

Cite this article

May R and Wetzl V (2019)

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Proceedings of the Institution of Civil Engineers – Engineering History and Heritage **172(2)**: 90–91,
<https://doi.org/10.1680/jenhh.2019.172.2.90>

Announcement

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Professor Dr.-Ing. Werner Lorenz retired from university

As mentioned in issue 172(1) of *Engineering History and Heritage*, the Editorial Panel wanted to publish a piece about the retirement of Professor Werner Lorenz. It will give an insight into the scope of his work and the respect that he commands.

The 30th of September 2018 marked the end of Werner Lorenz's tenure as professor of construction history at the Brandenburg Technical University (BTU) in Cottbus, which had spanned a quarter of a century. Through his work, the name of the city, located a good 100 km southeast of Berlin, became known far beyond Germany's borders as one of the world's most important centres of construction history.

Born in 1953 as the second of five children, Werner Lorenz grew up in Osnabrück during the years of the German *Wirtschaftswunder* ('economic miracle'). The solid middle-class conditions of his parental home were reflected by his attendance at the Carolinum Gymnasium, an old-language grammar school, where he graduated with distinction in 1971. Unusual for the son of a physician, however, was the decision to study civil engineering, and even more unusual was the place of study – West Berlin, far away from home.

The political and cultural pulse of that island of freedom in the middle of the communist German Democratic Republic (GDR) quickly captivated Lorenz. Hardly imaginable today, even engineering students were highly politicised in those wild years after 1968. At the time, pure concentration on the studies was by no means the ideal. There were enough stimuli, such as the escalating Vietnam War or the use of nuclear power, offering space for extensive political activities beyond professional interests.

Despite all distractions offered by the vibrant cultural metropolis, his studies at the Technische Universität Berlin (TU Berlin) progressed. He specialised in structural engineering with a focus on the statics of building construction and worked for several years as student research assistant at the departments for mechanics and statics. At the latter, he wrote his diploma thesis on the subject of finite elements. In 1980, he left the university as the year's best student.

Subsequently Werner Lorenz worked as a structural engineer in a Berlin engineering office; soon this activity no longer satisfied the young engineer, who was in search of intellectual input. With enthusiasm, he attended a seminar on Nietzsche's *On the Advantage and Disadvantage of History for Life* at the Freie Universität – the curiosity for history had been awakened. It was presumably the reconstruction of a ruinous farmhouse in Liguria, Italy, which began in 1983 together with a friend, that finally stimulated his interest in the historical dimensions of building constructions – a topic that until then had been rather neglected in Germany.

In 1984, Werner Lorenz moved back to the TU Berlin as a research associate at the Department of Structural Design, anchored in the Faculty of Architecture. For five years, interrupted only by a brief guest fellowship at the École Nationale des Ponts et Chaussées in Paris, France, he sharpened his awareness of the aesthetic dimensions of buildings, structures and details in his work with architecture students. The original intention to do a doctorate on historical masonry soon gave way to the fascination for a completely different research desideratum: early iron and steel structures. From then on, this topic was to play a decisive role in his work as a scholar and engineer.

Lorenz received his doctorate from the TU Berlin in 1992 with a dissertation on *Building with Iron in the Berlin Area 1797–1850*. Later published under the title *Konstruktion als Kunstwerk (Construction as a Work of Art)* (Lorenz, 1995), it was a decisive basis for his appointment as professor of construction history at the BTU Cottbus, which had emerged from a GDR engineering college after the reunification of Germany. This newly established professorship was probably unique in the world at the time and was created – alongside others – to attract students with innovative courses to the economically declining East German periphery.

Lorenz's appointment, however, was a fortunate decision. From 1993, he successively established his rather marginal chair as a core discipline in the joint Faculty of Architecture, Civil Engineering and Urban Planning. Interdisciplinary cooperation was cultivated here in an outstanding manner. For good reasons, his chair became the central anchor point for a graduate college established in 2014 by the German Research Foundation at the BTU with the title '*Kulturelle und Technische Werte Historischer Bauten*' ('Cultural and Technical Values of Historical Buildings') (BTU, 2019).

As university lecturer, Lorenz always remained committed to academic ideals: concepts were more important than recipes and giving the right answers was good, but asking the right questions was even better. Above all, the students were motivated to sharpen their awareness of the context in which a building is being constructed – as he himself had exemplarily demonstrated in 1996 in a widely acclaimed publication on the role of engineers during the National Socialist era (Lorenz and Meyer, 2004).

Particularly important to him were the students of civil engineering. In a phase of severe understaffing he took over responsibility for their degree courses – a decisive contribution to secure the survival of civil engineering at the BTU. At the same time, he worked both nationally and internationally as a tireless advocate for the integration of construction history into the university curriculum of civil engineering (Lorenz, 2004) – not as a decorative accessory, but as a 'powerful impulse for the development of one's own critical positions' (Lorenz, 2017a).

At his own university, Lorenz established over the years not only a series of acclaimed lectures on construction history and the history of structural analysis, but also the remarkable module 'preservation of structures' in the Master's programme in civil engineering. In this course, the location of his cross-disciplinary teaching at the cutting-edge between engineering history and engineering practice became particularly evident. In 2003, by renaming the chair to 'construction history and structural preservation', this approach was also formally manifested.

Lorenz's indispensable basis for this has been his long-lasting experience as a practicing engineer in Berlin, which added to his humanistic education and a long theoretical examination of construction history. Based on thorough historical analyses from 1999 to 2018, Lorenz and his colleague Michael Fischer carried out many demanding engineering tasks in the rehabilitation of historic structures at the engineering office Prof. Dr. Lorenz & Co. Bauingenieure GmbH. The refurbishment of the listed elevated railway viaduct of underground line 2 in Berlin, which was nominated for the German Bridge Construction Award in 2014, deserves special mention (Lorenz, 2017b).

In addition to his own professional activities, Lorenz was and is a tireless advocate of civil engineering heritage. For more than ten years, he has been a member of the scientific advisory board of the very successful publication series *Historische Wahrzeichen der Ingenieurbaukunst (Historical Landmarks of Civil Engineering)*, for which he has himself authored three volumes (Lorenz, 2014; Lorenz and Kaiser, 2011; Lorenz *et al.*, 2013). At the same time, he fights vehemently for the preservation of endangered engineering structures, being profoundly convinced of their role as cornerstones for the identity of cities or regions. One example is his commitment to the Chemnitz Valley Viaduct in Chemnitz, Saxony. After a long and arduous struggle, he was able to prevent its demolition in cooperation with a local citizen's initiative (ARISDA, 2016).

His international reputation, however, was acquired above all through his work as a scholar and leading driving force for the further development of the new discipline of construction history. The most important constant in his life as a scholar were and are historical iron structures. Currently, one of his projects is coming to fruition, in which the unique ceiling and roof structures in St Petersburg's Hermitage have been studied over many years (Heres, 2017). Inspired by this, Werner Lorenz has now traced, in the vast expanses of Russia, the very early structures of the 18th century, almost unknown to the scientific community (Kosykh *et al.*, 2018; Lorenz and Heres, 2015).

In addition to history, the engineer Werner Lorenz is also interested in the question of minimally invasive investigation of historic structures. His expertise in this field finally drove him to faraway Beijing, China, where he contributed to the development of strategies for the preservation of the Crystal Palace in the Forbidden City. At the same time, he was involved in a research project on the former bronze roof trusses above the portico of the Pantheon (Rome, Italy). For the leading specialist in early iron structures, this brought an unexpected encounter with an almost 2000-year-old load-bearing structure made of metal (Lorenz et al., 2016).

In general, over the last few years, Werner Lorenz has devoted himself with growing enthusiasm to building constructions from antiquity and even older civilisations, including the megaliths of Baalbek (Lebanon) or the gigantic undulating walls of Egypt. Parallel to this is his ongoing interest in the recent art of civil engineering; for example, in a research project on the influential civil engineer Franz Dischinger (Lorenz and May, 2013) that was conducted under his supervision.

Based on these multifaceted activities, Lorenz has been one of the leading minds of the international movement to establish construction history as a recognised academic discipline. Not only has he played a decisive role in defining the goals and content of this discipline (Lorenz, 2006), after initial events in Madrid (Spain) and Cambridge (UK), he courageously invited the worldwide construction history community for a third international congress to provincial Cottbus, Germany, in 2009 (Kurrer et al., 2009), which in the meantime has been followed by further congresses in Paris (France), Chicago (IL, USA) and Brussels (Belgium). His chair also coordinated three summer schools on construction history (CH.ESS) funded by the European Commission, which took place from 2011 to 2013, with participants from various European universities in Cambridge (UK), Munich (Germany) and Brussels (Belgium) (Lorenz and May, 2012).

In recent years, Lorenz has also rendered considerable services to the institutional consolidation of the German-speaking construction history community beyond Cottbus, which is geographically scattered but increasingly vibrant (Lorenz and Kurrer, 2015). Above all, it was impulses from his chair that led to the foundation of the *Gesellschaft für Bautechnikgeschichte* (Society for Construction History in German-speaking countries) in 2013. As founding chairman, he shaped and established the society as an active research community, which currently counts more than 150 members (GfB, 2019). Lorenz was also significantly involved in the recent founding of the International Federation for Construction History.

On the occasion of his retirement from his professorship at the BTU, Werner Lorenz was honoured by his university with a symposium under the title *Languages of Construction* (BTU, 2018), where his students and international companions intensively discussed this term, which he had coined himself. The remarkable event proved once again what a severe loss Werner Lorenz's departure is for the BTU: The university loses an outstanding personality who was able to combine Engineering Sciences and the Humanities in a unique way, and the faculty loses one of its most unconventional and visionary minds – a gifted speaker and writer who inspired architects and engineers alike. At least the international Construction History community will not lose Werner Lorenz so soon. His enthusiasm for his profession and his mission are still far too strong. For this we wish him many more years of creative energy and we are already looking forward to his next, surely highly fascinating contributions.

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Roland May and Volker Wetzky