

Between Media: Connections between Performance and Installation Art, and their Implications for Conservation

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This paper introduces different typologies of installations linked to performance: installations of performance relics and documentation, open-air installations that destroy themselves, automated installations, and installations that require a performance of the public. In order to illustrate the different typologies, works from the 1960s realised mostly in the context of the ZERO movement and of its successive developments are used as examples. The various kinds of connections between performance and installation art bring out different aspects that need to be considered in the conservation of such hybrid works. The translation of performances into other media, the new staging of performances conducted by self-destructing machines, the automation of performances originally carried out by operators of technical equipment and the role of spectators are amongst the issues discussed.

Zwischen den Medien: Zusammenhänge zwischen Performance und Installationskunst sowie deren Auswirkung auf die Konservierung

Der Artikel behandelt unterschiedliche Typologien von Installationen, die Verbindungen zur Performance aufweisen: Installationen, die aus Relikten und Dokumentation von Performances bestehen, Installationen im Außenraum, die sich selbst zerstören, automatisierte Installationen und Installationen, die eine Performance des Publikums voraussetzen. Die Beispiele, die zur Beschreibung der verschiedenen Typologien dienen, wurden zum größten Teil aus dem Kontext der ZERO-Bewegung der 1960er Jahre ausgewählt. Die verschiedenartigen Zusammenhänge zwischen Installationskunst und Performance bringen unterschiedliche Aspekte zum Vorschein, die bei der Erhaltung solcher hybriden Werke berücksichtigt werden sollen. Unter den behandelten Themen sind die Übersetzung von Performances in andere Medien, die neue Inszenierung von Performances, die durch sich selbst zerstörende Installationen aufgeführt werden, die Automatisierung von Performances, die ursprünglich von menschlichen Operatoren der technischen Ausstattung durchgeführt wurden, und die Rolle des Publikums.

The artist Dick Higgins asserted in 1966: "Much of the best work being produced today seems to fall between media."¹ As a matter of fact, it is very difficult to categorise works of contemporary art, since many of them fall into the grey area between different art forms. In particular, performance and installation art have been closely linked from the very beginning. Between the end of the 1950s and the mid-sixties, art-works expanded into space and into time. Two-dimensional works developed into assemblages, and assemblages developed into environments. At the same time, artists included movement, predefined sequences and process in their works. Duration in real time, a characteristic of theatre and film, found its way in other art forms. Moreover, the audience was increasingly involved in the works.² Consequently, different performative elements started to play a growing role in the visual arts. Well-known examples are the works by Allan Kaprow, who began to include happenings in his environments at the end of the 1950s. He saw environments and happenings as interrelated. Kaprow's works are not the only examples of boarder-crossing art. Kinetic works and multimedia installations also have performative characteristics.

Installations require particular care in the on-site staging. Unlike traditional objects of sculpture (usually on pedestals) they do not form a closed entity, which tends to demarcate its own space. Even if installations are not necessarily room-

filling environments that can be entered, they interfere in the space of the viewer and can stimulate different levels of participation.³

In the following, I am going to show various examples of installations linked to performance. My focus will be on works from the 1960s realised in the context of the international ZERO movement and of its successive developments.

Installations of performance relics as artistic documentation

Even though performances were originally conceived as ephemeral works, in some cases, artists display props, parts of the scene setting, costumes, remainders as well as photographic and video documentation of a performance to keep the memory of it alive. It is not always clear, if such installations should be regarded as independent artworks or as mere documentation of the original performance. The boundaries between art and documentation seem to be fluid in some circumstances.

This is the case of *Straße weiß gestrichen (Street Painted White)* by Günther Uecker. The installation consists of a photograph and props: a tub with dried white paint, a nail, a broom and a string (Fig. 1). This collection of objects refers to an action that Uecker performed on the 5th of July 1961



1
Günther Uecker, *Street painted white*, 1961
Zinc tub with the rests of white paint,
broom, nail with string, photo by Peter
Fischer reproduced on canvas

in front of Galerie Schmela in Düsseldorf.⁴ However, the photograph by Peter Fischer that the artist has chosen for this installation does not show much of Uecker's action. It is a close-up with motion blur on the legs of the performer. The broom and the string that are part of the installation can be recognised on the photo. However, the context of their use remains obscure.

A TV-report on the event at the Galerie Schmela in 1961 gives a good idea of the action and of the function of the different props:⁵ Uecker used the broom and the tub with colour to paint a white circle on the street (Fig. 2). The string had been fixed to the ground by a nail and linked to the broom, so that it could function as a compass. Without this information, the action conducted by Uecker does not become understandable in *Street Painted White*. What is the function of this installation then?

Street Painted White is included in the catalogue of Uecker's bibliophilic works.⁶ This means that Uecker considers it as a kind of artist's book in which the collection of objects assumes the role of a text. The installation functions as an illustrated instruction manual; it seems to be an invitation to the viewers to take the broom and paint white their own way.⁷ However, there is no fresh paint in the tub, and the viewers are not actually allowed to use the objects on display. The installation has a rather conceptual character. It points out the act of painting in itself and inspires a reflection on the changed role of this traditional artistic medium; the broom takes the place of a brush and the street supersedes the canvas. On a metaphoric level, the installation animates the viewers to perform a transformation of their per-



2
Günther Uecker painting a white
circle in front of Galerie Schmela at
the event *ZERO: Edition, Exposition,
Demonstration*, Düsseldorf, 5 July 1961

sonal path, carrying out a mental purification process. Since Uecker was very interested in Zen Buddhism in the 1960s, his performance may be interpreted in relation to the Zen Buddhist concept of emptiness. On the displayed photograph, the effect of the pictorial act is particularly visible; cobblestones on the street withdraw back into the all-pervading white paint.

Uecker combines different media like photography and props in an installation that refers both to painting and performance, creating an association to even another medium, the book. *Street Painted White* is intended to convey the idea of the historical performance rather than describe it. The artist signed the installation on the bottom side of the tub, so that it seems to have the status of an artwork on its own. However, Uecker also clearly referred to his action from 1961. *Street Painted White* fulfils documentation and divulgation purposes (like a book), but uses means of expression that overcome language (the traditionally preferred tool of documentation) and its dualistic logic. It belongs to a group of works by Uecker that have their origin in interventions and performances of the artist.⁸ Among them, there are other installations also composed by relics and photo or video recordings, such as *Lochrasen (Flämische Landschaft)* [*Holey lawn (Flemish landscape)*] from 1967 and *Schwarzraum – Weissraum (Black room – White room)* from 1972/1975.⁹ They are consistent with Uecker's concept of museum as „storage of ideas“ from 1970.¹⁰ Accordingly, museums should store and make accessible models, scores and projects that convey ideas, rather than collect traditional works. They should create for example a happening archive.

Self-destructing machines

While in the example described above the artist has deliberately kept relics of his action, in other cases, nothing is supposed to survive after the performance. Jean Tinguely, for example, created machines that destroyed themselves while performing. Tinguely's first self-destructing machine



3
Three different video recordings of
Jean Tinguely's *Homage to New York*
(17 March 1960) displayed at the
Museum Tinguely, Basel, 2013



4
Jean Tinguely's *Klaxon* (1960) dis-
played with photographs of *Homage*
to New York in the background,
Museum Tinguely, Basel, 2017

5
Heinz Mack, *Light Ship*, 1968



6
Heinz Mack, *Light Ship*, Düsseldorf, 18th of September 2010

was *Homage to New York* presented in the garden of the Museum of Modern Art in New York on the 17th of March 1960 (Fig. 3). The machine was a big assemblage of different pieces that Tinguely had found at junk markets and at the dump. It was meant to destroy itself through a kind of knock-on effect. However, it did not work according to plan, and the performance became a process with its own dynamics.¹¹ Johan Wilhelm Klüver, the electrical engineer that had supported Tinguely in the construction of his machine, reports that few pieces of the work survived at the end of the performance: „(...) the public descended on the remains for souvenirs. (...) Later the structure was dragged down into a pile of scrap that looked incredible. (...) The junk was the next day carried back to the dump. Only a few momenta survived. (...) All the rest was memory and pictures.“¹² Klüver highlights the circularity of the construction and destruction process: „The building parts of the machine came from the chaos of the dump and were returned to the dump.“¹³ However, six relics have been conserved. For example, *Homage to New York (Klaxon)* belongs to the collection of the Museum Tinguely in Basel (Fig. 4).

Another self-destructing work is *Feuerschiff (Light Ship)* by Heinz Mack. It consists of a wooden construction with pyrotechnics that floats on water. The construction is set on fire and at a certain point it displays fireworks. Mack realised *Light Ship* for the first time in 1968 for the film *Tele-Mack* (Fig. 5) and repeated it in 1979 in Duisburg and Stuttgart as well as in 2010 on occasion of the event *Light in Darkness* organised by the ZERO foundation in Düsseldorf¹⁴ (Fig. 6). Mack had the structure built completely anew each time. Photo and video recordings of the different performances show that the constructions were not equal. According to present knowledge, there are no remains of them.





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Franz Hogenberg, copper engraving, 1585

At a first glance, such self-destructing machines could appear as exceptional cases. However, they have similarities with temporary festive architectures of the past. Baroque celebrations ended often with fireworks, which burned the ephemeral architectures made especially for the festivities.¹⁵ An early example of a celebration with fireworks was the naumachia that took place on the Rhine at Düsseldorf for the marriage of Johann Wilhelm I in 1585¹⁶ (Fig. 7). Like many contemporary performances, the festive spectacles of the past with temporary architectures that served as setting are known today only through documentation. This shows that the conservation of contemporary art should not be regarded as a field completely separated from the conservation of historical works.

Automated installations

A very good example of a work that falls between media is *The Proliferation of the Sun*, which Otto Piene presented for the first time at the Black Gate Theatre in New York in March 1967 (Fig. 8). In this work, performers operate Kodak Carousel slide projectors following Piene's instructions recorded on

audiotape. The projections show organic forms, which were hand-painted by Piene with fluorescent colours on glass slides.

The ZERO foundation presented this performance on the occasion of the event *Light in Darkness* organised in Düsseldorf

8

Otto Piene, *The Proliferation of the Sun*, Black Gate Theatre, New York, March 1967





9

Otto Piene during a rehearsal of *The Proliferation of the Sun* at the ZERO foundation, Düsseldorf, 2010

dorf in 2010. The work was a loan of the Kunsthalle Bremen. Piene was still alive at that time and supervised the staging of the performance (Fig. 9).

However, *The Proliferation of the Sun* can also be presented as an automated installation. In this case, timers instead of performers operate the slide projectors. On the occasion of the Piene exhibition in Museum Ostwall in Dortmund in 2008, for example, *The Proliferation of the Sun* was presented once with performers as a special event.¹⁷ However, during the remaining days of the exhibition the projectors functioned automatically.

In 2014 – shortly before the artist's death – the installation was presented in a digital version (without operators and slide projectors) at Neue Nationalgalerie in Berlin (Fig. 10).¹⁸ The artist also supervised this installation.

In 2015 – after Piene's death – *The Proliferation of the Sun* was performed again with analogue slide projections and projectionists at the Stedelijk Museum Amsterdam (Fig. 11). Günter Thorn supervised it.

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Otto Piene, *The Proliferation of the Sun*, Neue Nationalgalerie Berlin, 2014



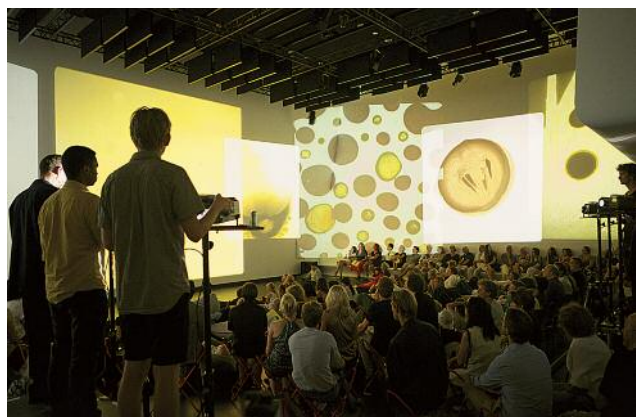
At this point, the relationship between *The Proliferation of the Sun* as a performance with projectionists and *The Proliferation of the Sun* as an automated installation should be analysed.

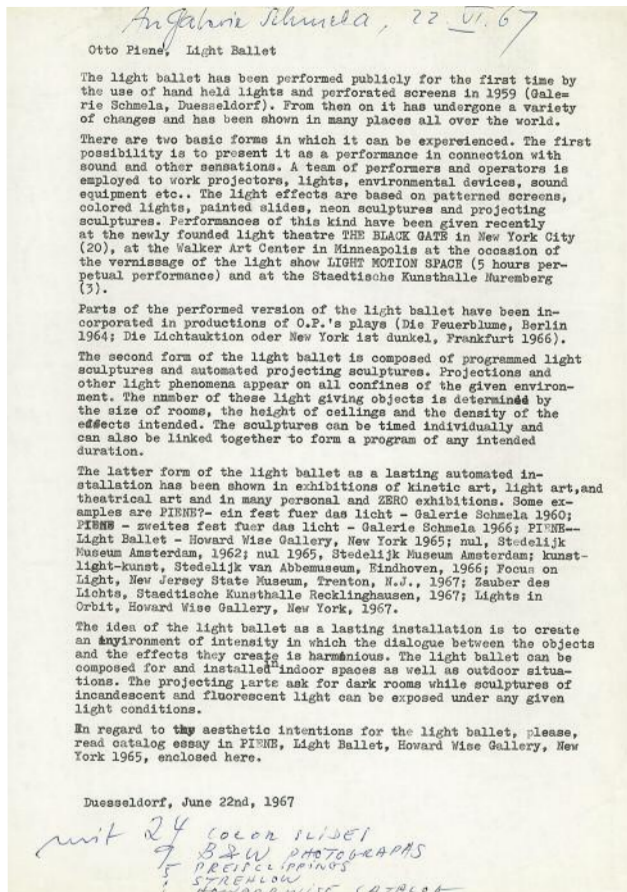
The Proliferation of the Sun has its roots in Piene's *Light Ballet*. Piene performed his first *Light Ballet* in 1959 using a torch that he moved beyond a perforated screen. He let light projections dance on walls and ceiling, involving the whole space. While in theatre and cinema the attention of the audience was focussed only on one direction (the stage or the screen), Piene's *Light Ballet* completely immersed the viewer. In the subsequent time, Piene involved more people in his performances. Each performer held a lamp and contributed to „the overall rhythm of the projection.“¹⁹ In 1960, Piene constructed his first motorized light machines. A year later, he programmed a timer that automatically activated and deactivated different devices according to a fixed score. Regarding the difference between the *Light Ballet* performed by people and its automatic version, Piene stated in 1965: „The light ballet lost spontaneity and gained steadiness when I mechanized it. Motors caused the steady flow of unfurling and dimming, reappearing and vanishing light forms.“²⁰

The Proliferation of the Sun is a particular kind of *Light Ballet* that makes use of slide projections.²¹ In the version with performers, the synchronisation is done by hand, so it is not always precise. The performers operate the slide projectors according to Piene's recorded instructions that dictate in how many seconds they must press the button to change slide. They are supposed to change slides simultaneously using a manual timer. However, the human factor makes each performance unique, leaving scope for mistake and chance. In comparison to the version with performers, the automated version „gained steadiness“, since timers automatically control the slide projectors. The digital version from 2014 functioned even more smoothly.²² Besides, the automatic version had the advantage that it could work continuously for the whole duration of an exhibition. Piene

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Otto Piene, *The Proliferation of the Sun*, Stedelijk Museum Amsterdam, 3rd of July 2015



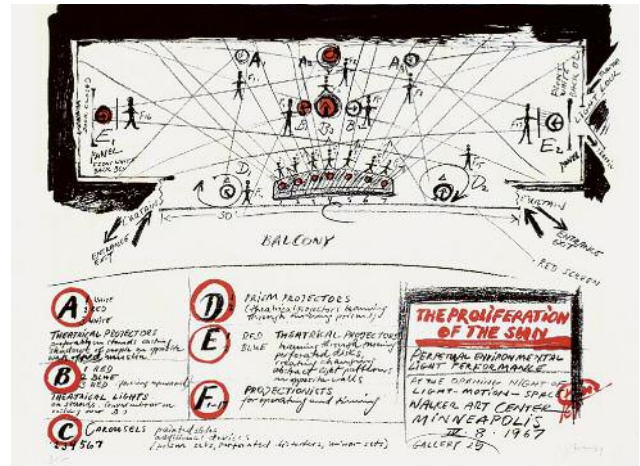


12
Otto Piene, *Light Ballet*, typescript,
Düsseldorf, 22nd of June 1967

stated about the *Light Ballet*: „I like the possibility that it may last, without beginning and without end.“²³

Unlike an installation of performance relics and documents, the automatic version of *The Proliferation of the Sun* was not conceived as surrogate of the performance, but as an alternative presentation form of the work. In a text about the *Light Ballet* written in 1967 for the Galerie Schmela in Düsseldorf, Piene asserts: „There are two basic forms in which it can be experienced. The first possibility is to present it like a performance in connection with sound and other sensations. A team of performers and operators is employed to work projectors, lights, environmental devices, sound equipments etc. [...] The second form of the *Light Ballet* is composed of programmed light sculptures and automated projecting sculptures“²⁴ (Fig. 12). The first form had been presented for example at the Black Gate Theatre in New York and in the Walker Art Center in Minneapolis in 1967 (Fig. 13). The second form of the *Light Ballet* – the „lasting automated installation“,²⁵ as Piene calls it – had been presented in particular in exhibitions of kinetic art, light art and in ZERO exhibitions.

Both in the version with projectionists and in the automated installation, it is the audience and not any performers (or even less the artist) that are in the centre of the occur-



13
Otto Piene, Sketch for the performance
of *The Proliferation of the Sun* at the
Walker Art Center, Minneapolis,
8th of April 1967

rence. The visitors can lie or sit on cushions on the floor or freely move in the space and become part of the light environment (Fig. 14).

In conclusion, I believe that both the performance with projectionists and the automated version of *The Proliferation of the Sun* can be further staged in the future. The automatic version is still a performance, even if it is conducted by a technical system instead of human beings. This kind of automated installation can also be defined as „system performance“, a term used by the artist Gary Hill referring to his installation *In Situ* from 1986.²⁶ Like in Piene's installations, also in Hill's work various devices are activated and deactivated automatically following a preset sequence.²⁷ In this context, „system performance“ does not mean the system capabilities in successful accomplishing a task but an action carried out by the system.

14
Otto Piene, *The Proliferation of the Sun*
(Die Sonne kommt näher), Galerie Art
Intermedia, Cologne, 12th of September 1967





15

Dancing people and projections in
Creamcheese, Düsseldorf

Installations that require a performance of the public

As asserted by Anne-Marie Duguet, „the installation is designed to be explored by visitors who, in so doing, not only progressively build their own perception and awareness of it, but also that of other visitors. The very existence of certain works (...) requires visitors to play a specific role – one visitor effectively executes a performance for others.“²⁸

An example is the so-called “TV-wall” realised for Creamcheese, a disco that was conceived by Günther Uecker together with other artists such as Ferdinand Kriwet, Heinz Mack and the film maker Lutz Mommartz. The disco opened in Düsseldorf in 1967. The TV-wall consisted of TV sets on shelves and was located in the vestibule of the premise. Two cameras transmitted live images from other spaces of the disco to the TV sets in a closed circuit. The images showed the patrons drinking, smoking, dancing etc. in a multimedia environment (Fig. 15). Sometimes, Uecker operated one of the cameras to catch details of the people dancing. In a certain sense, the dancing people ‘performed’ for the audience that watched the screens in the vestibule. Through the TV-wall, the patrons of Creamcheese shared a collective experience.

In 1978, the Kunstmuseum Düsseldorf acquired the TV-wall together with other artworks from Creamcheese. The museum presentation of this closed circuit installation is very challenging. The restoration of the TV-wall cannot be confined to a restoration of its technical components, but it needs to take into consideration also its performative aspects. The staging of this installation and in particular the exhibition context and the positioning of the cameras should be thought through to avoid that the TV sets show only images of deserted rooms and quiet museum visitors.²⁹

Installations can require different degrees of participation. Therefore, their interactive potential needs to be analysed prior to the elaboration of a conservation and presentation strategy.³⁰

Conclusions

Art installations can present different kinds of connections to performance. The typologies described above, which are not intended to be exhaustive and need further elaboration, focus on installations of performance relics and documentation, on open air installations that destroy themselves, and on different kinds of time-based media art installations.

The analysed installation of relics and photograph of a performance by Uecker does not match the documentation criteria of museum professionals, who always try to be as clear and objective as possible, but conveys the artistic idea in a rather evocative way translating it into different media. Uecker selected a photograph of his action that was not quite comprehensible, although more explicit photographs and a TV report were available. In other cases, artists may also rework performance documentation to different degrees for artistic purposes. This applies, for example, to the performance-based installation *Glauben Sie nicht, dass ich eine Amazone bin* (Don't Believe I'm an Amazon) by Ulrike Rosenbach (1975), which combines performance relics with photographs and a video. For this installation, the artist used an edited video of a performance staged for the camera instead of a raw recording of an actual performance conducted before an audience.³¹ A result of a case study on *Don't Believe I'm an Amazon* was the following advice: „In order to understand the work and develop conservation strategies, it is useful to clarify whether the individual elements have a purely documentary or more of an artistic nature.“³² The investigation of *Street Painted White* confirmed the necessity of analysing the context and the purposes of documentation used by artists for installations of relics, photographs and/or video recordings referring to a performance. However, it is also important to consider the limits of documentation itself. Documentation is always partial due to the perspective of the documentarian and the translation of the live performance into another medium. Even video recordings realised for documentation purposes are not completely objective. Although video recordings are often considered to faithfully render events, they actually are medial constructions of reality.³³ Therefore, artistic documentation is not necessarily unreliable but may convey aspects of a performance that cannot be captured by conventional documentation.

Also in the case of self-destructing installations like *Homage to New York* by Tinguely, relics are often displayed together with video recordings and photographs of the performance. These displays can help to understand how the self-destructing machine worked and give an idea of the atmosphere at the event. However, remains are in a certain sense also evidence of failure for this typology of works, since such installations are conceived to destroy themselves. Conservation issues conflict with the function of the work. In some cases, self-destructing performances may be staged anew, like in

the example of *Light Ship* by Mack. The repetition of a self-destructing performance always implies a complete replication of the installation. In this respect, it should be noted that even if a self-destructing machine were reconstructed in exactly the same way again, it would not perform equally, because the process of self-destruction is affected by many variables that cannot be completely controlled.

Like in the case of self-destructing machines, also in the case of automated installations the performance is conducted by a system. In 1968, the artist and art historian Jack Burnham stated that sculpture in the 20th century had developed from object to system and could manifest some properties of biological life: „The object denotes sculpture in its traditional physical form, whereas the system (an interacting assembly of varying complexity) is the means by which sculpture gradually departs from its object state and assumes some measure of lifelike activity“. ³⁴ Burnham mentioned movement, „irritability“ and „eventual death“ among the characteristics of life that can occur in a system. ³⁵ While self-destructing machines ‘die’ when they perform, automated installations usually have a longer life span, even if they can change considerably in the course of time, as *The Proliferation of the Sun* by Piene shows.

Like for performances carried out by human actors, also for performances conducted by a technical system the role of spectators should not be underestimated, since the presence of an audience is always determinant for a performance. As asserted by Erika Fischer-Lichte, „The co-presence of actors and spectators enables and constitutes performance. For a performance to occur, actors and spectators must assemble to interact in a specific place for a certain period of time.“ ³⁶ With regard to media art installations, a performance is an event that occurs when the installation is taking effect on an audience. ³⁷ In certain cases, installations also require active participation of the public. At all events, the conditions that influence the visitors’ experience play a central role for works that fall between performance and installation art.

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Notes

- 1 HIGGINS 1966, unpaginated
- 2 BÜSCHER 2002. Barbara Büscher focuses on the intersections between performance and technology in the US-American art.
- 3 About the use of the term installation, see CAIANIELLO 2013, pp. 218–222.
- 4 The action was part of the event *ZERO: Edition, Exposition, Demonstration* organised by Heinz Mack, Otto Piene and Günther Uecker at Galerie Schmela in Düsseldorf to promote the artist magazine ZERO, vol. 3, edited by Mack and Piene. CAIANIELLO 2012, pp. 511–526
- 5 TV-report in: Hier und Heute, Westdeutscher Rundfunk, broadcasted on 6th of July 1961. Also photographs by Manfred Tischer convey a clearer idea of the action.
- 6 DOMBROWE/LINSMANN 2007, no. L 6102, pp. 20–21
- 7 DOMBROWE 2016, pp. 172–173; DOMBROWE 2006, pp. 106–110
- 8 DOMBROWE 2006, pp. 104–110
- 9 DOMBROWE/LINSMANN 2007, nr. L 6702 pp. 56–57, and no. L 7501, pp. 134–139
- 10 UECKER 1970
- 11 FUCHS 2012, p. 212–217
- 12 KLÜVER 1961, unpaginated
- 13 KLÜVER 1961, unpaginated
- 14 *Tele-Mack*, film by Hans Emmerling and Heinz Mack, Saarländischer Rundfunk, 1969. Images of different performances in: HONISCH 1986, pp. 425 and 428–429 and SCHMIED 1998, pp. 132–133. The performance in Düsseldorf took place on 18th of September 2010 on the Rhine.
- 15 SALATINO 1997
- 16 See copper engraving by Franz Hogenberg representing a raft with firework for the marriage of Johann Wilhelm I in Düsseldorf in 1585. In: Dietrich Graminäus, *Beschreibung derer Fürstlicher Gültigscher ec. Hochzeit*, 1587, Theatermuseum der Landeshauptstadt Düsseldorf
- 17 Exhibition *Otto Piene:spectrum*, Museum Ostwall, Dortmund, 16th of September 2008–25 January 2009. The performance took place on the 22th of January 2009 and was executed by Günter Thorn (Piene’s chief assistant of many years) and members of the museum staff under the supervision of Piene.
- 18 *The Proliferation of the Sun* was presented nightly from 10 pm to 3 am in the context of the exhibition *Otto Piene: More Sky*, Neue Nationalgalerie and Deutsche Bank KunstHalle, Berlin, July 17th – August 31st 2014.
- 19 PIENE 1965, unpaginated
- 20 PIENE 1965, unpaginated
- 21 In 1966, Piene presented at the exhibition *ZERO in Bonn* the programmed multimedia installation *Lichtballett „Hommage à New York“* (*Light Ballet „Homage to New York“*) that combined light machines with slide projections and already comprised hand-painted glass slides like those later used for *The Proliferation of the Sun*. CAIANIELLO 2017, pp. 26–29. Light machines were used also in performances of *The Proliferation of the Sun*, as the photographs show.
- 22 In this case, the digital images were mounted in a video that showed them in the sequence and rhythm given by the artist.
- 23 PIENE 1965, unpaginated. However, Piene did not want to show the digital version of *The Proliferation of the Sun* in loop in 2014, although it would have been possible. *The Proliferation of the Sun* was scheduled at Neue Nationalgalerie with 15 min. interval between each screening to keep the performance character of the work perceivable (information from Babette Werner, art historian involved in the production of the digital version of the work).
- 24 Otto Piene, „Light Ballet“, typescript, Düsseldorf, 22nd of June 1967, Otto Piene records, 2.IV.83, ZERO foundation, Düsseldorf. I would like to thank my colleague, Thekla Zell, for bringing this document to my attention.
- 25 Otto Piene, „Light Ballet“, typescript, Düsseldorf, 22nd of June 1967, Otto Piene records, 2.IV.83, ZERO foundation, Düsseldorf
- 26 Gary Hill in Conversation with Tiziana Caianiello and Sandra Thomas. In: BUSCHMANN/CAIANIELLO 2013, p. 263
- 27 Tiziana Caianiello, „In Situ by Gary Hill.“ In: BUSCHMANN/CAIANIELLO 2013, pp. 255–262

- 28 DUGUET 1996, pp. 147–148
- 29 CAIANIELLO 2005, pp. 135–138 and 156–157. CAIANIELLO 2009, pp. 157–160.
- 30 Tiziana Caianiello, „What Is an Interactive Installation? An Attempt at Clarification.“ In: BUSCHMANN/CAIANIELLO 2013, pp. 273–278. Tiziana Caianiello, Julia Giebler, „Model for Registration of Interactive Installations.“ In: BUSCHMANN/CAIANIELLO 2013, pp. 279–280
- 31 PFENNINGER/JARCZYK 2011, pp. 55–67
- 32 PFENNINGER/JARCZYK 2011, p. 66. The case study was conducted at the Restaurierungszentrum Düsseldorf.
- 33 MÜLLER 2015, p. 26
- 34 BURNHAM 1968, p. 10
- 35 BURNHAM 1968, p. 12. Burnham illustrated his theory using – among other examples – many works realised in the context of the ZERO movement.
- 36 FISCHER-LICHTE 2008, p. 32
- 37 CAIANIELLO 2013, pp. 208–2012

Bibliography

- BURNHAM 1968: Jack Burnham, *Beyond Modern Sculpture: The Effects of Science and Technology on the Sculpture of this Century*. New York 1968
- BÜSCHER 2002: Barbara Büscher, *Live Electronic Arts und Intermedia: Die 1960er Jahre. Über den Zusammenhang von Performance und zeitgenössischen Technologien, kybernetischen Modellen und minimalistischen Kunst-Strategien, Habilitationsschrift an der Fakultät für Geschichte, Kunst- und Orientwissenschaften der Universität Leipzig* 2002
- BUSCHMANN/CAIANIELLO 2013: Renate Buschmann and Tiziana Caianiello (eds.), *Materializing the Ephemeral: Media Art Installations. Preservation and Presentation*, imai – inter media art institute, Düsseldorf. Berlin 2013
- CAIANIELLO 2005: Tiziana Caianiello, *Der 'Lichttraum' (Hommage à Fontana) und das 'Creamcheese' im museum kunst palast: Zur Musealisierung der Düsseldorfer Kunstszene*. Bielefeld 2005
- CAIANIELLO 2009: Tiziana Caianiello, *Creamcheese: From Disco to Museum Installation*. In: *Art, Conservation and Authenticities: Material, Concept, Context*. Proceedings from the International Conference, University of Glasgow, September 12th–14th 2007. Ed. by Erma Hermens and Tina Fiske. London 2009, pp. 155–164
- CAIANIELLO 2012: Tiziana Caianiello, *Ein 'Klammauck' mit weiterreichenden Folgen. Die feierliche Präsentation von ZERO 3*. In: *4 3 2 1 ZERO*. Ed. by Dirk Pörschmann and Mattijs Visser, ZERO foundation, Düsseldorf. Düsseldorf 2012, pp. 511–526
- CAIANIELLO 2013: Tiziana Caianiello, *Materializing the Ephemeral: The Preservation and Presentation of Media Art Installations*. In: BUSCHMANN/CAIANIELLO 2013, pp. 207–229
- CAIANIELLO 2017: Tiziana Caianiello, *The Fluid Boundaries between Interpretation and Overinterpretation: Collecting, Conserving, and Staging Kinetic Art Installations*. In: *Keep It Moving? Conserving Kinetic Art*. Proceedings from the interim meeting organized by The Getty Conservation Institute, the ICOM-CC Modern Materials and Contemporary Art Working Group, and Museo del Novecento, Palazzo Reale, Milan, Italy, June 30th–July 1st, 2016. Los Angeles 2017 (to be published), pp. 22–30
- DOMBROWE 2006: Britta Julia Dombrowe, *Redepflicht und Schweigefluss: Zur Gestalt, Bedeutung und Funktion von Günther Ueckers 'Bibliophilen Werken'*. Mainz 2006
- DOMBROWE 2016: Britta Julia Dombrowe, *Günther Uecker's Bibliophilic Works: 'Books' between Eloquence and Silence*. In: *Günther Uecker: Porträt Mensch, Staatliches Museum Schwerin*. Wien 2016, pp. 167–175
- DOMBROWE/LINSMANN 2007: Britta Julia Dombrowe and Maria Linsmann (eds.), *Redepflicht und Schweigefluss: Bücher und Bibliophile Werke von Günther Uecker*, catalogue raisonné, Museum Burg Wissem, Troisdorf. Mainz 2007
- DUGUET 1996: Anne-Marie Duguët, *Does Interactivity Lead to New Definitions in Art? In: Media art Perspectives: The Digital Challenge;*

- Museums and Art Sciences Respond*. Ed. by Hans Peter Schwarz and Jeffrey Shaw. Stuttgart 1996, pp. 146–150
- FISCHER-LICHTE 2008: Erika Fischer-Lichte, *The Transformative Power of Performance: A New Aesthetics*. Abingdon and New York 2008
- FUCHS 2012: Miranda Fuchs, *Art is Revolt: Jean Tinguely as a Performance Artist*. In: *Museum Tinguely Basel: The Collection*. Heidelberg and Berlin 2012, pp. 210–245
- HIGGINS 1966: Dick Higgins, *Intermedia*. In: *The Something Else Newsletter*, vol. 1, no.1, February 1966, unpaginated
- HONISCH 1986: Dieter Honisch, *Mack: Skulpturen 1953–1986*, catalogue raisonné. Düsseldorf and Wien 1986
- KLÜVER 1961: Johan Wilhelm Klüver, *The garden party*. In: *ZERO 3*, 1961, unpaginated. Reprinted in: *4 3 2 1 ZERO*. Ed. by Dirk Pörschmann and Mattijs Visser, ZERO foundation, Düsseldorf. Düsseldorf 2012
- MÜLLER 2015: Irene Müller, *Performance Art, Its 'Documentation', Its Archives: On the Need for Distinctive Memories, the 'Quality of Blind Spots' and New Approaches to Transmitting Performance Art*. In: *Performing Documentation in the Conservation of Contemporary Art*. Ed. by Lúcia Almeida Matos, Rita Macedo und Gunnar Heydenreich. Proceeding of the conference 2013, *Revista de História da Arte* 4, 2015, pp. 19–31
- PFENNINGER/JARCZYK 2011: Martina Pfenniger, Agathe Jarczyk, *Don't Believe I'm an Amazon: The Preservation of Video Installations based on Performance Art*. In: *Inside Installations: Theory and Practice in the Care of Complex Artworks*. Ed. by Tatja Scholte and Glenn Wharton. Amsterdam 2011, pp. 55–67
- PIENE 1965: Otto Pione, *Light Ballet*. In: *Otto Pione: Light Ballet*, exhibition catalogue, Howard Wise Gallery, New York. New York 1965
- SALATINO 1997: Kevin Salatino, *Incendiary Art: The Representation of Fireworks in Early Modern Europe*, The Getty Research Institute for the History of Art and the Humanities. Los Angeles 1997
- SCHMIED 1998: Wieland Schmied (ed.), *Utopie und Wirklichkeit im Werk von Heinz Mack*. Köln 1998
- UECKER 1970: Günther Uecker, *Das Museum als Ideenkommer: Ein Zukunftsmodell*. In: *Frankfurter Allgemeine Zeitung*, April 4th 1970. Reprinted in: „... zum Raum wird hier die Zeit“: Günther Uecker, *Bühnenskulpturen und optische Partituren*, exhibition catalogue Neues Museum Weimar. Berlin 2001, pp. 44–45

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