In 1921 the German-Jewish architect Erich Mendelsohn designed and built his seminal hat factory Steinberg, Herrmann & Co., whose many transformations and changing patterns of ownership finally led to a state of obsolescence. After first successful attempts to reconstruct the premises from the 2000s onwards, the building remains predominantly idle, with the risk of falling into disrepair again. Rather than focussing on issues of style, composition, or materiality, this article looks at the life of this building and its current condition, thus seeking to trace some of the aspects that are imbricated in its architecture: issues of race, war, politics, economics, preservation, climate, and function.

PALABRAS CLAVE
Erich Mendelsohn, Modernidad, Luckenwalde, fábrica de sombreros, vacante

KEYWORDS
Erich Mendelsohn, Modernism, Luckenwalde, Hat Factory, Vacancy

One of modern architecture’s most dramatic roofs had a rather short life span. Daring in its outline and ingeniously devised, the roof of Erich Mendelsohn’s famous dye works at Luckenwalde was erected in the early 1920s only to be torn down in 1935, after the factory grounds were taken over by a machine-building company largely controlled by the German air force under the direction of Hermann Göring, a former fighter pilot and one of the most powerful Nazi leaders (fig. 01). Transforming what once was a hat factory into a war plant resulted in the removal of its most prominent component: the black, trapezoidal roof,

Tim Altenhof
Architect and a university assistant in architectural theory at the University of Innsbruck. He holds a PhD from Yale University, where his dissertation, entitled Breathing Space. The Architecture of Pneumatic Beings, was awarded the Theron Rock well Field Prize in 2018. An excerpt of this work, which was published in English and Italian under the title The House-As-Chimney, Erich Mendelsohn’s Breathing Space at Luckenwalde, won the Bruno Zevi Prize 2018. During the fall semester 2022, Tim was an International Fellow at the Institute for Advanced Study in the Humanities (KWI) Essen, where he worked on his book manuscript, a monograph on the ways in which different conceptions of the atmosphere and a heightened awareness for breathing affected modern architecture in the early twentieth century. His writings have appeared in 21:Inquiries into Art, History, and the Visual, Log, Journal of the Society of Architectural Historians, La Rivista di Engramma, and Süddeutsche Zeitung, among others.

Affiliation: University of Innsbruck
E-Mail: tim.altenhof@uibk.ac.at
ORCID iD: 0000-0001-7465-0477

Fig. 01
Exterior view of the refurbished dye works, February 2023, photo by the author.
which would have been too easy a target for anticipated air raids; and it also meant the structure lost its original purpose (fig. 02).

Luckenwalde had long been a center of the German textile industry that traced its origins to the late eighteenth century, and local companies began to produce hats from the 1870s onwards. After some initial rivalry, two of the leading entrepreneurs, Friedrich Steinberg and Gustav Herrmann, merged their competing companies and commissioned the young Erich Mendelsohn to devise a new manufacturing plant in the outskirts of town: the hat factory Friedrich Steinberg, Herrmann & Co. From the onset, the factory had garnered its share of acclaim, thanks to an effortless confluence of architectural form and smooth production process. A token of modernity, it became one of the paradigmatic expressions for an industry of the future, with critics like Adolf Behne pointing out the functional layout and its compelling translation into a tight architectural form. Indeed, Mendelsohn converted the production process of woollen and felt hats into a compelling spatial sequence: trains supplied the power station containing the boiler and turbine house with coal that was then heated and thus translated into kinetic energy so as to set in motion drive belts inside the four production sheds formerly used for wet processing (fig. 03). Although the dye works marked the end of a hat’s production process, this part of the structure actually gave the company its face: upon entry through the gatehouse (which no longer exists), the dye works was the first thing one would see. What lay hidden from public view, however, was its physiology: the

![Exterior view of the refurbished dye works, February 2023, photo by the author.](image)
geometry of its roof cleverly helped dissipate the toxic fumes emerging from vats, which workers used to dye the felt required for Germany’s latest hat fashion (fig. 04). The roof, in other words, had inner workings. Because of the chimney effect warm air rose above the workers’ heads, thus carrying the toxic fumes up and out through the hood. Operable louvers at the top allowed for a finely calibrated air flow. Production began in 1923, not before a large fire had broken out in February that year, destroying the wooden roof structure whose reconstruction was eventually more expensive than the entire complex had cost initially. In fact, the former factory’s roof structure in particular is nothing but a history of periodic destruction and reconstruction, and so is that of the complex more generally, which saw first modifications the moment the German air force took over. With Herrmann’s death in 1932 also came the end of the company so that his partner Friedrich Steinberg had to sell the factory grounds in 1934, while in 1935 Herrmann’s shares were expropriated. Of Jewish origin, Luise and Erich Mendelsohn were not the only
ones to leave Germany. Gustav Herrmann's family also departed in 1933 to escape the looming anti-Jewish programs. Where workers previously dyed felt, the raw material for hats, others soon began to manufacture anti-aircraft guns, the raw material for modern warfare. Those others, in fact, also included forced laborers. Once turned into a production site for the burgeoning war machine, the chimney effect became gratuitous and the roof fell into disuse. Soon it was taken down (fig. 05). Thus decapitated and disfigured, the dye works transmogrified into an inadvertent harbinger of World War II.

Even with the benefit of hindsight it is hard to determine whether this act of architectural violence might have spared the complex from more severe air strike demolition, but clearly did it heavily encroach upon a finely calibrated complex. And so did a number of additions built in 1935, including partitions inside the sheds, as well as two adjacent wings that began to bookend the dye works from 1940 onwards. After World War II, in 1945, the remaining machines served as reparation payments and were relocated to the Soviet Union, which in turn converted the remaining structure into a repair shop. In 1957, a company for roller bearings took command of the factory grounds, a transition which gave rise to further modifications that left a strong mark on the factory's original character, so much so, that the composition was less and less identifiable. The former power station, for instance, was transformed into office spaces distributed across newly inserted slabs. Steel windows were replaced by timber framed windows; apertures appeared where they had never been; others were simply closed off; and the boiler house suffered substantially. What is more, the soil underneath was heavily contaminated.

The building's history, beginning with the company's demise in 1933, is one of endless appropriation, disregard, but also pragmatism and appreciation. When the so-called VEW Wälzlagerwerk, a former GDR company, had to declare bankruptcy in 1991 shortly after German reunification, the structure was taken over by another company, which
soon withdrew in the face of crashing markets in the East⁹. Thus aban-
donied for a decade, the former hat factory virtually fell into oblivion and in 2000 finally wound up in the hands of a Berlin-based textile entrepre-
nur, who bought Mendelsohn’s structure after years of obsolescence. Initial ideas to reinvigorate the building with funds from different historic preservation offices, such as the Brandenburgisches Landesamt für Denkmalpflege and the Deutsche Stiftung für Denkmalschutz, finally led to a reconstruction in the course of which the investor also restored the famous roof with his private money¹⁰. This allowed the abandoned factory to regain much of its “enormous expressive power,” the “remarkable func-
tionality” however still remains unexploited¹¹. Initial plans to repurpose the structure as a plant for textile recycling never came to fruition. Because the building is flooded with day light, it would have saved a considerable amount of energy for the use of artificial lighting (and would do so until today); in turn, a reprocessing of fabrics would have re-aligned the factory with its original function as a production facility for felt.

But note the conditional in this endeavor. Located just 50 km south of Berlin, Luckenwalde is the capital of a small district in Brandenburg, one of the 16 German federal states. Once a flourishing industrial hub, the town has experienced a decrease in population es-
pecially in the aftermath of German reunification and has some 20,500 citizens today. The impact of World War II, Germany’s division during the Cold War, and decades of structural change brought about a state of eco-
nomic uncertainty, to the extent to which the building began to flounder. Located in what was once East Germany, Luckenwalde has a locational
disadvantage especially for entrepreneurial projects and unless this structural problem subsides, the only way to save the building might be its inclusion into the World Heritage List.

If the hat factory was once “the most widely published industrial structure in Germany since the Werkbund exhibition of 1914,” it now makes only occasional appearances in local German newspapers and media outlets to keep it discursively alive, just so that it does not entirely dissolve into another state of decay. And yet, after first attempts to reconstruct the ensemble, the initial enthusiasm has vanished and the building seems to fall into oblivion again. While in 2012, apparently, the factory complex was offered online for 2.2 million Euros, its current ownership is unknown to me. During a visit earlier this year, when a thin blanket of snow covered much of the bleak surroundings, one of the workers of a nearby metalshop approached me, inquiring about my camera model. His and other cars had inscribed fresh tire tracks into the snow, marks of recent activities which have little to do with the former factory and its rich production history (fig. 06). I was on my way to unlock the dye works—which, unfortunately, are no longer open to the public—in order to spend an hour alone below the reconstructed roof. In 2004, architectural historian Regina Stephan curated a small exhibit featuring a wooden model that can still be found inside the dye works. Built in 2003 on the occasion of the 50th anniversary of Mendelsohn’s death, students from the University of Stuttgart created a version of the factory in the scale of 1:100 (fig. 07). The model sits inside a vitrine mildly covered in dust,
so much so that my camera could at first not autofocus. A single black plastic chair was eerily placed in the middle of the space, as if someone had recently sat there contemplating the model. If back then, some twenty years ago, a direct confrontation between the architectural model and the dilapidated original might have caused some grief, it still does so today, although the structure is in much better shape. A bunch of artificial flowers in glowing orange and pale pink arise from wooden boxes and only increase one’s sensation of a lifeless, abandoned interior. And yet, on the other side of the wall, I heard the sound of pallet jacks and palettes being moved around. Not quite the soundscape of production, at least there was some life inside, and for a moment the space felt used and animated. Meanwhile, a nearby metal processing company rents the former production sheds as a storage unit for their materials (fig. 08).

After different stakeholders invested millions of euros in funding, there is still no strategy for a long-term use. Although major efforts to breathe life into the structure in the early 2000s ultimately led to its successful reconstruction, the former hat factory is still looking for a new program, perhaps even for a new owner. Some two years ago, segments of tar paper had peeled off from the exhaust stack, a condition which has been fixed in the meantime. The politics around this building remain the same: without a proper function, it is difficult to be maintained. The structure may have its hood back, and yet it seems as after decades of headless drift it still floats like a rudderless ship straight towards decay. With no bearing on reality, one could imagine many things in those spaces: a greenhouse; a manufacturing facility for all kinds of things from vaccines to robotics and solar panels; perhaps even a new architecture school (fig. 09). In fact, a wide range of ideas were once on approach, including a Go-kart track, an information center for modernism, as well as an exhibition hall for fairs. A combination of half-hearted attempts, difficult economic times, complicated entanglements between public funding agencies and private ownership, and the intricate site made it so far impossible for any scenario to come true. And yet, the structure is still able to pique the general public’s cu-
riosity, with spiking enthusiasm among architects, students, and fans of Mendelsohn, resulting in occasional research projects. In 1998, a group of students from the Architectural Association in London pondered options for creative reuse and the factory’s afterlife. Resulting in a small booklet, these works and accompanying essays framed the structure as a “ruin of modernity,” raising important questions about the fate of neglected classics vis-à-vis their potential function. Another publication from 2006 gathered more scholarly contributions to a Mendelsohn symposium held two years before, one of which discussed the structure and its condition as a “nursing case” in the context of cultural heritage.

A recent master thesis submitted at the Bauhaus University Weimar examines the factory’s potential as a satellite campus for Berlin or Potsdam, so as to incentivize exchange between locals, students, and visitors. It also pays heed to the structure’s textile history. Today, or so it seems, many of these earlier premises and observations are still in place, and while we can no longer understand the factory as a ruin of modernity, it remains a nursing case nonetheless. A lack of local enthusiasm together with difficult economic preconditions turn any concept for reuse into a challenging endeavor.

As is the case with the Mies van der Rohe campus, a former silk weaving factory turned business park, a range of smaller programs could help take the pressure off finding a single function for reuse. The premises of the so-called VerSeid AG, the textile company which no longer exists, today accommodate office spaces in the former dye works, a venue in the former boiler house, as well as restaurants and a range of leisure activities, from classic bouldering to parkour. This factory ensemble, too, is located in one of Germany’s former hubs for the textile industry: Krefeld, which is often referred to as the Velvet and Silk City, used to be the center of German silk production since the early eighteenth century. Currently, its population is more than ten times bigger than that of Luckenwalde. A combination of geographic and demographic factors guarantee more fluctuation, and the structure also lends itself to diverse uses as it is more compartmentalized than Luckenwalde’s hat factory,
whose axial layout and symmetrical sheds provide one coherent central space with no interior separations.

It takes a confluence of global and local efforts to find a new program, ideally by employing the chimney effect underneath the roof. Still today, it is surprisingly cool inside the former dye works, a space that might soon garner new attention in the face of rising temperatures: it is an upflow of warm air and people working inside which together gave meaning to this famous roof. Issues of race, war, politics, economics, preservation, manufacture, public-private ownership, climate, and function are all imbricated into the history of this building, of which the hood is only the most pronounced component. An integral part of the dye works, the hood in its current state merely serves to keep an empty building cool and dry. It is staggering nonetheless (fig. 10). RA
Notes


04. This price explosion was a direct result of inflation. See DRACHENBERG, T., “Die Hutfabrik,” cit. p. 2.


06. VON KAENNE, Gerald Kühn, LEBEK, Christoph, and NOELL, Noell, “Luckenwalde - Die ehemalige Hutfabrik Friedrich Steinberg, Herrmann & Co. von Erich Mendelsohn,” Brandenburgische Denkmalpflege 1, 1992, 1, p. 75. This article documents the results of a first building survey after German reunification.


08. Two photographs documenting the status in 1992 are included in VON KAENNE, G., “Luckenwalde”, op. cit., p. 80.


12. JAMES, Kathleen, Mendelsohn, op. cit., p. 80.


14. Ibid.


18. KARG, Detlef, “Pflegefälle”, op. cit.

**Bibliography**


