2024

Innovation and Best Practice for International Standards on Sculpture Study and Management

CASE STUDY NO. 3

DENNIS OPPENHEIM, AGING, 1974

ARIANNE VANRELL VELLOSILLO AND MAYTE ORTEGA GALLEGO
MNCARS - MUSEO NACIONAL CENTRO DE ARTE REINA SOFÍA

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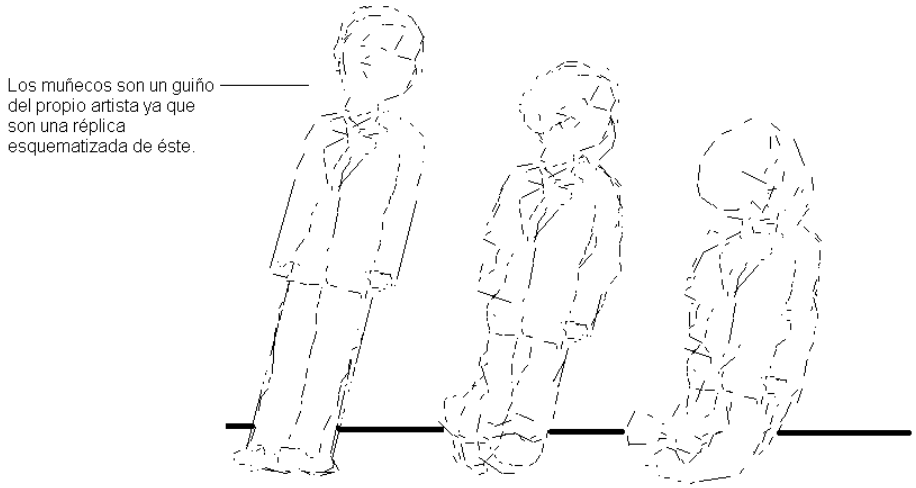
STUDY CASE NO. 3

1. Description of the artwork
2. Challenge
3. Approach
4. Application of BISS Standards
5. Conclusion
6. Literature (optional)

1. Description of the artwork

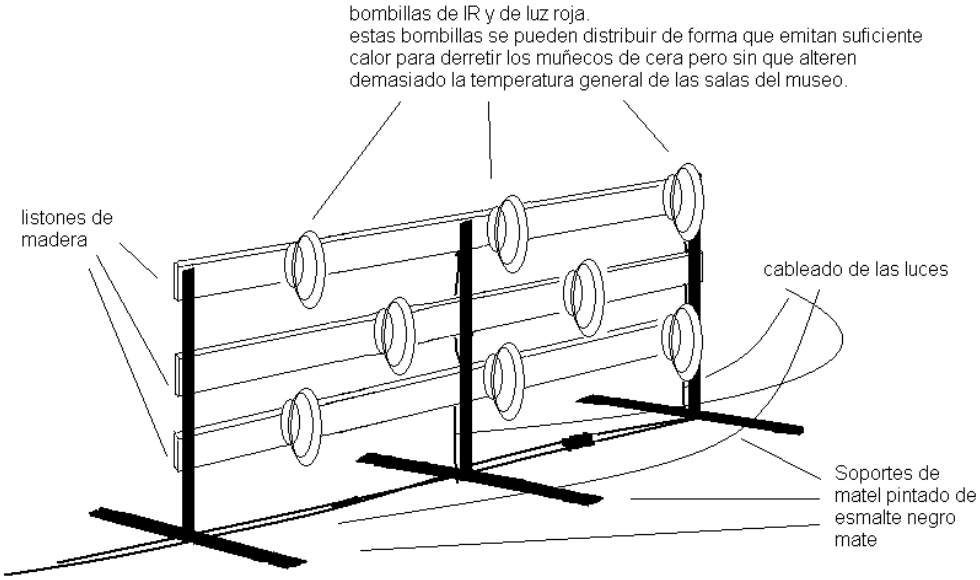
ORIGINAL TITTLE	
Artist	Dennis Oppenheim
Date	1974
Material / Technique	Assemblage of variable structural elements (three metal rods and three wooden slats, electrical cable, ceramic bulb holders, and 29 IR (infrared) or red light bulbs). Wax figures weighing 2.5 kg each the number of which may vary between 18 and 12. These wax figures are fashioned from different ratios of yellow wax, white wax and solid paraffin and have the form of the artist Dennis Oppenheim. According to the artist, these wax figures are intended to melt from the heat of the light bulbs – thereby simulating aging – and will need to be replaced periodically during the period of their exposure.
Dimensions	Maximum dimensions: 90 (height) x 426 x 180 cm
Edition / Numbering	
Inscriptions	
Owner	Museo Nacional Centro de Arte Reina Sofía
Location	Repositories of the Museo Nacional Centro de Arte Reina Sofía. Madrid, Spain.

Ejemplo de la colocación de los muñecos y de la progresión de su fundición por calor.
La cantidad de muñecos utilizados es proporcional y depende del número de barandillas utilizadas (2 o 3).
En el montaje realizado con Oppenheim en el MNCARS se colocaron 3 barandillas y 18 muñecos.



Los personajes, realizados con diferentes porporciones de cera blanca, cera amarilla y parafina, se colocan apoyados a la pared a intervalos regulares, a todo lo largo de la distancia ocupada por las barandillas

Estos se derriten por efecto del calor desprendido por las bombillas de IR.
Se deben sustituir cuando se han derretido a un punto en el que el personaje está doblado y no se observan los detalles de su ropa, etc.
Cada día se deben colocar en orden decreciente en función del nivel de fundición de los muñecos para crear un efecto de progresión.



Vista por delante de una de las tres barandillas con la ubicación de las lámparas de IR.
Las tres barandillas son iguales y pueden colocarse dos o tres en función del espacio disponible en la exposición, según lo indicado por el artista durante el montaje de su obra en 2005 en el MNCARS.

Detalle de una de las barandillas de la obra "Aging", 1974, del artista americano Dennis Oppenheim.

2. Challenge

This is a complex work on account of the variety of elements necessary for the staging of the work and the sensations that the heat and intensity of the light produce in the spectators.

During the exhibition, the characters melt and are destroyed by the effect of heat - to represent the passage of time and aging - so they must be replaced periodically.

For the assembly of the artwork it is necessary to have moulds and a space dedicated to the production of these wax characters, as well as to periodically replace the silicone moulds that are required.

It is a work of art made with everyday elements and of low quality and precarious execution, such as the railings and the electrical system.

The wax characters that melt in the heat also allude to the lost-wax technique, used in the making of sculptures in bronze and other metals, but the artist chose to use a more accessible and economical material.

The artwork consists of several elements:

STRUCTURE

1. Three fences or railings, with unpainted iron structure and three pine wood slats on each fence, placed longitudinally and parallel to the ground.

The artist indicated in an interview that he was part of the European project Inside Installations that the work could be exhibited with two or three railings, depending on the exhibition space. The number of wax figures should also be variable and proportional to the total length of the railings.

The railings serve as a support for twenty-nine ceramic sockets in which twenty-nine infrared and red light bulbs are inserted.

The dimensions of the railings differ, with two of them being the same – with eleven sockets each – and a smaller rail with seven sockets.

The set of railings with lamps should be placed in a straight line, forming an angle of approx. 30º with the wall on which the wax figures will be placed.

The light and heat emitted by the bulbs must influence a variable number of wax figures – between twelve and eighteen – who are placed leaning against the wall.

ELECTRICAL SYSTEM

1. The electrical current supplied by a 7 mm diameter cylindrical black cable with three earthed plugs.

The bulb holders are all of white ceramic with the wire connections visible on both sides.

The IR bulbs and incandescent red light bulbs that entered the museum as part of the work are of the Bulbrite brand.

The infrared bulbs are 250 W, 120-130 volts, and the red incandescent bulbs are 100 W, 120 volts.

During the assembly of this work for the *Inside Installations* Case Study, 240 volt light bulbs were replaced to adapt to the standard electrical current in Spain. These bulbs have the same aesthetic characteristics and light intensity as the original bulbs.

The wax figures/characters:

These are a small-scale allegory of their author, in that they are small models of Dennis Oppenheim himself.

Each character weighs approximately 2.5 kg. They are exhibited propped against the wall and are made with variable proportions of yellow wax, white wax and solid paraffin to favour melting in different ways during their exposure to heat.

CONSERVATION

The structural and operational elements of the railings present small deformations and currently require major revision of the metal welds of the railing legs.

A recent inspection detected that three bulb holders were not working; all three have been repaired.

Current electrical regulations obliged us to replace the cable with a fireproof cable. This cable looks similar but is a little thicker than the original cable. We consider that this will not alter the spectators' perception since it is not a significant or prominent element of the work as a whole.

For safety reasons, the presence of a qualified electrician is required during the assembly of the electrical installation. This technician must calculate the voltage of the work and provide and install an adapted plug. The work in operation has 29 IR and red light bulbs.

PRODUCTION AND EXHIBITION

Environmental problems during the exhibition of the work.

When the piece is exhibited near other works of art in a museum setting, the heat emanating from the IR bulbs considerably alters the environmental conditions of the exhibition rooms.

To avoid altering the existing environmental conditions inside the museum and to make the exhibition of this work compatible with other works in the collection, a consensus was reached with the artist to replace a high percentage of IR bulbs with red light bulbs. This would also reduce the frequency with which the wax figures need to be replaced.

To maintain the sensation of heat, IR bulbs were placed on top of the railings, closer to the spectators. This resulted in a more gradual rate of substitution and the creation of less dramatic and varied forms of the melted figures.

Although Oppenheim did not define the exact proportions of wax or paraffin in each figure, he did indicate the need to vary the proportions of these materials in each piece, since each material has a different melting point and will respond differently to the heat source, resulting in a greater variety of forms.

3. Approach

In this work Dennis Oppenheim sought to express the concept of aging through the changes produced by the melting of the wax figures that are part of the work.

To do this, the artist designed three metal and wood railings on which he installed 29 ceramic bulb holders, inserting a bulb in each, combining IR, bulbs, which emit more heat, and incandescent red bulbs, which give out less heat.

The railings are placed in a straight line at an angle of 30° with the wall on which the wax figures are placed.

The figures created by Oppenheim are scaled-down figures of himself.

As the figures melt they take on very different shapes depending on their proximity to the heat source.

When the figures have been reduced to unrecognisable forms they are replaced by new pieces and the material is melted and poured into a mould produced from the positive of one of the figures.

The figures ae to be arranged each morning in order, from least altered to most altered with respect to the initial form. The curator or restorer responsible for the exhibition will decide when to remove and replace or a particular figure.

4. Application of BISS Standards

- Partial reproduction authorised for exhibition purposes..
- Replacement of technological elements in order to comply with local safety regulations.

5. Authorised Work (partially)

14. Authorised Interpreted Work (partially)

16. Authorised Updated Work (partially)

5. Conclusion

This installation requires significant support in the production of wax elements throughout its exhibition.

During the first exhibition of this installation in the Inside Installations Project, an average of two to three wax figures per day were produced and replaced.

This involved recasting these wax figures, filtering wax and removing dust and dirt, as well as melting new wax pieces into moulds created for this purpose.

These moulds were made from a plaster and silicone mould provided by the artist – which was already in a very advanced degradation process due to the natural aging of the silicone. A positive plaster was also made for the production of future moulds.

The work has not been exhibited for about 15 years.

In December 2024, the artwork was mounted as a part of a background to an interview within of our museum web programming.

We have calculated that for each new exhibition we will need plaster and silicone to create a new mould – since the previous moulds have aged naturally and are in no condition able to be used properly.

We have 12 wax characters in storage ready for exhibition but we will have to produce at least 10 new figures to exhibit the piece on the day of filming the interview.

It will therefore be necessary to melt, filter and recast all the pieces in order to have the work ready for exhibition: this being so, so the process of pre- and post- production will extend continue for at least two weeks after the end of its exhibition.

6. Literature

- *Oppenheim, Dennis, Germano Celant, and Mark Eaton. Dennis Oppenheim. Charta, 1997.*
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- *Grande, John K. "DENNIS OPPENHEIM—ECSTASY… BODY, LAND, ART…." CSPA Quarterly 20 (2018): 59-69.*
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