

The Wider the Flatter

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contributor(s): Sanneke Stigter, Conservator Modern Art Kröller
Müller Museum

case / special study: Conservation Treatment Report

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Condition Treatment Report

Condition

All ten chromogenic photographs exhibit extreme surface dirt and soiling. Dust and other grime are embedded overall in the emulsion layer. Along the upper half of each photograph the grime and dust is heaviest and causes the image appear dull and grey. The emulsion is brittle and locally appears powdery and unstable.

Fingerprints are visible locally throughout all 10 chromogenic photographs. In these areas the emulsion is etched and some discoloration due to oils and other impurities is visible in the form of fingerprints. Fingerprints in obscure areas in the images may originate from the re-making of the artwork in 1976.

Scratches in the emulsion are locally visible throughout and in particular in the first 3 images. The front image exhibits extreme abrasion and scratching. This is probably due to the mechanical action of clothing from museum visitors brushing against the image and due to handling of the image.

In large areas of the first (front) image only the white of the polyethylene and titanium dioxide layer is visible. These white areas exhibit deterioration of the polyethylene and titanium dioxide layer in the form of cracking. In some areas paper fibres from the RC support are visible.

All ten images show extreme colour shifts due to the disproportional fading of one or more of the dyes that make up the chromogenic print. Due to the appearance of the colorcast, it can be deducted that large amounts of the cyan and yellow dyes have faded leaving disproportional amounts of the more stable magenta dye behind.

The aluminium frame onto which the images are mounted exhibits surface grime and adhesive residue on the top and lower edges and on the verso of each of the aluminium strips. The adhesive residue probably originates from the last re-mounting of images to the aluminium structure in 1976.

Local scratches are visible throughout the visible areas of the aluminium structure.

Conservation Issue(s)

Due to the colour shifts, the images on the aluminium frame no longer coincide with the colour of the wall on which the work is meant to be mounted.

As can be seen from Stigter's text,

What can be concluded from the artist's interview is that the specific wall that 'The wider the flatter' is made for is irrelevant, but that it is the visual relation of the wall and the object that is essential to the artwork. This means that 'The wider the flatter' can be characterized as 'site-related' rather than 'site-specific' because to the artist the work could be installed anywhere, as long as the photographs on the aluminium structure correspond to its surroundings. This means that the functionality of the artwork will not be damaged when the architectural setting will change as long as the photographs will be changed correspondingly."

the functionality of the work is directly related to the correspondence of the images to the wall. The colours of the images must be restored to accurately correspond to the wall to which it will be installed. However, due to the chemistry and the dyes that make up the colour emulsion, it is impossible to restore the colour of the images using any known conservation treatment.

The conservation problem that is created is one of replacement. By replacing or exchanging original images with reproduction images the work can once again be exhibited. The reproduction images must be printed in such a way as to represent the colour of the wall onto which the object will be mounted, restoring the functionality of the conceptual artwork. Without the correspondence of image and wall, the artwork has lost its function.

Treatment Options

One option can be not to treat the object and appreciate that a work of art has a limited lifespan. At the end of this limited span it may be necessary to accept total loss of the artwork.

A second option can be to replace the discoloured photographs with reproductions. The quality of the image and the characteristics of the photographs must then be reproduced in a way that does not compromise the ideas of the artist, or the interpretation of the artwork during the original time of production, which in this case was 1972.

Discussion

In conceptual art, the idea takes precedence over traditional aesthetic and material concerns. One of the first definitions of conceptual art was written by Sol LeWitt and appears in "Paragraphs on Conceptual Art" which was published in *Artforum* in June 1967. LeWitt writes, "In conceptual art the idea or concept is the most important aspect of the work. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art. This is very different from traditional art where for example, the corporal painting is the artwork."

The fact that in the history of "The Wider, the Flatter", the chromogenic photographs have twice been replaced with new images (under supervision and with consent of owner and maker) supports this viewpoint.

Considering that the work in question is conceptual art. And taking into account that through communication with the artist (artist interview and other communication) and historical research performed by the museum the idea of the artist is essential to the physical relation between object and installation area, it seems ethically viable to choose the second treatment option, make reproduction photographs and substitute these with the discoloured images that are presently adhered to the work.

Treatment Proposal

1. Photographs before, during and after treatment shall be made using a Nikon D70 SLR digital camera and two lenses (Nikor 50-70 mm lens and a macro).
2. Reproduction images shall be made under normal light conditions, using a technical camera and professional development and printing on a chromogenic paper that has similar characteristics of the original images.
3. The front image shall be removed from the aluminium support using solvent and heat application as needed. The image is physically not stable enough to remain on the aluminium support and function as underlying support for a reproduction image.
4. The last image shall be removed from the aluminium support using solvent and heat application as needed so that the signature and original dates of the artwork can be archived together with the conservation treatment report.
5. The remaining 8 images will remain on the aluminium to provide the conservation history of the object should the written documentation and removed images become misplaced.

6. The soil and grime on the 8 remaining images will be cleaned using dry and aqueous methods as necessary.
7. The emulsion on the 8 remaining images will be consolidated with a layer of photographic gelatine. The layer will provide stability to the photographic emulsion by consolidating it and isolate the photographic emulsion from the adhesive that will be used to adhere the reproduction images.
8. The reproduction images will be cut to the proper format and be adhered to the aluminium support and the 8 original photographs.

Testing

Testing was performed on the 8 remaining images to establish the stability of the emulsion and the most appropriate method for cleaning the emulsion of grime and soil. Testing showed that a solution of 75% pure ethanol in deionised water was the most effective and stable method for cleaning the surface of the images. Dry cleaning the images was not effective because the soil and grime was adhered to and embedded in the emulsion.

Testing was performed to establish a solution of photographic gelatine that would serve as an appropriate isolation layer. Testing results showed that a 1.5% solution of photographic gelatine was sufficient to consolidate the emulsion. Testing showed that a 5% solution of photographic gelatine provided a good isolation layer.

Testing was performed to choose the appropriate adhesive and adhesion method. Literature and practical research show that Lascaux Acrykleber is an adhesive that is used in mounting resin coated (RC) photographs. It is reversible with heat and in ethanol and the 496 HV variant is stable enough at room temperature to provide a good adhesion. Lascaux Acrykleber is an adhesive used in conservation and has a good chemical stability. The data sheets show that it can be used on both plastic and metal supports. Testing using Lascaux Acrykleber 496 HV and leftover strips of the reproduction images on aluminium strips showed that a good adhesion can be attained.

Testing performed to find the most suitable method for removing the original images from the aluminium support showed that heat in combination with acetone or ethyl acetone worked sufficiently but mechanical manipulation with a spatula was necessary and the process was very slow. Later testing showed that a vapour chamber made with ethyl acetate for 18 – 20 hours swelled the original adhesive sufficiently to remove the photograph image with almost no physical manipulation using a spatula.

Testing was performed to find a solvent that would cause the adhesive to swell but not cause ink migration of the signature on the last photograph. Testing showed that ethyl acetate vapour does not cause the ink from Ger van Elk's signature to migrate or fade.

Treatment Report

Conservation treatment was performed in the Inside Installations exhibition gallery of the Kröller-Müller Museum. Seeing that the space was not a photograph conservation lab, but an exhibition room with museum visitors who were permitted to watch ongoing conservation treatment and ask questions concerning the treatment, treatment methods were sometimes limited to enable a safe environment for museum guests.

1. Photograph documentation was made before, during and after treatment using a Nikon D70 SLR digital camera and two lenses (Nikor 50-70 mm lens and a macro).
2. Reproduction images were made under normal light conditions, using a Cambo Wide technical camera and a Schneider Super Angulon 65 mm F 5.6 lens at F-stop 22, and the shutter speed set to halve a second. The images were photographed using Kodak Portra 100 ASA daylight film and mounting a Kodak colour scale and 18% grey card to the wall that was being photographed.
3. The film was developed (C41 processing) by professional lab S-Colour, Singel in Amsterdam. Five months after processing the lab, due to lack of analogue processing, closed.
4. The images were printed onto Endura Satin RC paper from Kodak, the only available satin chromogenic paper in the Netherlands by De Verbeelding in Purmerend (near Amsterdam). The Verbeelding is the only professional lab remaining in the Netherlands that can print 3 meter long analogue images.
5. The photographs were printed using a Durst colour enlarger and Schneider lens 80 mm, 5.6 lens using R4 machine processing.
6. The front image was removed from the aluminium support using solvent and heat application. A vapour chamber made using cotton and ethyl acetate was made and after 4 hours the chamber was dismantled. The vapour chamber treatment was insufficient and the image was removed mechanically using a metal spatula and introducing ethyl acetate directly between the photograph and adhesive using a paintbrush. The treatment for removing the image was very slow (10 hours) and further testing was performed to find a better method.
7. The last image was removed from the aluminium support using a vapour chamber with cotton moistened with ethyl acetate and closed using aluminium barrier foil. The chamber was closed for 18 hours. After this time the image could easily be removed from the aluminium support.
8. Adhesive residue on the front and last aluminium support were removed / reduced using cotton pads moistened with ethyl acetate. Sometimes direct contact with ethyl acetate was needed before the adhesive was soft enough to be reduced.

9. The adhesive-free aluminium was cleaned using cotton pads wetted with acetone to remove all adhesive and oils and grime. Other areas of the aluminium frame were degreased and cleaned in the same fashion or using cotton swabs wetted with acetone in small or hard to reach areas.
10. Soil and grime on the 8 remaining images were reduced using a 75% solution of 99.5% pure ethanol mixed with deionised water. Cotton swabs and cotton pads were wetted with the mixture and used to gently clean the surface using a circular motion.
11. The emulsion on the 8 remaining images was consolidated using a 1.5% solution of photographic gelatine in deionised water. After drying an isolation layer was applied using a 5% solution of photographic gelatine in deionised water. The solution was brush applied using a fan-shaped paintbrush with sable hair. The form of the brush provided a relatively even application, better than that using other types of brushes.
12. The reproduction images were cut to an 8 x 300 cm format using a polymethylmethacrylate (pmma) ruler of the same format which was professionally made for this purpose. The photographs were rolled out onto a 3 meter Gatorboard board. Two needles were pushed into the lower edge of the to-be-cut-out image area and the ruler was positioned against these needles. In this way the ruler formed the outside edges of the image. A scalpel was used to cut out the areas of the image.
13. The underside of the aluminium frame was supported with bits of blotting paper and when needed Gatorboard to provide an even positioning surface for the reproduction images. Without an even surface the images would not be adhered evenly to the aluminium surface.
14. The reproduction photographs were positioned onto the aluminium frame and the excess length was cut off using a scalpel.
15. Lascaux Acrykleber 498 HV was used to adhere the new images to the aluminium artwork. The images were laid face-down onto remnant strips of the unused photographs and adhesive was applied to the images using a soft paint roller used to apply oil-based house paint to wooden surfaces.
16. The images were positioned onto the aluminium frame so that the corner of the photographed wall was in the centre of the each of the supports. The image was pushed down so that it made contact with the surface created by the blotter and Gatorboard. Wooden planks cut to the exact proportions as the aluminium frame supports and layered with blotting paper and thin polyester webbing (Holytex) were pressed onto each adhered photograph using clamps made for this purpose. The images were allowed to dry for 4 days before the clamps and wooden planks were dislodged. Excess image material (approximately 2 cm) was cut off the top using a scalpel to create an even edge with the aluminium support.

17. Upon the removal of the clamps, the front-most image showed cockling due to poor local adhesion especially in the areas where rivets are hammered into the aluminium frame. The adhesion problems were located at the copper aluminium interface. The rivets are made from copper and attach an aluminium T-profile to the verso of the front-most frame for reinforcement of this area.

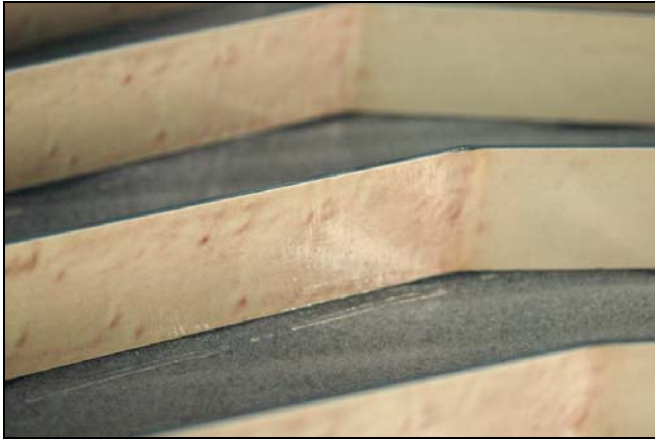
The decision was made together with Sanneke Stigter (Conservator of Modern Art at the Kröller Müller Museum) to remove the front photograph completely and adhere a new photograph using an interlayer of blotting paper adhered to the aluminium to ensure better adhesion of the photograph.

18. The photograph was removed mechanically with the aid of a metal scalpel. Lascaux Acrylkleber 498 HV adhesive was removed using a cotton pad moistened with ethanol.

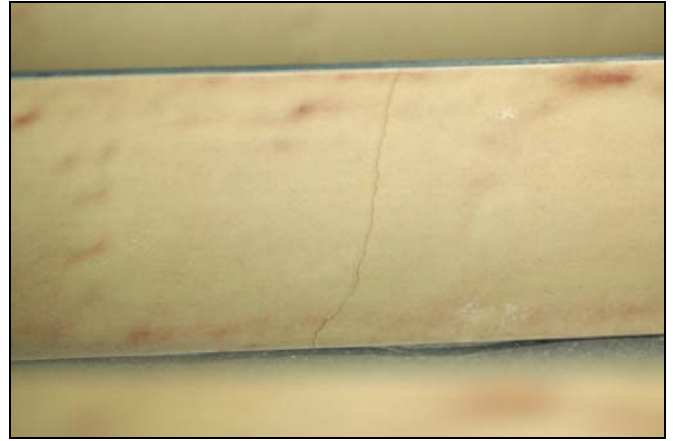
Upon removal of the cockled photograph, blue staining was visible in areas of the adhesive where the adhesive covered copper rivets in the aluminium support. In these areas the adhesive most likely reacted with copper to form a copper salt. Due to this reaction, it was decided to change the adhesive. The other 9 aluminium strips did not have copper rivets and since the Lascaux Acrylkleber 498 HV did not show adverse reactions with the aluminium, it was felt that the adhesive was a safe choice for the other strips.

19. The aluminium frame was degreased using acetone to reduce any adhesive remnants or oils left behind on the aluminium.
20. Strips of blotting paper were cut the length of the aluminium strip and to 8 cm in height. The blotting paper was adhered to the aluminium strip using PVA and allowed to dry using the same clamps and lined wooden planks as above for approximately 3 hours.
21. A coating of PVA was applied to the verso of a new photograph and adhered onto the blotting paper on the aluminium strip using the technique described above. The photograph was allowed to dry for a week using the same technique as described above. Excess image and blotter material (approximately 2 cm) was cut off the top using a scalpel to create an even edge with the aluminium support.

Fotodocumentation



Before Treatment: image illustrates abrasion and colour shift of the old photographs



Before Treatment: image illustrates a tear in the old photographs and damaged areas in the emulsion due to fingerprints



Before Treatment: image shows damage due to fingerprints



Before Treatment: image illustrates damage due to fingerprints.



Before Treatment: a tear is visible in the second front-most photograph



During Treatment: the first and last photographs are removed. Three copper rivets are visible in the front aluminium strip.



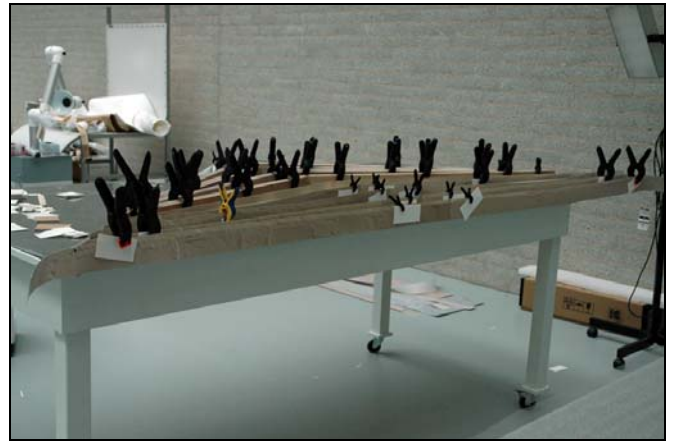
During Treatment: the exact image portion is cut out of the larger reproduction photograph in preparation for mounting.



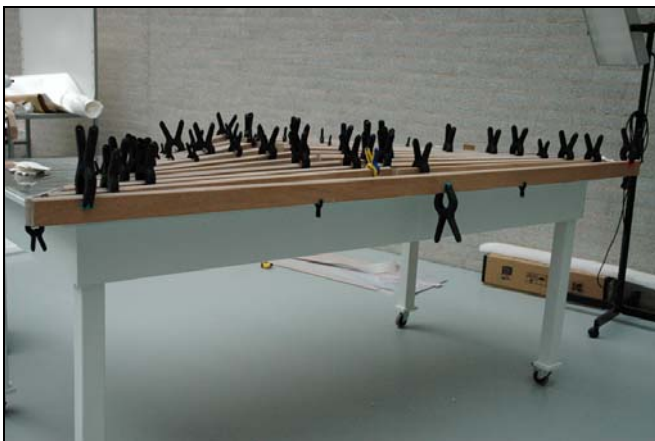
During Treatment: the artist Ger van Elk evaluating the colour of the new reproduction photograph



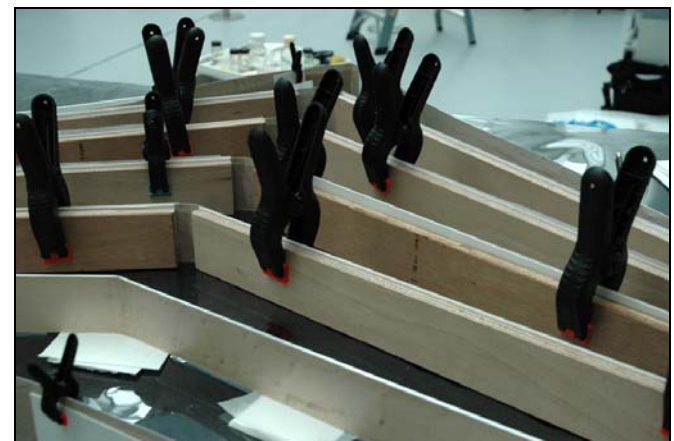
During Treatment: the reproduction photograph is coated using Lascaux Acrylkleber 498 HV



During Treatment: the images are positioned on the aluminium frame to determine their exact position on the frame.



During Treatment: the drying of the photographs using Holytex, blotter, wooden planks and clamps.



During Treatment: detail illustrating the positioning of the planks and clamps.



During Treatment: the front most photograph is removed



During Treatment: Detail showing the blue corrosio at the copper rivet interface



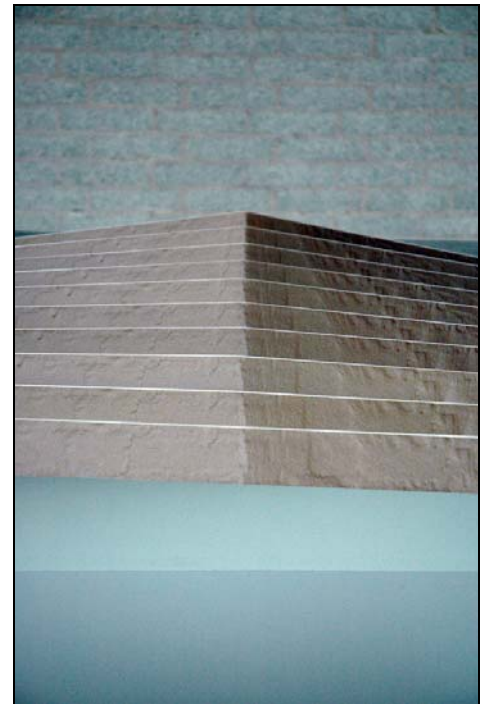
During Treatment: after cleaning and degreasing the aluminium frame



During Treatment: the drying of the front-most photograph



After Treatment



After Treatment: detail

List of materials used and suppliers

Emergo BV (Part of Fischer Scientific International)

Postbus 4
1120 AA Landsmeer
Zuideinde 70
The Netherlands
Tel +31 20 4877000
Fax +31 20 4877044
Product: Deionised water, Ethyl acetate and acetone

Minigrip Nederland

Kamerlingh Onneslaan 6
8218 MA Leylystad
The Netherlands
Telefoon: +31 (0)320-277900
Fax: +31 (0)320-277940
Product: Aluminium Barrier Foil

Albert Hein

Zuiderhaven 3
8861 CB Harlingen
The Netherlands
Product: Cotton and cotton pads (D-makup)

Russelot

Harry Ransom Center
University of Texas
Austin, Texas
USA
Product: Photographic Gelatine

Jansen Wijsmuller & Beuns

Veerdijk 44
1531 MS Wormer
The Netherlands
Tel: +31 75 621 1001
The Netherlands
Product: Blotting Paper

Profilex

Van Diemenstraat 410
1013 CR Amsterdam
The Netherlands
Gatorboard

S-colour

Singel (out of business)
Other location
Anthony Fokkerweg 3
1059 CM Amsterdam
The Netherlands
Tel 020 - 669 08 09
Fax 020 - 669 08 69
Product: Negative Film processing

Fotovaklab De Verbeelding BV

Netwerk 7-9
1446 XB Purmerend
The Netherlands
+ 31 299 366 944
Verbeeld@deverbeelding.nl
Product: Printing and processing of reproduction photographs

Wilcovak

Postbus 2045
7900 BA Hoogeveen
The Netherlands
+31 528 - 269 183
info@wilcovak.nl
The Netherlands
Product: PMMA ruler

Talas

20 west 20th Street
5th Floor
New York, New York 10011
United States
Product: Holytex

Peter van Ginkel

Bilderdijkstraat 99
1053 KM Amsterdam
The Netherlands
Product: Lascaux Acrylkleber 498 HV