The ticket booths at the Olympic Stadium Munich

Meltem Çavdar, Pietro Sircana, Lucrezia Rodriguez, Lisa Schröter, Livia Calcagni, Jana Calatrava, Concetta Maria Casagrande, Beatrice Brinchi Giusti, Chiara Saccomanno, Mu-Yen Lee, Jesse Han Professorship for Recent Building Heritage Conservation Department of Architecture, Technical University of Munich

The entire ensemble of the Munich Olympic Park designed by Behnisch & Partners is regarded as one of the most significant examples of post-war architecture in Germany. The famous tent roof by Frei Otto is recognised worldwide. The main facilities, the Olympic Stadium, the Olympic Hall, the Olympic Swimming Hall and the TV Tower are protected as individual monuments, the entire Olympic site with its characteristic park landscape as an ensemble. Unfortunately, the small buildings of the Munich 72 Games, such as the multiple kiosks, cafes, restaurants and sanitary facilities, are almost forgotten today.

Intended to present a new and liberal face for post-war Germany, the Olympiapark consisted predominantly of open public spaces. Landscape architect Günther Grzimek was called in to develop the concept in close coordination with the architects. According to his design, buildings and park furniture were to be subordinated to the landscape. One of the main ideas behind the 1967 design concept was to build main sports facilities as "pits in the landscape" to avoid monumentality of solitary structures and to always relate to "human scale". It was desired by the organizers to achieve an atmosphere of playful cheerfulness.

Together with the guidance and orientation system designed by Otl Aicher, multiple small buildings, public artworks and installations were part of the design canon of the Games in 1972, contributing to the fairground atmosphere. These have mostly vanished in today's Olympiapark, except twelve neglected small buildings around the stadium. The facility buildings include ticket booths, kiosks and medical stations. Though ultimately part of Behnisch's brief, they were designed by a young group of architects around Jochem Jourdan and Bernhard Müller, who in 1969 founded in Darmstadt the Projektgruppe Architektur und Städtebau (PAS). Their project was developed together with Carlo Weber, who coordinated several external architectural teams within the overall assignment of Günter Behnisch.

The overall design concept of the 1972 Olympic Games matched the studies of Jourdan, who had worked as a sci-



Fig. 1 Central ticket booths NO1 on the north side of the Olympic Stadium 2019 (Photo: Livia Calcagni)

entific assistant at the Technical University of Darmstadt on the topic of the open playful environment (offene Spiellandschaft) since the late 1960s. The results of a seminar called "mobilerspielraum" – mostly mobile and modular designs in plastic or metal – were displayed in an exhibition in 1969. Short construction times and simple assembly of the modular systems should offer possible combinations for a flexible "open space". The aim of the designs was to achieve an environment in which everyone could enter and contribute. The influence of contemporary architectural theory and groups like Archigram was strong. The design work was developed in an integral way, with artists, composers and scenographers contributing to the discussions. Finally, the exhibition of the designs resulted in the assignment of PAS at the Olympic Games.

Constructive design

The ticket booths consist of three main components: a walkway, cabin-like cash desks and the outside space divided by handrails. They are composed of 1.40m-wide similar modules, with the number of modules varying according to location and orientation. Some of the buildings also have circular lounges, armored garages for the money transporters, and surveillance towers as additional modular units.

All the ticket booths, as well as the kiosks, consist of a scaffold made of galvanized steel tubes, clad with similar aluminum sandwich panels or acrylic glass elements. The individual cabins of the cash desks are connected to each other at the rear via the tunnel-like, 1m-wide walkway and separated from each other by thin aluminum walls. With dimensions from 1.35 m to 1.40 m, they are just big enough to provide space for a chair and a tabletop in front. The chairs are firmly anchored to the floor. The tabletop of the switches continues outwards.

The outer space for the queue was originally characterized by a differentiated floor covering. Today its contours can still be seen in the asphalt. The handrails are designed in such a way that waiting visitors are guided directly to the cash desks.

Current condition

In order to conduct a basic documentation and survey of the structural elements and architectural surfaces as a basis for a long-term preservation and management plan, a study project was realised jointly by the Professorship for Recent Building Heritage Conservation and the Chair of Conservation-Restoration, Art Technology and Conservation Science during the summer term 2019. The students were introduced to 3D photogrammetry, using 3DF Zephyr for the documentation of the objects' current condition. Together with on-site analysis, the 3D models were further used for a phenomenological mapping of building materials and surface deterioration and decay. In addition to the analysis of the original building plans, on-site measurements and axonometric line drawings of the structural elements enabled a better understanding of damages, recent repairs

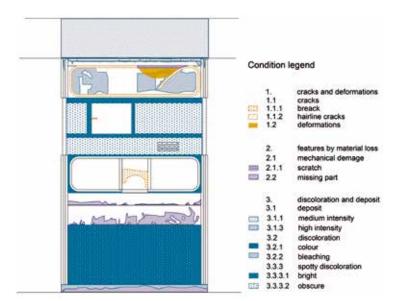


Fig. 2 Condition mapping of ticket booth NW (*Drawing: Jana Calatrava, Lisa Schröter*)

and alterations.

Apart from cashier NO1 at the main entrance of the stadium, the ticket booths are no longer in use today. In comparison to the former, the neglected objects appear more derelict. All booths hardly meet today's requirements. Deterioration ranges from weathering and material losses through aging, especially visible at the PMMA, steel and aluminum surfaces. Most paints are detached and damages, such as scratches and dents, are particularly noticeable on surfaces close to the ground. So far, only minor structural damages and losses can be attributed to anthropogenic influences.

The results of the survey formed the basis for a discussion on different concepts for developing a conservation and management strategy for these fragile structures. As integral

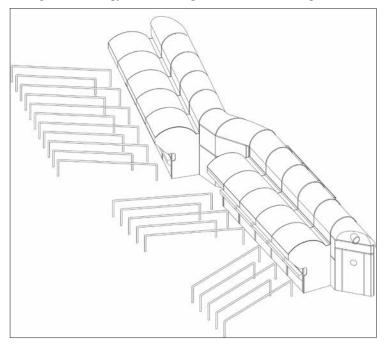


Fig. 3 Axonometric ticket booth SW (Drawing: Jesse Han, Mu-Yen Lee)



Fig. 4 3D Model ticket booth NO2 (Model: Concetta M. Casagrande, Beatrice B. Giusti)

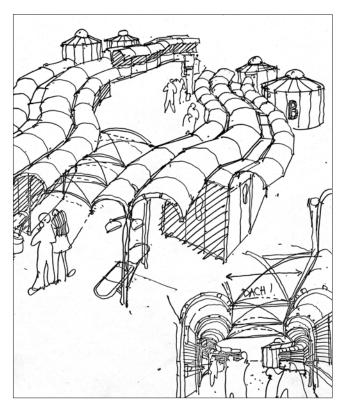


Fig. 5 Early sketches of Jochem Jourdan 1971 (PAS Archiv)

part of the cultural significance of the whole Olympic ensemble, these little structures are in need of regular maintenance. The challenge for their future preservation will be to find appropriate uses.

Bibliography

- KUH, Hans; Beil, Brigitte (1972): Das visuelle Erscheinungsbild für die Spiele der XX. Olympiade München 1972. In Novum 43 (7), pp. 2–56.
- Assum, Gernot; Badran, Rassem; Boedeker, Karl; Turk, Wilfried; Jourdan, Jochem (1969): Mobiler Spielraum. Seminar und Ausstellung. Edited by Jochem Jourdan. Technische Hochschule Darmstadt. Lehrstuhl für Entwerfen, Baugeschichte und Kirchenbau (Prof. Dr. Rolf Romeo).
- Referat für Stadtplanung und Bauordnung (2008): Entwicklungsplanung Olympiapark 2018. Materialsammlung und Grundlagenworkshop. München.
- SCHRÖTER, Lisa (May 2019): Interview with Jochem Jourdan and Bernhard Müller in Frankfurt am Main.

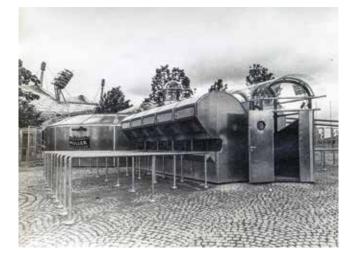


Fig. 6 Ticket booths SO1 at the south entrance of the stadium (PAS Archiv)