never liked thinking about it."²⁶ In many of the interviews, patients treated with prolonged baths were agitated, bedwetting or suicidal. Benoît Majerus takes on a different perspective, using the example of the Belgian Hôpital Brugmann he analyses the "social life" of the bed, the door and also the bathtub and its transformation into a therapeutic object.²⁷ He also explains the treatment in his book "Parmi les fous".²⁸

Since my article uses the prolonged bath treatment to enquire about the interplay between material culture and nursing (practices), it draws on newer research approaches that were established during the *material turn* and *practice turn* and utilises them for the fields of history of psychiatry and history of nursing.

4 The Installation of Bathrooms

Since the 1890s, psychiatrists in German Empire had been discussing the use of prolonged bath treatment (lasting several hours) to address states of agitation, and only a few years later this treatment method – combined with bed rest – acquired a leading position in psychiatric institutions and clinics and drastically changed them both in terms of their architecture and their social aspects.²⁹ The uptake of hydrotherapy at the end of the 19th century³⁰ paved the way for the prolonged bath treatment to enter psychiatry even though hydrotherapeutic measures had already been used before.³¹ During the First World War and the post-war period prolonged bath treatment was less frequently used due to the lack of coal, lack of staff and the increased price of water. If reports of the institutions are to be believed, prolonged baths continued to be used during the 1920s and 1930s, albeit in rather restricted circumstances, and seemed to be applied even beyond that time.³² This is similar to the practice in other

²⁵ Cantini/Pedroletti 2000, pp. 75–77.

²⁶ Tischer/Engelbracht 1990, pp. 42–47, here: 46.

²⁷ Majerus 2011, pp. 100–105.

²⁸ Majerus 2013.

²⁹ Boschma 2003.

³⁰ In 1899 the first Chair for Hydrotherapy was created at the University of Vienna and Wilhelm Winternitz was appointed.

³¹ Rohnert-Koch 2009.

³² [NOS], Bäderbehandlung in den Irrenanstalten (1921/22). Cf. also the descriptions of Dorothea Buck who was admitted in 1936 to the v. Bodelschwingh Institutions in Bethel and spent 23 hours in a prolonged bath



countries.³³ At least for a while, in general treatment they were not replaced by somatic therapies.

After the introduction of the prolonged bath treatment doctors in the asylums communicated intensively about the new treatment method, drawing on their (and the nurses') experiences. In journals they explained the technical, spatial and material features of their prolonged bath settings, published technical drawings and photographs, explained the usage, pointed out problems that emerged during the application of the treatment, described suggestions for solutions and provided recommendations for spatial, material and technical adaptations which simultaneously illuminated the deficiencies and susceptibility to errors that were inherent to the treatment. "At the centre of the modern therapy [...] is the systematic treatment with bed rest and baths and there does not seem to be a single institution anymore that is not using them", according to a report on the "Fortschritte des Irrenwesens" (Progress of Mental Institutions) from 1903 which emphasised the significance of the new treatment methods.³⁴ The psychiatrist Emil Kraeplin was credited with combining bed treatments that had been promoted by his colleague Clemens Neisser³⁵ with baths of multiple hours, and later even days, weeks and months, and with having created a spatial ensemble consisting of a large ward or monitored room for the bed treatments with an adjacent bathroom for the prolonged bath treatments. His student Heinrich Dehio³⁶ wrote in 1904:

The essentially new part of Kraepelin's actions is the effort to treat all conditions of agitation that pose a problem for bed treatment with a full bath of nearly unlimited duration. Secondly there is the technical execution of this concept in that the baths are provided under continuous monitoring in a larger room equipped with multiple bathtubs located next to the surveillance wards.³⁷

Franz Nissl who succeeded Kraepelin as head of the Psychiatric University Hospital Heidelberg in 1904 pointed out that the prolonged baths which his predecessor had set up had been the first ones that had been used for the regular treatments of patients who were bedwetting or had bed sores. Such rooms, he claimed, were a model for other institutions.³⁸

The combination of bed therapy and prolonged bath treatment, and the concomitant architectural innovations required, provided psychiatrists like Kraepelin and Neisser with the opportunity to make psychiatric institutions more like general hospitals where both treatment methods were already used. Max Löwy writes: "In addition to the surveillance wards, the

³⁵ On the installation of bed treatments cf. Ankele 2018.

as she described in her autobiographical book "Auf der Spur des Morgensterns" (Tracing the Morning Star). Zerchin 1990, p. 67.

³³ Svedberg/Bjerén 2000; Cantini/Pedroletti 2000.

³⁴ Deiters 1903, p. 133.

³⁶ Heinrich Dehio earned his doctorate under Kraepelin in 1997 at the Psychiatric Hospital Dorpat, where he also worked as a doctor. When Kraeplin was the head of the Psychiatric University Hospital in Heidelberg, Dehio was granted a leave of absence to work in Kraepelin's lab at that hospital. Cf. Kreuter 1996, p. 245.

³⁷ Dehio 1904, p. 482.

³⁸ Nissl, Die psychiatrische Klinik, Heidelberg, 18 November 1910, p. 8, Universitätsarchiv Heidelberg, Sig. H-III-682/1.



installation of prolonged baths has given the wards for agitated patients of the modern mental asylum a much better image."³⁹ The idea was that through both bed and prolonged bath treatment a psychiatric ward was created that, based on a new material culture and subsequently a changed nursing practice (monitoring instead of isolating), would mark the beginning of a "modern" and "humane" psychiatry. Using force during the treatment of mental patients, epitomized through the image of a straightjacket and solitary cell, was replaced by the principle of continuous monitoring. The nurses were able to do this through the newly set-up wards (bedrooms) and bathrooms: and the method was supposed to affect the patients differently but not less effectively than the straightjacket and the isolation cell. While doctors had before felt forced to isolate severely agitated patients in solitary cells, the bed and prolonged bath treatment was meant to enable the return of these patients into the wider patient community, as long as permanent monitoring by nurses was provided.⁴⁰ The newly created rooms (ward and bathroom) which were signed over to the nurses had to match this condition.

To set up the new ensemble of ward and prolonged bath room, the separating walls of the isolation cells had to be gently demolished so that the former cells could be turned into larger rooms or changed into bathrooms. The sickbed and the bathtub were introduced as therapeutic agents, and they served as co-nurses. Thus, the basics were created to comply with the principle of continuous monitoring, reconfiguring the relationship between nurse and patient. Franz Nissl reported that in 1900 the "cells [...] were changed according to the progressive views on the treatment of the patients into a ward with monitoring facilities for agitated patients [...] with a so-called prolonged bath" at the Psychiatric Hospital Heidelberg.⁴¹ By removing the hallways, the small rooms for patients and the room for the warden were transformed into three larger wards for patients with an adjacent bathroom containing four bathtubs. Similarly, at the asylum in Emmendingen the walls were taken out of the isolation cells in the wards for agitated patients in order to set up facilities for prolonged bath therapy.⁴² (Fig. 1)

³⁹ Löwy 1926, p. 90.

⁴⁰ On the effects of the community with regards to the bed treatment cf. Ankele 2018, on the interplay of psychiatric concepts of the rooms and the nurses' task of monitoring cf Ankele 2019. Sabine Jenzer, Willi Keller, and Thomas Meier show in their interviews that they collected for their book "Eingeschlossen. Alltag und Aufbruch in der psychiatrischen Klinik zur Zeit der Brandkatastrophe von 1971" (Trapped. Daily routine and departure in the psychiatric hospital at the time of the fire disaster of 1971) that the new orientation of psychiatric institutions in Switzerland during the 1970s went hand in hand with a reform of their material culture. Jenzer/Keller/Maier 2017.

⁴¹ Here and subsequently: Nissl, Die psychiatrische Klinik. Heidelberg, 18 November 1910, Universitätsarchiv Heidelberg, Sig. H-III-682/1.

⁴² Haardt 1912, p. 5.



Fig. 1: Plan for the facilities for prolonged bath therapy on the ward for agitated women at the Emmendingen asylum. The lighter colour marks the two walls that were to be removed. August 1910, Staatsarchiv Freiburg, Holdings B 698/5, No. 5057.

The location of the bathrooms was central. Since they served to calm down "acutely and chronically, but also particularly agitated and partially bedwetting patients,"⁴³ they were supposed to be separate, but still in close proximity to the bedrooms where the aforementioned patients were housed. Connecting the bedroom to the bathroom had the advantage that the nurses could move the patients more easily from one room into the other, that is, "directly from the bed into the bathtub."⁴⁴ Furthermore, the nurses who were often on call by themselves in the bathroom had the opportunity to call for a nurse from a neighbouring surveillance ward in case they needed help.⁴⁵ As Doctor Tomaschny pointed out in his 1905 report on prolonged bath facilities in German and Austrian asylums, well equipped bathrooms were rarely used when they were too far away from the surveillance wards.⁴⁶ The location of

⁴³ Osswald 1904, p. 166.

⁴⁴ Dehio 1904, p. 482.

⁴⁵ Wachsmuth 1909/10, p. 192; Dehio 1904, p. 482; Tintemann 1907.

⁴⁶ Tomaschny 1905, p. 461.



the rooms had an immediate impact on both the work of the nurses and on whether a treatment was applied or not. The practicability of implementing a treatment seemed to have been more crucial than the potential necessity of it. If the ward and the bathroom were located next to each other, patients could be given a prolonged bath even at night when they were not to disturb the peace in the ward.⁴⁷ At the Leipzig-Dösen asylum, the superior nurse was able to prescribe a prolonged bath without the prior consent of a doctor as it had "proven itself to be useful" during agitated phases at night, "and especially because it was hard and time consuming to reach a doctor in the middle of the night."⁴⁸

The set-up of bespoke rooms for prolonged bath treatments was also the result of the expansion of the infrastructure in the institutions. The extension of the water pipe system happened at the same time as the prolonged bath treatment was introduced, facilitating the connection to a (central or local) hot water supply. This opened up new avenues for hydrotherapeutic treatment concepts because, as Tomaschny pointed out, the installation of bathrooms for prolonged baths required the continuous availability of hot water both during the day and at night.⁴⁹ Originally, the bathtub was a nomadic piece of furniture. It had rubber wheels (Fig. 2) or a movable wheel frame (Fig. 3) and could be placed in different rooms where the nurses filled it from buckets. With the extension of the water supply system, the bathtub became a fixed piece of furniture⁵⁰ that could and (had to) be installed at a specific place.



Fig. 2: Badewannenräder (Bathtub wheels). In: Medicinisches Waarenhaus (ed.): Ausrüstungs-Gegenstände, Krankenpflege-Artikel für Heilstätten, Liste No. XV. Berlin 1905, p. 61.

⁴⁷ Ganser 1912, p. 638. Dehio reports that in the asylum Leipzig-Dösen the nocturnal prolonged baths had been exclusively conducted in the women's ward up to that point because there had been no corresponding "need" for it on the men's ward. Dehio 1904, p. 482; Würth commented in 1902 that due to a lack of nursing staff prolonged baths could not be performed at night at the Hofheim asylum. Würth 1902, p. 679.

⁴⁸ Dehio 1904, p. 482.

⁴⁹ Tomaschny 1905, p. 461.

⁵⁰ Giedion 1988, p. 738.





Fig. 3: "Fahrvorrichtung für Badewannen, speziell geeignet für Krankenanstalten" (Undercarriages for bathtubs, especially suitable for hospitals). In: Medicinisches Waarenhaus (ed.): Ausrüstungs-Gegenstände, Krankenpflege-Artikel für Heilstätten, Liste No. XV. Berlin 1905, p. 61.

5 The Material Configuration of the Bathrooms



Fig. 4: Room for permanent baths at the Langenhorn mental asylum, 1909. Staatsarchiv Hamburg, StAHH 141-19, Sig. 06-195-p1398a.

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"Apart from the bathtubs, the room should be sparsely furnished to avoid any opportunity for destruction or risk of accidents," Kraepelin recommended in his manual in 1909.⁵¹ A photograph of a "room for permanent baths" from the Langenhorn mental asylum from 1909 captured his instructions. The photograph shows a light and nearly empty room giving the nurse the highest level of overview and visibility, and from her standing position she can overlook the whole room and monitor the patients. The floor and the walls of the room are tiled; to avoid injuries, the radiators were boxed in. The four bathtubs filled with water are placed with ample space between them in the middle of the room, such that the patients can only touch each other by stretching out their arms. In the photograph the patients are wearing shirts, and one tub is lined with a sheet to prevent the patient from drowning. The inflow pipes for the water that were connected to the tubs are clearly visible in the photo, which also shows that the taps to regulate the addition or draining of the water are located in a wall-cupboard, to prevent patients from using the taps themselves; only the nurse could handle the device. In this image, she stands next to the wall cupboard from where she can regulate both the water supply and the temperature. In this facility, the use of buckets to fill and refill the tubs has been rendered obsolete because of the technical equipment that had been placed between patient(s) and nurse. The sign directly above the wall cupboard states the bath rules.

The physical arrangement of the prolonged bath treatment prescribed the relationship between nurses and patients. It became "live" once the agents stepped into the room and went to the location prescribed to them by the arrangement. Through the material configuration of lying (tub/patient) versus standing (room/nurse), the treatment allocated both groups of agents their own places in the room, which provided them with a different perception and distinctive forms of communication, perspective and points of view, ranges of motion and levels of action. The juxtaposition of the standing nurse and the patient either sitting or lying in the tub in the picture illustrates this difference, as the patients were restricted in their movements both by the tub and the water. In 1904 the psychiatrist Heinrich Dehio pointed out that the patient lying in water "was habitually in much more need of help" and "is in a much bigger relationship of dependency with the nursing staff which, if utilised correctly, can make the patient significantly more willing and responsive."⁵² In contrast to isolation in a cell that both the nurses and the patients could perceive as punishment, "patients and nurses alike" were supposed to recognise "the use of the bath as a beneficial medical measure."⁵³

The particular physical qualities of water, the requirements of its processing to be suitable for the treatment, and the patient group that was supposed to be treated – often agitated, self-harming or harming others – required adaptations of the room which affected the work of the nurse. Water as the central element of the treatment made it necessary that the walls of the bathrooms were painted (at least to reaching height) with a water-resistant oil or enamel paint. Tomaschny recommended that all elements made of wood, such as doors and doorframes, should be coated with the same water resistant paint because wood was prone

⁵¹ Kraepelin 1909, p. 580.

⁵² Dehio 1904, p. 485.

⁵³ Kraepelin 1909, p. 583.



to rot quickly due to the high humidity in the room.⁵⁴ A waterproof and ideally warm floor was meant to protect the bathing patients from the cold. "[I]n the interest of the staff in the bathroom" the floor was supposed to be slightly slanted "to ensure a quick drainage of the water that would be on the floor mainly due to the patients' splashing."⁵⁵ This served to prevent nurses and patients slipping on the wet floor. Osswald recommended that the room should be "big enough, full of air, light and equipped with high ceilings [...]; a rectangular shape would possibly be the most functional form." Such a room would make it easier for the nurses to monitor the patients as this was their main task during the bed and prolonged bath treatment.⁵⁶

When installing the tubs, their positions should take into account the need "to facilitate the monitoring of patients in the baths and to ensure that the occupants of the tubs are able to bother each other as little as possible." Tomaschny did not think it necessary to place walls between the tubs as was custom in some asylums because these made it more difficult "to keep an eye on the bathing patients."⁵⁷ His recommendation for setting up a room for prolonged baths were guided by the tasks and the responsibilities that the nurses had to assume while conducting the treatment.⁵⁸ Appropriate arrangement of the room should enable nurses to better manage the requirements that the work in the prolonged bath entailed. Room and nursing practices correlated. As a co-agent of the treatment, the room and its material arrangement (position of the tubs, non-slip safety of the floor etc.) could make the work either easier or harder.

6 The Technique of Bathing

Even though the photographs of the bathrooms for prolonged baths provide an insight into the ideal treatment, they show nonetheless rooms that had to be "played" by the nurses.

For the nurses, the prolonged bath treatment did not only require numerous new tasks that required a different level of attention and new knowledge, they also took on an increased level of responsibility for the patients. They had to familiarise themselves with the medium "water" and its specific impact on the room (humidity, steam etc.) and on the body and the psyche of the patients. Finally, there were the (often rather dangerous) actions that the medium triggered (submerging, swallowing, splashing etc.). Nurses had to know how to use the technical equipment to process the water and learn certain routines and techniques for the application of the treatment. With service regulations or specifically created bathing rules that

⁵⁴ Tomaschny 1905, p. 463.

⁵⁵ Here and subsequently: Osswald 1904, pp. 166–168.

⁵⁶ On monitoring as the central task of nurses in the bathroom for prolonged baths cf. Svedberg/Bjerén 2000 and Boschma 2003.

⁵⁷ Tomaschny 1905, p. 462.

⁵⁸ Tomaschny 1905, p. 462.



were hanging⁵⁹ or lying⁶⁰ in the bathrooms, the mental hospital provided its staff with a guideline for the application of a prolonged bath. In addition nurses received some training, as in the Wiesloch asylum where "at the beginning of the shift in the bath they receive detailed instructions from the bathing rules."⁶¹ The manuals, service regulations and bathing rules particularly emphasised the potential dangers that the treatment could cause: patients could drown when falling asleep (the warm water was meant to have a soothing effect after all), or they might suffer scalds of their skin when the added water was too hot. "There are nowhere as many accidents as in the bath," the Swiss psychiatrist Walter Morgenthaler stated in his nursing manual and categorised them into four groups: "drowning," "scalding," "catching colds" and "harm and self-harm through objects that are lying around or have been torn off."⁶²

The nurses' tasks when working in the bathroom were not limited to placing the patients in the tub, letting in the water, regulating the water temperature and monitoring the bathing patients. The nurses had to handle of all aspects that were created by this novel materialspatial arrangement, this ensemble of co-agents: cleaning and airing of the bathroom, cleaning and drying the tubs with the appropriate detergents, mopping the wet floors, drying sheets, opening the windows after the treatment and preventing drafts during the treatment, undressing or changing the patient, at times also inserting the sheets in the tubs to keep the patients in the water or to place patients on them when there was a danger of drowning and – as far as this was planned – lubricating the skin with Vaseline⁶³ or Lanoline⁶⁴ to protect it from the damaging qualities of the water. The nurses themselves were recommended to frequently cream their forearms and hands with oil, as for instance in the Leipzig-Dösen asylum.⁶⁵ One of the side-effects of the prolonged bath treatment that equally affected patient and nurse were infections that could spread in the water and were transmitted by it: boils, phlegmons, fungal infection and inflammatory diseases such as eczema were all potential sources of infection.⁶⁶ To protect the nurses from the moisture some institutions provided them with functional clothing for the work in the bath. While in Hofheim, the nurses received "bathrobes made of Billroth-batiste,"⁶⁷ in the hospital in Freiburg they were given "linen dresses" under which "they (the female nurses, M.A.) should wear a waterproof apron at the front."68

⁵⁹ Photograph of the room for the prolonged bath treatment at the Philippshospital, 1930. LWV-Archiv und Museum Philippshospital, photo collection, without signature, printed in: Rohnert-Koch 2004, p. 162.

⁶⁰ Bathing rules of the asylum Wiesloch, 1910, Generallandesarchiv Karlsruhe GLA Abt. 463 Wiesloch. No. 722.

⁶¹ Bathing rules of the asylum Wiesloch, 1910, Generallandesarchiv Karlsruhe GLA Abt. 463 Wiesloch. No. 722.

⁶² Here and subsequently: Morgenthaler 1930, p. 141.

⁶³ Tomaschny 1905, p. 462.

⁶⁴ The protective creaming with Lanoline was used for instance at the Asylum for Lunatics and Epileptics in Frankfurt a. M. (Anstalt für Irre und Epileptische), cf. Wachsmuth 1909/10, p. 194. Kraepelin also recommended this to prevent skin diseases, cf. Kraepelin 1915, p. 585.

⁶⁵ Dehio 1904, p. 484.

⁶⁶ The state asylum Goddelau Würth reported a spreading of furunculosis that affected the forearms of mainly those nurses who were "monitored furunculous patients in the prolonged bath", cf. Würth 1905, p. 290.

⁶⁷ Würth 1902, p. 678. "Billroth-batiste" is a waterproof fabric that was named after its inventor, the surgeon Theodor Billroth.

⁶⁸ Deiters 1905, 387–388.



Before the patients were taken to the bathroom, the nurses had to run the bath with water at a temperature of 36 degrees Celsius, unless otherwise prescribed by the doctor. According to the bath rules in Wiesloch, the patients were allowed to get in the tub only after the male or female nurse⁶⁹ had measured the water temperature with the bath thermometer. He or she was not allowed to measure the temperature "by touch with the hand or the arm" or to rely on instinct.⁷⁰ Once the patient was in the tub the nurse had to check the water temperature every half an hour with a thermometer. For the nurses, keeping a (relative) consistent water temperature proved to be a particular challenge during the prolonged bath treatment. Even though some materials that were used to make the tubs kept the heat better than others – it was recommended to use tubs made of tin-glazed earthenware⁷¹ – the water cooled down with time and refills with warm water were necessary.

If the temperature falls below 34 degrees the nurse (in German: Wärter, M.A.) drains half of the tub (approximately one hand width) and adds warm water (by switching on first the tap for cold water and then the tap for hot water) of at most 42 degrees (according to the thermometer of the mixer tap) until the bath water has reached the correct temperature of 36 degrees again.⁷²

Since it became clear that the risk of accidents was very high when hot water was added, many institutions established the rule that the patients had to be removed from the tub while water was added to it.

Using the mixer tap requires a high focus. The nurse must repeatedly reassure himself that the thermometer is working, that no tap [...] and in particular not that tap with hot water [...] leaks after it has been turned off, nor that the mercury rises to the top of the thermometer.⁷³

Furthermore, looking at the thermometer and reading the temperature quickly and to interpret the display correctly required training. As soon as the patients became sleepy or

⁶⁹ The respective bath rules only use the male form of the term "Wärter" (transl. as "nurse").

⁷⁰ Here and subsequently: Bathing rules of the asylum Wiesloch, 1910, Generallandesarchiv Karlsruhe GLA Abt. 463 Wiesloch. No. 722.

⁷¹ For this reason, the Langenhorn asylum was supposed to have tin-glazed earthenware tubs. Cf. information by the senate to the citizenry 1909, 25 June, Antrag, betreffend dritte Erweiterung der Irrenanstalt Langenhorn (Application concerning the third expansion of the asylum Langenhorn), Staatsarchiv Hamburg, Holdings 364-3/1, Sig. 57. When the Winnenthal asylum planned to refurbish the cells of the old department and transform them into a bathroom for prolonged baths, it was noted on 30/10/1905 that the purchase of tin-glazed earthenware tubs "was far too expensive for prolonged baths for patients who were agitated or tended to demolish things." At times the tubs would not last very long – and if they were to be purchased a warranty had to be given. Staatsarchiv Ludwigsburg, E 163, Sig. Bü64. The Viennese Medizinische Wochenschrift (Weekly Medical Journal) reported that the Viennese company Bondi & Comp. had developed a bathtub that "avoided differences in temperature [...] because it was made out of a poor heat conductor. This means that the bath heats up quickly and the bath water does not cool down so rapidly." Berichte aus den wissenschaftlichen Vereinen. Gesellschaft für physikalische Medizin, Meeting on 18 March 1908.

 ⁷² Bathing rules of the asylum Wiesloch, 1910, Generallandesarchiv Karlsruhe GLA Abt. 463 Wiesloch. No. 722.
⁷³ Bathing rules of the asylum Wiesloch, 1910, Generallandesarchiv Karlsruhe GLA Abt. 463 Wiesloch. No. 722.



when the prescribed bathing time was up, they were supposed to be taken out of the tub, dried, dressed and put to bed.⁷⁴ Putting the patients back to bed at night presented a particular challenge, when – as for instance in the asylum in Frankfurt on the Main – there was only one nurse on duty in the prolonged bath.⁷⁵ However, he or she could "call for a nurse for support from a neighbouring ward," as Wachsmuth conceded.⁷⁶ The lack of staff was the biggest source of risk: On 15 November 1930 a patient died in the Langenhorn state asylum after a nurse had taken her to the bathroom because she had soiled herself. The nurse, who had been on night-duty and was caring for another 20 bedridden patients, briefly left the patient in the bath and went back to "the room to check on things", as she stated herself.⁷⁷ When she returned to the bathroom after fifteen minutes, the patient's head had sunk under the water and she could not be saved. Due to the structural framework, the nurse was prevented from acting ethically in the sense of non-maleficence.

7 The Technical Apparatus

The introduction of the prolonged bath treatment accompanied the installation of mixer taps that were supposed to ensure water entered the tub at a constant temperature, because scalding of the skin was a huge risk during the treatment. Nurses had to familiarise themselves with this technical apparatus, that is they had to practice using the lever or crank that served to regulate the flow of cold or warm water and they had to learn how to interpret the display of the thermometer. Haymann writes in his manual: "The assistant in the bath must be fully familiar with the mixer taps before starting to work there", 78 while Wachsmuth pointed out that "highest demands must be placed on the reliability of the staff and the usability of technical operation."⁷⁹ In the asylum in Frankfurt on the Main both a mixer tap with a lever and one with a crank were used. When the nurse turned the crank, cold water was let into the tub first while the hot water valve was still closed. When he or she continued to turn the crank, the valve for hot water opened as well and when he or she turned even more, the cold water valve closed and only hot water was flowing into the tub: by "setting two nuts by moving them along a valve spindle [...] every desired maximum temperature" could be determined and "scalding of the bathing patient could definitely be avoided."⁸⁰ A display with a scale of "closed - medium - warm" and a thermometer allowed the nurse to evaluate the temperature of the bath. Yet, this model was prone to the risk that the nurse would "turn the [valve in the] wrong direction in a moment of shock and thus instead of turning off the water completely, he or she would only turn off the cold water and open the hot water valve." The lever system was meant to prevent this risk because one glance at the position of the lever was supposed to be

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 ⁷⁴ Bathing rules of the asylum Wiesloch, 1910, Generallandesarchiv Karlsruhe GLA Abt. 463 Wiesloch. No. 722.
⁷⁵ During the day two nurses looked after six patients in the prolonged bath, "in very difficult cases even

⁷⁵ During the day two nurses looked after s three." Wachsmuth 1909/10, p. 192.

⁷⁶ Wachsmuth 1909/10, p. 192.

⁷⁷ Handwritten reports on the death of a female patient in a prolonged bath, Staatsarchiv Hamburg, Holdings Staatskrankenanstalt Langenhorn, 352-8/7, Sig. 146.

⁷⁸ Haymann 1922, p. 118.

⁷⁹ Wachsmuth 1909/10, pp. 192–193.

⁸⁰ Here and subsequently: Wachsmuth 1909/10, pp. 192–193.

enough to check the water temperature. As Wachsmuth illustrated, however, the constant water temperature did not only depend on the respective mixer tap but also on an even water pressure in the pipes.



Fig. 5: The prolonged bath at the Psychiatric Hospital of the University of Munich. In: Emil Kraepelin: Psychiatrie. Ein Lehrbuch 1909, p. 582.

While the technical apparatus for the prolonged bath was supposed to reduce accidents and help the nurses to delegate some of their tasks to the equipment, in reality the mixer taps repeatedly proved to be unreliable and accidents happened despite their use. For this reason, the Psychiatric Hospital in Munich used an electric system to regulate the temperature.

It automatically ensures that the water temperature in the large storage vessels never rises above 60 degrees and it signals a red light as soon and for as long as the water that is let in the tub is warmer than 40 degrees. The temperature can always be checked on the thermometer.⁸¹

As we can see on a photograph from the hospital in Munich (Fig. 5), the bathroom there – similar to the one at the Langenhorn asylum – had an open-plan layout, was light and neatly

⁸¹ Kraepelin 1909, p. 581.



arranged. The male nurse is overlooking the room from a bench that has been inserted into one of the walls. He is not positioned right next to the technical equipment as was the case in the image from Langenhorn but opposite to it. Yet, this slightly raised position provided him with an overview over the bathing patients, provided that none of the patients was standing in the water, was getting out of the tub or was splashing water around, or was submerging himself. Any such incident would have changed the situation and required the nurse's attention so that he could no longer focus on the overall picture. Under ideal circumstances this viewpoint allowed the nurse also to keep an eye on the equipment for adding and draining water – located in the open cupboard across from him. The thick glass panes made it possible to observe "the thermometer that was located in the inflow pipe."⁸² If water that was warmer than 40 degrees was flowing in, the red light came on that he could also see from across the room.

8 Room – practice – ethics

When providing a prolonged bath, the nurses' tasks straddled far more than the handling of a single object. Here, a whole arrangement of tasks had to be managed and mastered. In the writings of physicians, providing a prolonged bath treatment emerges as an interplay between technical equipment and nursing staff. Each "player" was given specific tasks, each of them was prone to make mistakes and could cause huge damage in case of failure. While the technical apparatus to mix water was installed to make the treatment safer for the patients, it was highly susceptible to errors. This was one reason why the hospital in Munich installed a warning light. Such adaptations were reactions to experiences that had been made during the treatment. Similarly, the bathroom was adapted to reduce the opportunities for patients to hurt themselves or others. All of these interventions in the bathroom served to enable nurses to run the treatments safely. Hence, they were designed on the whole to take the practice of nursing into account. Bathroom and nursing practice – and consequently also the ability for ethical treatment - were configured from a material point of view. They were in close proximity to each other, that is they depended on each other. The configuration of the room affected the nurse's actions more than bath rules or service regulations. Water, as the central medium of the treatment, illustrated to the nurse what could happen if he or she was inattentive or lost focus. It forced the nurses to be attentive.

From a historical perspective, this article raises contemporary ethical questions in nursing regarding the effectiveness of spatial and material arrangements and the interactions between nurses and patients. A material analysis of the prolonged bath treatment, enriched through a focus on practice, visualises the complexity of the situation with which nurses were confronted when they provided the treatment. This perspective reveals that treatment practices and ethical questions cannot be reduced to an analysis of face-to-face-situations because the interaction of nurses and patients, that is how nurses treated the patients, was also influenced by the spatial and material arrangements with which they were confronted.

⁸² Kraepelin 1909, p. 582.



Last but not least, the material configuration of the prolonged bath treatment shows thatdespite some attempts to install appropriate equipment such as technical apparatus and adapting the room through installation of mixer taps, warning lights, covering the radiators, arrangement of the tubs, use of linen sheets etc. – it was impossible to make the work easier for the nurses and at the same time increase safety for the patient, even though the experiences had an impact on how the arrangement was adapted. Ethical action in nursing does not start with the direct encounter of patient and nurse. Rather, their meeting and their subsequent relationship are largely arranged by the material configuration of the respective treatment setting. This historical analysis of the prolonged bath treatment is intended to direct the focus towards the ethical implications that are inscribed and contained in the setting. Thus, this article underlines the significance of a material cultural analysis with regards to questions in nursing ethics by highlighting the dependency that exists between ethical actions (not to cause harm) and the material configurations, the concrete (physical) setting that conditions a treatment. This does not imply that nurses are to be released from their responsibility for their patients but it is a plea to also include the structural framework of a treatment (here the room, medium and materials) into the analysis when studying nursing ethics.

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9 Bibliography

- Ankele, Monika: Alltag und Aneignung in Psychiatrien um 1900. Selbstzeugnisse von Frauen aus der Sammlung Prinzhorn. Wien/Köln/Weimar 2009.
- Ankele, Monika: Horizontale Szenographien. Das Krankenbett als Schauplatz psychiatrischer Subjektivation. In: Harrasser, Karin/Lars Friedrich/Céline Kaiser (ed.): Szenographien des Subjekts. Wiesbaden 2018, pp. 49–64.



- Ankele, Monika: Sich aufführen. Rauminterventionen und Wissenspraktiken in der Psychiatrie um 1900. In: Ankele, Monika/Céline Kaiser/Sophie Ledebur (ed.): Aufführen, Aufzeichnen, Anordnen. Wissenspraktiken in Psychiatrie und Psychotherapie. Wiesbaden 2019, pp. 71– 89.
- Artner, Lucia/Isabel Atzl/Anamaria Depner/André Heitmann-Möller/Carolin Kollewe (ed.): Pflegedinge. Materialitäten in Pflege und Care. Bielefeld 2017.
- Berichte aus den wissenschaftlichen Vereinen. Gesellschaft für physikalische Medizin, Sitzung vom 18. März 1908. In: Wiener Medizinische Wochenschrift 19 (1908), pp. 1092–1093.
- Boschma, Geertje: The Rise of Mental Health Nursing. A History of Psychiatric Care in Dutch Asylums, 1890–1920. Amsterdam 2003.
- Braunschweig, Sabine: Zwischen Aufsicht und Betreuung. Berufsbildung und Arbeitsalltag der Psychiatriepflege am Beispiel der Basler Heil- und Pflegeanstalt Friedmatt, 1886–1960. Zürich 2013.
- Cantini, Claude/Jérôme Pedroletti: Histoires infirmières. Hôpital de Cery sur Lausanne, 1940– 1990. Lausanne 2000.
- Dehio, [Heinrich]: Einige Erfahrungen über die Anwendung von Dauerbädern bei Geisteskranken. In: Psychiatrisch-Neurologische Wochenschrift 45 (1904), pp. 481–486.
- Deiters, [NOS]: Dritter Bericht über die Fortschritte des Irrenwesens. In: Psychiatrisch-Neurologische Wochenschrift 40 (1905), pp. 385–390.
- Dietrich-Daum, Elisabeth: Das Dauerbad in der Psychiatrie. Theorie und Praxis in der Landes-Irrenanstalt Hall in Tirol in der Zwischenkriegszeit. In: Virus. Beiträge zur Sozialgeschichte der Medizin 12 (2013), pp. 117–133.
- Engelbracht, Gerda: Von der Nervenklinik zum Zentralklinikum Bremen-Ost. Bremer Psychiatriegeschichte 1945–1977. Bremen 2004.
- Ganser, [NOS]: XVI. Versammlung mitteldeutscher Psychiater und Neurologen zu Dresden, 23. October 1910. In: Archiv für Psychiatrie und Nervenkrankheiten 49 (1912), 2, pp. 615–643.
- George, Uta/Herwig Groß/Michael Putzke/Irmtraud Sahmland/Christina Vanja: Psychiatrie in Gießen. Facetten ihrer Geschichte zwischen Fürsorge und Ausgrenzung. Gießen 2003.
- Giedion, Sigfried: Die Herrschaft der Mechanisierung. Ein Beitrag zur anonymen Geschichte. Bodenheim 1988.
- Grießenböck, Angela: Zur Geschichte der psychiatrischen Landschaft im Kronland Tirol. Die "Landes-Irrenanstalten" Hall in Tirol und Pergine. In: Eberhard, Gabriel/Martina Gamper (ed.): Psychiatrische Institutionen in Österreich um 1900. Wien 2009, pp. 121–133.
- Haardt, Karl: Großherzoglich Badische Heil- und Pflegeanstalt Emmendingen. In: Bresler, Johannes (ed.): Deutsche Heil- und Pflegeanstalten für Psychischkranke in Wort und Bild. (2nd Vol.). Halle an der Saale 1912, pp. 1–9.

- Haenel, Thomas: Zur Geschichte der Psychiatrie. Gedanken zur allgemeinen und zur Basler Psychiatriegeschichte. Basel 1982.
- Haymann, Hermann: Lehrbuch der Irrenheilkunde für Pfleger und Pflegerinnen. Berlin 1922.
- Hermes, Maria: Krankheit: Krieg. Psychiatrische Deutungen des Ersten Weltkriegs. (Zeit der Weltkriege, 2). Essen 2012.
- Jenzer, Sabine/Willi Keller/Thomas Meier: Eingeschlossen. Alltag und Aufbruch in der psychiatrischen Klinik zur Zeit der Brandkatastrophe von 1971. Zürich 2017.
- Kalthoff, Herbert/Torsten Cress/Tobias Röhl: Einleitung: Materialität in Kultur und Gesellschaft. In: Kalthoff, Herbert/Torsten Cress/Tobias Röhl (ed.): Materialität. Herausforderungen für die Sozial- und Kulturwissenschaften. Paderborn 2016, pp. 11–41.
- Kraepelin, Emil: Festrede zur Eröffnung der Klinik am 7. November 1904. In: [NOS]: Die Königliche Psychiatrische Klinik in München. Leipzig 1905, pp. 7–42.

Kraepelin, Emil: Lehrbuch für Studierende und Ärzte. (1st Vol). Leipzig 1909.

- Kraepelin, Emil: Lehrbuch für Studierende und Ärzte. (1st Vol.). Leipzig 1915.
- Kreuter, Alma: Deutschsprachige Neurologen und Psychiater. Ein biographischbibliographisches Lexikon von den Vorläufern bis zur Mitte des 20. Jahrhunderts. (1st Vol.). München/New Providence/London/Paris 1996.
- Löwy, Max: Spezielle Balneo- und Klimatotherapie der Geisteskrankheiten. In: Dietrich, Eduard/Siegfried Kaminer (ed.): Handbuch der Balneologie, medizinischen Klimatologie und Balneographie. (5th Vol.). Leipzig 1926, pp. 53–137.
- Majerus, Benoît: Le lit, la baignoire et la porte. La vie sociale des objets psychiatriques. In: Genèses 82 (2011), 1, pp. 95–119.
- Majerus, Benoît: Parmi les fous. Une histoire sociale de la psychiatrie au XXe siècle. Rennes 2013.
- Medizinalabteilung des Königlich Preußischen Ministeriums des Innern (ed.): Krankenpflege-Lehrbuch. Berlin/Heidelberg 1913.
- Morgenthaler, Walter: Die Pflege der Gemüts- und Geisteskranken. Bern/Berlin 1930.
- Osswald, [NOS]: Ueber Dauerbadeinrichtungen grösseren Stils. In: Psychiatrisch-Neurologische Wochenschrift 19 (1904), pp. 165–169.
- Rein, Oskar: Vorrichtung zur Erhaltung konstanter Wassertemperatur im Dauerbad. In: Psychiatrisch-Neurologische Wochenschrift 22 (1911/12), pp. 209–210.
- Reinhard, C.: Ueber die Anwendung permanenter Bäder bei brandigem Decubitus gelähmter Geisteskranker. In: Allgemeine Zeitschrift für Psychiatrie und psychisch-gerichtliche Medicin 39 (1883), pp. 759–768.

- Rohnert-Koch, Friedgard: Zwischen Therapie und Strafe. Die Dauerbäder im Philippshospital. In: Sahmland, Irmtraud et al. (ed.): "Haltestation Philippshospital." Ein psychiatrisches Zentrum – Kontinuität und Wandel. 1535 – 1904 – 2004. Marburg 2004, pp. 161–173.
- Rohnert-Koch, Friedgard: Hydrotherapie in der Psychiatrie des 19. Jahrhundert. (med. Diss.). Gießen 2009.
- Ruppel, [Friedrich]: Allgemeine Krankenhäuser. Bautechnik. In: Liebe, Georg/Paul Jacobsohn/Georg Meyer (ed.): Handbuch der Krankenversorgung und Krankenpflege. (1st Vol.). Berlin 1899 a, pp. 759–829.
- Ruppel, [Friedrich]: Anlage und Bau der Krankenhäuser nach hygienisch-technischen Grundsätzen. In: Weyl, Theodor (ed.): Handbuch der Hygiene. (5th Vol.). Jena 1899 b, pp. 1–284.
- Schatzki, Theodore: Materiality and Social Life. In: Nature and Culture 5 (2010), 2, pp. 123–149 (in German as: Materialität und soziales Leben. In: Kalthoff, Herbert/Torsten Cress/Tobias Röhl (ed.): Materialität. Herausforderungen für die Sozial- und Kulturwissenschaften. Paderborn 2016, pp. 63–88.)
- Svedberg, Gunnel/Gunilla Bjerén: Narratives on Prolonged Baths from Psychiatric Care in Sweden during the First Half of the Twentieth Century. In: International History of Nursing Journal 5 (2000), 2, pp. 28–35.
- Tintemann, [NOS]: Zur Einrichtung der Freiluft-Dauerbäder. In: Psychiatrisch-Neurologische Wochenschrift 20 (1907), p. 162.
- Tischer, Achim/Gerda Engelbracht: Das St. Jürgen-Asyl in Bremen. Leben und Arbeiten in einer Irrenanstalt 1904–1934. Bremen 1990.
- Tomaschny, [NOS]: Ein Beitrag zur Frage der Dauerbadeeinrichtungen. In: Psychiatrisch-Neurologische Wochenschrift 47 (1905), pp. 461–464.
- Urbach, Anna: Auf leisen Sohlen das Fallen fixieren. "Epileptikeranstalten" als Wegbereiter einer spezifischen Qualifizierung von psychiatrischen Pflegekräften um 1900. In: Nolte, Karen/Christina Vanja/Fritz Dross/Florian Bruns (ed.): Geschichte der Pflege im Krankenhaus. (Historia Hospitalium, 30). Berlin 2017, pp. 65–87.
- Von Beyme, Ingrid/Sabine Hohnholz: Vergißmeinnicht Psychiatriepatienten und Anstaltsleben. Aus Werken der Sammlung Prinzhorn. Wiesbaden 2018.
- Wachsmuth, Hans: Die Dauerbäder der Anstalt für Irre und Epileptische zu Frankfurt a. M., ihre Einrichtung und ihr Betrieb. In: Psychiatrisch-Neurologische Wochenschrift, 22 (1909/10), pp. 188–195.
- Wernli, Martina: Schreiben am Rand. Die 'Bernische kantonale Irrenanstalt Waldau' und ihre Narrative (1895–1936). Bielefeld 2014.
- Wick, Andrea/Rouven Porz: Implizite Machtstrukturen in der Psychiatrie. Eine Care-Ethik-Perspektive. In: Mathwig, Frank/Torsten Meireis/Rouven Porz/Markus Zimmermann (ed.):



Macht der Fürsorge? Moral und Macht im Kontext von Medizin und Pflege. Zürich 2015, pp. 195–209.

- Würth, [NOS]: Ueber das Dauerbad, seine Anwendung und seine Erfolge. In: Allgemeine Zeitschrift für Psychiatrie 59 (1902), pp. 676–683.
- Würth, [NOS]: Ueber Trichophytie und andere Nebenwirkungen der Dauerbäder. In: Psychiatrisch-Neurologische Wochenschrift 31 (1905), pp. 289–291.
- Zerchin, Sophie: Auf der Spur des Morgensterns. Psychose als Selbstfindung. Ein Erlebnisbericht. München und Leipzig 1990.
- Zuschlag, Gustav: Die Anwendung des permanenten Wasserbades im Neuen Allgemeinen Krankenhaus zu Hamburg-Eppendorf. In: Jahrbücher der Hamburgischen Staatskrankenanstalten. Leipzig 1897, pp. 113–132.
- [NOS], Verbrühung im Dauerbad. In: Psychiatrisch-Neurologische Wochenschrift 8 (1906), p. 71.
- [NOS]: Bäderbehandlung in den Irrenanstalten. In: Psychiatrisch-Neurologische Wochenschrift 33/34 (1921/22), pp. 202–208.