

# **Project description: The restoration of *Blikk* (2018 - 2020 version)**

## **1. Introduction**

Blikk is a room-size collaborative "multimedia" artwork that consists of kinetic sculptures, lights, laser, and audio. The work was commissioned by and first performed at Henie-Onstad Kunstsenter (HOK) in 1970. Irma Salo Jæger (kinetic sculpture), Jan Erik Vold (texts, voice), and Sigurd Berge (music) were the main artistic collaborators, and three engineers from Forsvarets Forskningsinstitutt - Halvor Heier, Birger Komedal, and Harald Schiøtz - were brought in to realize the artistic visions with their technical expertise (light and audio synchronization programming and development of the control system; laser drawing).

Due to its technical complexities and scale, combined with the lack of documentation, Blikk has been presented to the public only as a partial or modified version since 1970; for example, both "Nordisk 60-tall" exhibition at HOK in 1990 and "Kunst 2" exhibition at MFS in 2005 featured a single cube, with modified or absent original light and audio settings.

Nasjonalmuseet's project of restoring Blikk in full scale, as a part of the permanent exhibition at the new museum building of Nasjonalmuseet in 2020, corresponds with the 50th anniversary of the commission and unveiling of this seminal work at HOK. The project aims to recreate Blikk in full scale, with all the elements comprising the 1970 original version, based on (the research of) the records and resources currently available.

As the surviving material and technical components and documentation from the original production are scarce, the recreation project has become in fact a very extensive research and restoration project, in which the exhibition technicians, conservators, curators and external experts collaborate in filling the gaps among the remaining records and knowledge of the work and the elusive working of the original. Therefore, a recognition and need for documenting the components and process of the project as well as some guiding operation principles have emerged as an anchoring point for coordinating dissonant voices and views underway.

## **2. Work description (translated from Norwegian text accompanying the 2005 version)**

*Blikk* ("Glance") was created on the commission from HOK and was presented in Studiosalen at HOK in 1970. For the exhibition *Nordisk 60-tal* ("Nordic 1960s"), organized by Nordisk Kunstsenter in 1990, a simplified version of *Blikk* was presented. The 2005 version is a mutation of the 1990 version.

Blikk was a multimedia work investigating how visual and auditory perception intertwine and influence each other. A computer was designed to run and control the whole program, which was based on Jan Erik Vold's poem *Blikket* ("The Glance"). The poem consists of 320 lines where the five words "the eye you don't catch me" are permuted in all the combinations possible with five given elements.

*Blikket* was one of 10 texts by Jan Erik Vold. Sigurd Berge merged these texts into his electronic music, a total of 17 compositions.

There were two types of objects in the room: mirrors and cubes. Inside a cube were three translucent blades, each printed with circles in elemental colors - yellow, magenta, and cyan, of which overlappings produce other spectral colors. The cubes were rotating slowly around their super-diagonal axis and reflected on the mirrors. Lights from the floor went through blades and were reflected in the mirrors, which in turn cast colorful shadows on the surrounding walls.

The lights were turned on and off in the order that the five words are repositioned in the program. The whole program lasted 83 minutes, and the first 40 minutes followed the order of the word combinations. Then, for three minutes, a laser beam drew two of the compositions on the wall. After that, the remaining lighting sequence was mirrored in the opposite order. In the auditory section, the sounds and words could move, fill, share, gather, or leave the room through many speakers in the room.

### **3. Participants / collaborators**

This section lists the participants and their contributions in the recreation project of Blikk during 2018 - 2020 period.

#### Irma Salo Jæger (visual artist)

- Provided the 4 original aluminum cubes
- Provided her original sketches for the colored circles in the cubes
- Provided working notes for the audio and light control
- Advice on the overall expression as well as the undocumented details of the work during the recreation period (2018-2020)

#### Sigurd Berge (composer, deceased) / TONO (copyright)

- Composition (original)
- Provided the original audio master reels (8 individual tracks + 2 edited for the 1970 exhibition)

#### Jan Erik Vold (poet)

- Text (original)
- Voice (original)

#### Halvor Heier (engineer)

- Provided consultation on the original audio and light control in 1970

#### Nasjonalmuseet (exhibition technicians, conservators, curators, project leaders)

- Project economy and management
- Research and documentation
- Purchase, commission, and production of all components other than the original parts specified in Section 4.1.1.
- Daily operation and maintenance of the exhibition

## NOTAM

- Digitization of the master audio reels ( 8 x stereo audio reels provided by Åmund Krokan Berge and 2 x mono audio reels provided by Jæger)
- Noise reduction and mastering of the digitized audio (Cato Langnes)
- Research, interpretation, and new audio distribution (Jøran Rudi)
- Programming of light control (Thom Johansen)

## Nerem BSS

- Silkscreen on Plexiglas

## Pleksiform

- Manufacture of Plexiglas

## Aage E. Bergman

- Consultation on laser technology

## **4. Components and scope of Blikk (2018-2020 version)**

To clarify and document the various elements of Blikk and their origins and processing history, this section will:

- Define material and immaterial elements of the work
- Define alterable and unalterable elements of the work
- Define replaceable and non-replaceable element of the work
- Define the extent of alteration and interpretation

**4.1. Material components** of the work not only mean the physical objects but also technological systems or units that are used to produce, process, and distribute electronic audiovisual signals.

The components in this category are:

- Jæger's 5 original cubes
- 5 electric fans
- "Stage": pentagon base, mirrors, hanging system
- Lamps
- Speakers
- Control console for light and sound
- Laser unit
- Original audio 1/4" reels

#### 4.1.1 Material components from the 1970, 1990, and 2005 versions :

- 5 sets x aluminum frames for the cubes and inner blades: 1 owned by Nasjonalmuseet + 4 provided by Jæger (provenance: originals from 1970)
- 1 set x Plexiglas plates with silk-screened circles (owned by Nasjonalmuseet): not to be used due to their fragile state and consideration on matching colors of all the cubes
- 1 set x aluminum frame + 3 x mirrors introduced and used in 1990 version (owned by Nasjonalmuseet; only mirrors used in 2005): not used

#### 4.1.2 New material components for the 2018-2020 version, based on div. references and documentation of the original version:

- 10 x mirrors (200 x 200 cm): purchased, based on the photo documentation
- 1 x pentagon-shaped base: NMK produced, dimensions and shape based on the photo documentation and references
- 5 sets x hanging systems for the cubes: NMK produced, modified (no record on the material, technique, and dimensions) based on the photo documentation
- 5 x electric fans: purchased, based on the photo documentation and div. references
- 10 x lamps ( 5 x ceiling + 5 x floor): purchased, modified (LED lamps <- original: halogen lamps)
- 10 x speakers: purchased, modified (technology has changed; no record on maker and model)
- Laser unit: purchased, modified (intensity much reduced due to regulation; no record on the material, technique, and dimensions)
- Wall: NMK produced, modified (no record on the material, technique, and dimensions) based on the photo documentation
- 1 x pentagon-shaped aluminum frame for suspending 5 cubes from the ceiling: bespoke parts, modified/invented
- Control console for light and sound: purchased, modified (technology has changed; source of audio has changed)
- Audio source: digitized from the analog original

**4.2. Immaterial components** of the work mean perceptible elements such as audio, light, and motion as well as an aesthetic expression that the whole of the work generates during operation. They also include the artistic intention(s) or internal score behind specific expression or the overarching theme.

- Kinetic element: speed and tempo of the cube rotation
- Audio intensity and distribution; sound quality; tempo
- Stage light color, intensity, and tempo (on/off)
- Drawing movement of laser
- Duration
- Ambiance

**4.3.** Although defining what can or cannot be altered has been primarily dictated and limited by what is available as material and archival source, some **principles regarding the scope of modification, alternation, and interpretation for the 2020 version** can be drawn as follows:

- The 2020 version aims to recreate Blikk in full scale, with all the elements comprising the 1970 original version, based on the critical research of the records and resources currently available.
- Therefore, all identification, selection, and presentation of the material components are based on a careful examination of the existing visual and textual references and of the original production as well as the interviews with the original collaborators.
- However, as remaining first-hand records are often fragmentary, raw, and rarely contain any actual technical information on the characteristics or workings of the immaterial components - such as wiring, distribution and control of light and sound, finding technical solutions for the desired expression becomes more or less up to the judgment of the staff or experts who are in charge of the task.
- When interpretations are required for the understanding of cryptic or fragmentary records or finding technical solutions for specific expressions, the first guiding principle is to consult the original collaborators.

#### 4.3.1. Reworked or altered components with interpretation:

- **Audio:** The original 1/4" master audio reels were digitized, noise-reduced and re-mastered by NOTAM in 2018-2019. This audio quality control process is inherently subjective.
- **Light control score:** The score included in the original HOK exhibition catalog has been discounted by Halvor Heier as not the actual score that they ended up using in 1970. Also, it doesn't seem to correspond with the signal recorded in audio reels.
- **Audio distribution and "behavior":** Since all the audio tracks in the remaining tapes are not separate, to figure out how the separation and distributions of the tracks across 10 - 20 speakers actually occur is not an easy task. This also opens up a pretty wide door for "interpretation" of the existing audio tracks as well as the text descriptions of the audio behaviors or intentions of the composer.
- **Laser drawing:** No records available on the intensity of the laser source, the distance to the projection wall, the dimensions of the laser drawing on the wall, and movement in the original version in 1970. The changes in regulations on the laser also contribute to the difference between the original and 2020 version.
- **Tempo:** No records available on the rotation speed of the cubes, the on and off sequences of lighting, and drawing movement of the laser

#### 4.3.2. Components decided by Nasjonalmuseet:

- **Room dimensions**
- **Accessories:** benches for the audience; light curtain, and entrance design
- **Public access**
- **Display/performance schedule**