Auslobung Kunst am Bau der Stiftung Bauhaus Dessau
Einreichung Nr. 127348

Lichtspielhaus
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Verfassererklärung (auf Englisch) separat
LICHTSPIELHAUS = light/play/house

Lichtspielhaus is a dynamic installation of overlapping colored glass panels conceived for the lower level of the Bauhaus Museum in Dessau, and designed in response to the building’s award-winning design by González Hinz Zabala.

At once a kinetic color study, an ever-changing abstract animation, a customizable projection surface for film, and a moveable backdrop for performance, Lichtspielhaus draws on a number of key Bauhaus histories and pedagogical objectives while also using new technologies to reimagine those ideas in relation to the present and foreseeable conditions of the museum, its collection, and the city of Dessau.

From a central position along the building’s eastern façade, large panels of colored glass will be suspended along two parallel rails installed along the bottom edge of the black box, facing the park. The panels may be manually moved along the rails as with barn doors into various configurations and zones of overlap, creating myriad color combinations, interactions which will be further modulated by the continuously changing position of the sun and atmospheric conditions outside the museum. The character of the work will change substantially when night falls and the museum is lit from within, glowing vibrantly from the building’s exterior.

**Color Study**
In the spirit of Josef Albers’ color studies, these interactions will serve a pedagogical function that can be restaged, restudied, and revisited through direct observation as weather and seasons change throughout the hour, the day, or from year to year. On constant exhibit to the public from both inside and outside the museum, they are also a nod to the open house form of the building and the historic Bauhaus, which is, at its essence, a school.

**Abstract animation**
This interaction of light and color will be further activated by the ambulatory movement of people walking by in both interior and exterior spaces, viewing the piece from different angles. In this way, Lichtspielhaus is an animation in space-time that equally animates the space and the public around it. Its multiplanar surface is constantly in flux, even when the panels that comprise it are stationary.

**Customizable Projection Screen + Stage Backdrop**
Beyond his own substantial and diverse body of work, Moholy Nagy, in his writings, proposed a future for cinema and theater that has still, for the most part, not come to pass.

*It is possible to enrich our spatial experience by projecting light onto a succession of semitransparent planes...It is also quite possible to replace a single flat screen by sections of differing size and shape that would form innumerable patterns by continual change of position.*⁴

and

*The scenic background of the future will be conceived as a mechanism for the production of light and shade (trellis and skeleton construction) and as a complex of planes for the differential absorption and reflection of light (walls constructed for the organized distribution of light).*²
Lichtspielhaus can function as a projection surface for films, which may be rear projected onto the largest panel of glass. This panel will contain an interlayer of rear projection screen as well as a polarization filter. The several adjacent panels on the next rail will also be laminated with a polarization filter, so that when they overlap the projection panel, there will be a complete occlusion of light. In this way, these panels will function as curtains to effectively mask the projection surface for the desired aspect ratio of the film projected. There is potential here to create combinations imagined by Moholy Nagy, including multiple projections, vertical aspect ratios, square films, and so on.

The work can also operate as a backdrop for staged theatrical works or performances. In addition to the two rails containing glass panels, a third “empty” rail will be installed. It will be electrified, and equipped to easily install lights, cameras, props, or other equipment that could be used performatively in combination with the panels.

The legacy of modernism
The glass of Lichtspielhaus literally doubles the materiality of the museum, reflecting back the rich history of the material in relation to modernism in general and the Bauhaus specifically. Beyond its architectural significance, glass was seen as a material for mass-produced designware as well as for handcrafted works. These panels will be industrially manufactured with a local supplier, while their movement requires manual involvement. As an artwork which is enhanced rather than damaged by the sun, the piece also foregrounds the complexities of exhibiting work in a glass building, and the architects’ solution of the black box just above.*

New Technology
While Lichtspielhaus connects to the history of glass manufacture and production in the region and within the Bauhaus, it also utilizes significant recent technological advances. Major developments in structural glass production analysis along with new bonding technologies can now allow even the largest of these panels to be produced without frames. In itself, this will create a subtle but dramatic effect in its striking difference from what we’re accustomed to seeing. It will also allow color interactions to take place without a framed outline around each color, as in Albers’s transparency studies. The film interlayers laminated into each panel for color, polarization, and projection capabilities use nanoscale film and optical treatments, some of which are only just coming to market.

*This work is scalable: With a larger budget, the panels could be deployed at a larger scale and/or elsewhere in the building, which could also enable an additional schematic function: to block or deflect sunlight coming into the ground floor during sun-sensitive temporary exhibitions. Jumbo glass could also be used in situ to the scale of 40 foot barn doors.

2 Ibid. p 134
View through glass windows to the Bauhaus schoolbuilding, Dessau

advertisement Lichtspielhaus
Joseph Albers
Color transparency study

Bauhaus stage design
Laszlo Moholy-Nagy
Light Space Modulator
DESCRIPTION/TECHNICAL SPECIFICATIONS

GLASS

Glass is to be laminated and tempered for both safety and visual performance
Glass to be low iron, soda lime
Anti reflective coatings may be used, such as Guardian Clarity
Color to be achieved with a colored interlayer such as Vanceva PVB
Typical glass thickness for 2.4mx6m panel = 2 x 10mm laminated
The maximum panel weight will be 1000kg
Each rail will hold approximately 11linear m of glass
Glass to be frameless with holes drilled to accommodate the hardware.

FILMS

Films will be generally laminated into the glass and not mounted to the surface.
PET films adhere to PVB foil, and can have effects ranging from polarizing filters or dichroic coatings.
Projection films such as 3M Vikuiti or a Kuray projection interlayer will be used where projection is proposed.

HARDWARE

Barn door hardware similar to many off-the-shelf systems such as that made by Dorma will be used.
The weight of the glass will hang from rollers which run along a top track. The track could be either stainless steel or painted carbon steel.
Doors are manually operable by curators
Automation of the panel movement is possible though not necessary
The rails are to be fixed into the concrete structure of the black box with anchor bolts by Hilti or similar
example of barn door hardware

glass samples with colored filter lamination
glass samples with polarizing filter (above) and without (below)
## TIME SCHEDULE

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artistic and Technical Design</td>
<td>18 weeks</td>
</tr>
<tr>
<td>Coordination with client and other stakeholders</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Fabrication</td>
<td>24 weeks</td>
</tr>
<tr>
<td>Installation</td>
<td>2 weeks</td>
</tr>
</tbody>
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Projektbilder
o1 Grundriss
04 Skizzen, Zeichnungen, Fotomontagen

View from the park side
Photo-Montage
Views from the park side
Sketchup-Model
Views from inside
Sketchup-Model

The biggest panel can be used for projections