FARBEN

LICHT

SPIELE

by LUDWIG HIRSCHFELD-MACK

RECONSTRUCTION 2000
a film by
CORINNE SCHWEIZER and PETER BÖHM

SONATINE I (ultramarin-grün)	1923	18:31 min.
SONATINE II (rot)	1923/24	09:05 min.
KREUZSPIEL (silent)	1923	05:59 min.
S-TANZ (Soviet-Tanz)	1923	04:57 min.
A Short Introduction (e / dt / it)	2000	06:00 min.

arrangend and performed by
Peter Böhm, Marlies Fuchs, Corinne Schweizer,
Burkhard Stangl, Annabella Supper

organ players
Kurt Heiling, Peter Böhm
accordion player
Krassimir Sterev

reconstruction of the coloured light plays
Corinne Schweizer, Peter Böhm
reconstruction of the light playing apparatus
Koloman Mayerhofer, Kaj Delugan
art historical consultant
Peter Stasny

directed and produced by
Corinne Schweizer, Peter Böhm © 2000

DVD-Video, PAL, stereo, dur. 45 min.
complies to version 1.0 of the DVD-video specifications

information
schweizer@mlab.at
www.mlab.at

A Gesamtkunstwerk in the Bauhaus Style

**The coloured Lightplays of Ludwig Hirschfeld-Mack
reconstructed by Corinne Schweizer and Peter Böhm**

The artist Ludwig Hirschfeld-Mack developed the coloured lightplays at the Bauhaus during 1922 and 1923. Following the principle of greatest possible reduction – the basic units are the circle, triangle and square and the colours blue, yellow and red – a carefully composed sequence of moving images is brought into being, colour and form flowing into each other to the rhythm of a specially composed score.

Practical realisation is effected through a mechanically operated lightbox, with six specially constructed spotlights with changable colour filters, the intensity of which can be regulated by means of switches and resistors. Towards the front of the lightbox are two layers of stencils defining geometric figures whoose forms can be moved and changed by two operators. The lightforms animated by the operators are then projected onto a transparent film of paper, where the transformations of the geometric figures appear in glowing colours.
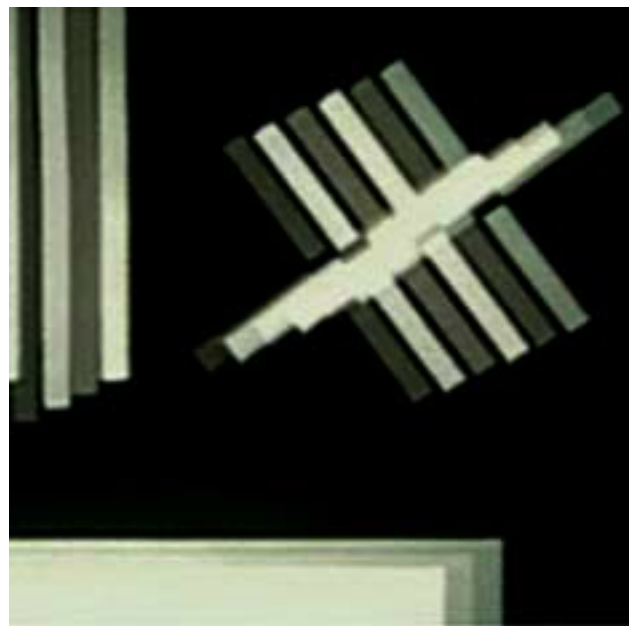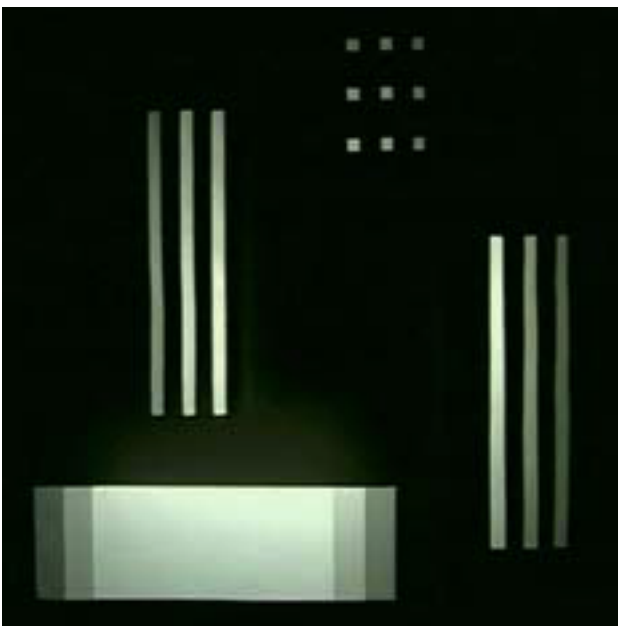
After months of work the film-maker Corinne Schweizer and the composer Peter Böhm have succeeded in reconstructing this machine-art from sketches and the fragments of scores. Important insights were gained from the Ludwig Hirschfeld-Mack's grandson, Kaj Delugan and from the Viennese art historian, Peter Stansy. Together with a team of operators and two musicians, Schweizer and Böhm have prepared five pieces with a total playing time of fourty minutes.

The Step towards Modernism

The coloured lightplays are Ludwig Hirschfeld-Mack's most important work and anticipate the tendencies and developments of much 20th century art. His moving images of projected light stand in a line of similar endeavors, not only in the realm of colour/ light/music but also in abstract film and in theatre, where it was sought to unite the gestures of the actors with their movements on the stage, so as to create an overall, total effect.

The idea of constructing an apparatus in which elementary forms, colours and movements could be combined on different levels and thus put in relation to each other, anticipates action painting, animated film, light- and laser shows. Light enters into fascinating dialogue with painting and technology, a dialogue which through the developments of the accompagnying music, can be rhythmicaly structured to become the signifier of emotion.


Hirschfeld-Mack described his creation as: *"a play of yellow, red, green and blue fields of light, developing in organically defined units from darkness to maximum intensity. Set: a transparent screen. Elements of design: colours, forms and music: in cornered, sharp, pointed forms, in triangles, squares, polygons and circles, curves and waveforms; upwards, downwards, sideways in all possible rhythmically controlable movements, the elements of the coloured light play being brought into an artistically planned, orchestral presentation. Combined with the interactions, combinations and overlayering of the colours and forms, are the musical elements to which they give rise and from which they become inseperable."*

Chance as the Instigator

The coloured light plays were developed in the experimental enviroment of the class for stage design at the Bauhaus and are the summation of Hirschfeld-Mack's studies in the theory of colour and form. They reflect the design theory of Johannes Itten and the work of Paul Klee as well as being a reaction to the films of Lyonel Feininger and the shadow plays of Moholy-Nagy. Oskar Schlemmer's ideas were also influencial.

The immeadiate precusor was a shadow play presented at a latern party held at the Bauhaus in June 1922. As an actyline lamp was being changed, Hirschfeld-Mack noted that, *"through the combination of the chance doubling of the shadows on the transparent paper and the different coloured actyline lamps, a warm and a cold shadow became visible"*.

After experiments inspired by this accidental discovery, he arrived at the principles of his Farbenlichtspiele: it is not the shadow of the stencil that appears on the projection screen but rather the unmodified light itself that passes through the modifiable opening of the neagtive form of the stencil and can thus be made to take on various forms.
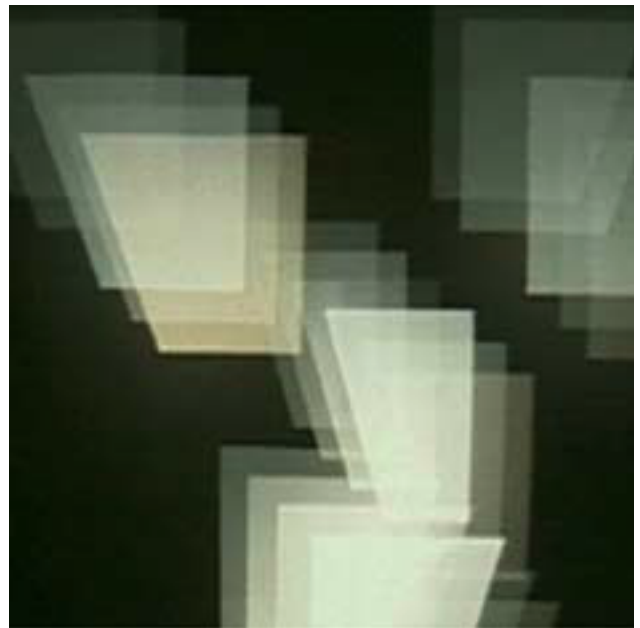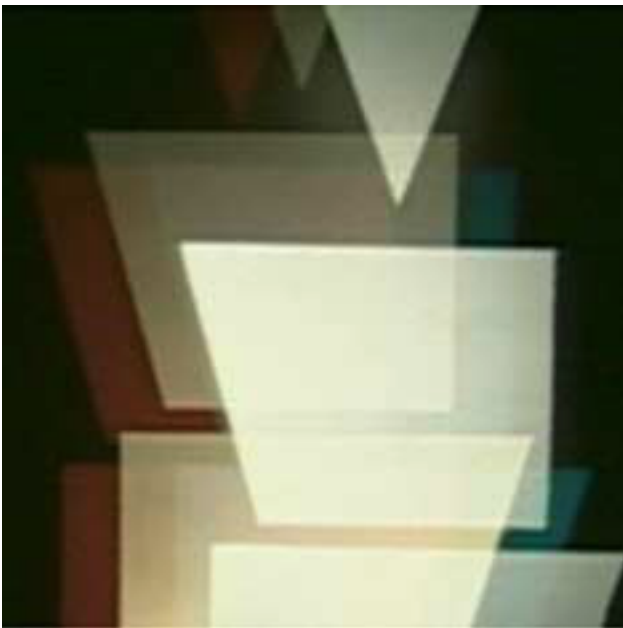
‚A total composition in fairy-tale metamorphoses'

Hirschfeld-Mack's invention was of great interest to his contemporaries. Performances took place not only at the Bauhaus but also at the Volksbühne in Berlin, in Halle, Celle, Hamburg and Nurenberg as well as in Leipzig where it was shown after a lecture by Wassily Kandinsky.

"A total composition in fairy-tale metamorphoses and shiftings," was the verdict of one reviewer, while another proclaimed "this incomparable addition to the world of theatre, whose dimensions and possibilities defy estimation". In September 1924, shortly before the Bauhaus' dissolution, the coloured light plays were performed in Vienna at the Konzerthaus, during the city's festival of Music and Theatre.

After the Second World war, a revival of the coloured light plays was initiated by Hans Maria Wingler, director of the Bauhaus Archive in Darmstadt. During the Sixties he invited Hirschfeld-Mack to reconstruct his light playing apparatus, together with some of the light plays from the Twenties and during Hirschfeld-Mack's last trip to Europe a performance was held. This reconstructed light playing apparatus was however lost, when the Bauhaus Archive subsequently moved to Berlin during the Seventies.

The Reconstruction as Film

The reconstruction of the light play scores, their implementation and arrangement and the production of the coloured light plays on DVD video are all part of a project by Corinne Schweizer and Peter Böhm that is intended to have a use and relevance independant of the exhibitions about Hirschfeld-Mack and associated screenings with which it thus far been associated.

In producing the video, the challenge consisted in maintaining the immediate sensual quality of projected light in the reproduction. From beginning to end, the DVD was therefore produced digitally so as to retain the plasticity of sound and image. This advanced production technique is thus in agreement with Hirschfeld-Mack's innovative ideas. So that the play of form and colour might be experienced as authentically as possible, digital post-production was kept to the barest minimum.

In the programming of the DVD, particular attention was paid to the practicalities of continual use, important in museum situations. All pieces can therefore be selected to be played continually as a loop by themselves, or as a loop one after the other. Likewise, once a language has been selected, the short documentation can also be played as an endless loop.

The DVD-video *Farbenlichtspiele by Ludwig Hirschfeld-Mack* was shown as part of the exhibition *Ludwig Hirschfeld-Mack, Bauhaus and Visionary*, held from March 2000 until April 2001 at the following museums: MUSEION -Museum for Modern Art Bozen, The Jewish Museum of the City of Vienna, The Jewish Museum of the City of Frankfurt on Main and from May 2001 until July 2001 at the Bauhaus Archive in Berlin during the exhibition "Coloured Light Plays" together with a new presentation of Moholy-Nagy's Light-Space-Modulators.

Further reading:
"Ludwig Hirschfeld-Mach, Bauhaust and Visionary", Editored by Andreas Hapkemeyer and Peter Stansy, Catalogue to the like-named exhibition held at MUSEION -Museum of Modern Art Bozen, The Jewish Museum of the City of Vienna and the Jewish Museum of the City of Frankfurt on Main, Hatje Cantz Verlag 2000.

Corinne Schweizer
Stage designer and media artist
born in Stuttgart 1963, lives and works in Vienna.
Studies in Media Design at the University of Applied Arts in Vienna, graduating in 1992.
Numerous stage and film sets, preferably involving use of audio-visual media; conception and realisation of interactive installations, films and videos. Intermediary cooperation with artists from the disciplines of music, literature and drama. Planning and production of interdisciplinary projects, archives and data banks for the internet. 2001 Guest Professor for video in the field of painting at the University of Art in Linz/A.

Peter Böhm
Composer, sound director and programmer
born in Prague 1961, lives and works in Vienna.
Studies: violin at the Conservatories in Prague and Vienna; jazz theory and arrangement and electro-acoustic and experimental music at the College for Music and Dramatic Arts in Vienna.
Computer music and performances, numerous electro-acoustic pieces, compositions for instruments and live electronic music. Musik for art videos, film, performances and installations. Conception and technical realisation of interactive installations. Preparation and realisation of numerous live-electronic pieces in the realm of new music for leading contemporary composers. Teaches sound design at the University of Applied Arts in Vienna/A. Acoustic conception and advisory service for acoustics in buildings and construction.

Corinne Schweizer and Peter Böhm run a joint studio for audio and video, specialising in the preparation and realisation of artistic and interdisciplinary projects.