



ARTIST: Tony Conrad (1940–2016)	TITLE: <i>Ten Years Alive on the Infinite Plain</i>
ACCESSION NO.: L04307	YEAR: 1972 – ongoing
MEDIUM: Performance with live music and film	
DURATION: Approximately 90 minutes ¹	

INTRODUCTION

This document is the second part of a dossier of information that must be consulted prior to activation of the work and must be disseminated to the appropriate parties at the appropriate moments in the lead-up to the performance.

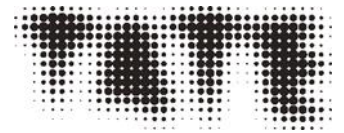
The dossier comprises the following documents:

1. Performance Specification
 2. Guidelines for Projectionists
 3. Guidelines for Musicians
 4. Guidelines for Sound Engineers
 5. Associated contextual and audio-visual documentation²
- The present document aims to provide an overview of the details of the projectionist’s role in the performance. This information has been collected with key contributions by Andrew Lampert, projectionist in four activations of the work, as well as through interviews with past performers.³
 - It is important that the projectionist becomes acquainted with Tony Conrad’s work; the media files that sit alongside this document are designed to assist this process.

¹ This is the duration that can be found on Tate’s collection management system. Different contributors, including Andrew Lampert, Regina Greene and Andrea Lissoni, have stated different durations between 90 and 100 minutes, often considering silent moments before and after the performance as part of the performance itself.

² The materials contained within this section will be varied and may change from display to display depending on the context of display, size of venue, and so on.

³ These guidelines have had a number of contributors, including Andrew Lampert (lead contributor from the Conrad Estate and ‘transmitter’ of the work, having been the projectionist in three activations in 2005, 2007 and 2017), Mark Webber, Peter Spence, Rob Kennedy, and Tate’s Time-Based Media Conservation team (Louise Lawson, Hélia Marçal and Ana Ribeiro). Aside from Tate’s internal documents and published literature, two other moments informed this specification: (1) Performance at The Tanks, Tate Modern, 2017: information was gathered and produced by Esther Harris, Ben Webb, Louise Lawson and Patricia Falcão; Paige Sarlin, Vera Alemani, Angharad Davies, Dominic Lash, Andrew Lampert, Rhys Chatham and Andrea Lissoni directly participated in the event and its documentation; (2) Projection test at N-Space, Tate Store, March 2019: information was gathered and produced by Louise Lawson and Hélia Marçal, with contributions from Lia Kramer, Claire Perrault, Ben Webb and Mark Webber.



- Although they contain repeated sections, the projectionist should also refer to the Performance Specification and Guidelines for Musicians to learn more about the work.
- The projectionist role is akin to, and intrinsically linked to, the roles of the musicians. As such, it involves liaising with the musicians to understand the timing and feel of the performance.

DESCRIPTION OF THE PERFORMANCE

Ten Years Alive on the Infinite Plain is an approximately 90-minute film and music performance work involving four⁴ 16 mm film projectors, a projectionist, a pre-recorded audio file of Tony Conrad (hereafter referred to as 'the artist') playing solo violin, and live, amplified accompaniment by three⁵ musicians performing on violin or viola (hereafter referred to as 'violin'), electric bass guitar and a unique instrument called a 'long string instrument' or 'long string drone' (LSD).⁶

The performance features the three musicians playing a durational, minimalist and somewhat improvisational⁷ accompaniment to the recording of the artist. There is, intentionally, no score to guide musicians; the artist has stated that 'My idea was to eliminate the social and cultural function of the score as a site'.⁸ The musicians are positioned to one side of a screen, upon which there is a projection coming from four 16 mm projectors arranged side-by-side in a row, whose projected images are lined up edge-to-edge.⁹ The 16 mm film loops each contain the same pattern of alternating light and dark vertical stripes which appear to move across the screen. Every third frame, the image switches between its positive and negative form, intended to create an intense, pulsating effect. Over the course of the performance the focus of each of the projections is subtly altered to create different effects. Roughly halfway through the performance the projectors and projections are incrementally shifted inwards at a very slow rate so that they gradually unite to form one pulsating, overlapping projection.

⁴ The number of projections has varied: three projectors were used in the performance in Leeds in 2006 (EVOLUTION 2006 festival, Leeds City Art Gallery) due to the fourth projector breaking just before the performance, and six projectors were used in the 2013 performance in Bologna (Live Arts Week Festival II, Museo d'Arte Moderna di Bologna (MAMbo)). This was agreed with the artist, who was present in both cases.

⁵ The number of musicians has varied across previous performances, from three at The Kitchen, New York in 1972 to seven at the performance at BOZAR, the Centre for Fine Arts in Brussels in 2007.

⁶ The term 'long string instrument' is used by musicians and long string instrument practitioners. The reference to the instrument as a 'long string drone' came from Tony Conrad as a form of word play, since its abbreviation carries the double reference to the psychedelic drug LSD. Rhys Chatham, personal communication with Hélia Marçal, Kit Webb and Ana Ribeiro, 24 April 2019.

⁷ Given that the artist is no longer able to guide and perform the work following his death in 2016, there exists a tension between his improvisational practice and the need for the musicians to respond to the fixed recording of the artist playing.

⁸ Tony Conrad in Hans-Ulrich Obrist, *A Brief History of New Music*, Zurich 2013, p.194.

⁹ Information provided by Andrew Lampert.



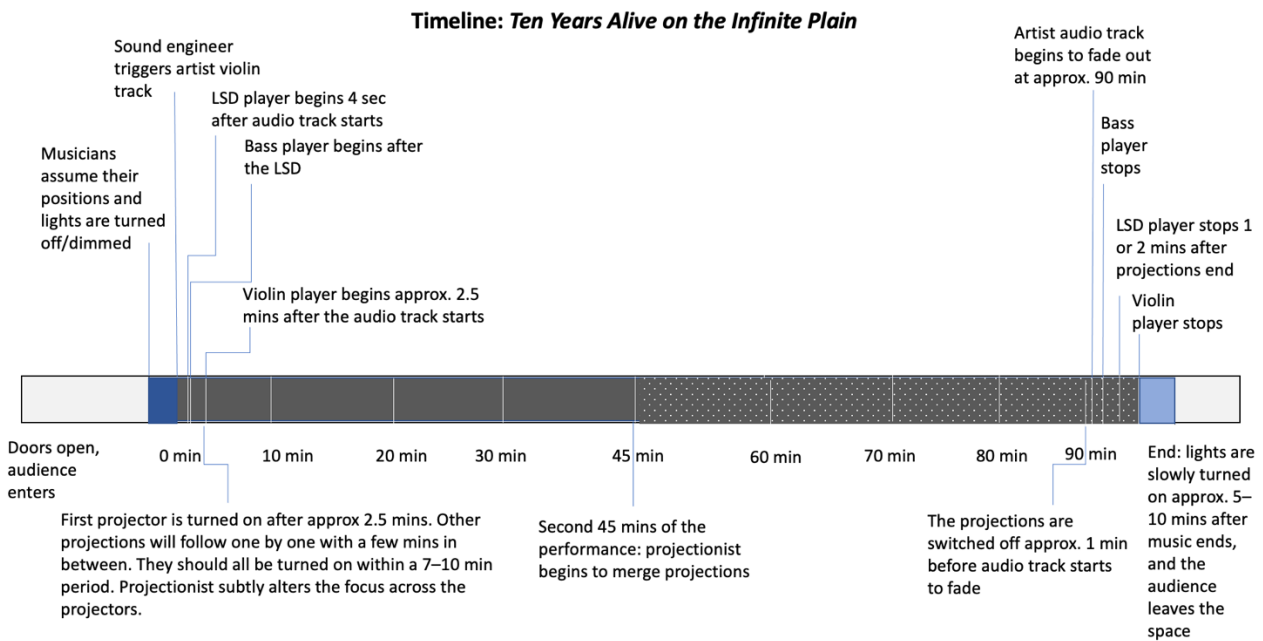
The projectors and projectionist are set up on a raised platform behind the audience, which is located in the middle of the darkened space.

TIMELINE OF THE PERFORMANCE AND THE ROLE OF THE PROJECTIONIST

The artist intended for the projectionist to have a lot of scope in terms of how and when they choose to work with the image, and much of their work is improvisation.¹⁰ However, there are still certain time markers and other considerations that must be kept in mind.

Throughout the performance, while there are a lot of movements and manipulations, these should be small and hopefully imperceptible, and a light touch is necessary.¹¹ The viewer should only notice that the image has been continuously changing after some time – it should not be something they can easily track.

The performance is approximately 90–100 minutes in length. The duration of the music and projections has become fixed to the duration of the recording of the artist playing the violin. The additional time is accounted for by the two moments of darkness and silence at the beginning and the end.¹²



¹⁰ Information provided by Andrew Lampert.

¹¹ Information provided by Andrew Lampert.

¹² Information provided by Andrew Lampert, Andrea Lissoni and Regina Greene.



Beginning:

- The beginning of the event is marked with the doors of the performance space opening and the audience entering the dimly lit space and finding their way to sit, stand or roam as they choose. The audience space is situated between the projection surface and the projection platform, the exact positioning of which is dependent on the chosen space.
- When the performance is ready to start, the musicians assume their positions with their instruments, chairs, instrument stands and amplifiers. The projectionist takes their position behind the projectors.
- When ready, the lights are turned down to create a darkened space.¹³
- The performance begins with the playback of the pre-recorded audio track, triggered by the sound engineer.
- The LSD player starts after four seconds of playback.
- The bass player starts immediately after the LSD player.
- After around two and a half minutes, the violin player begins.
- Also at around two and a half minutes, the first projector is turned on; while there is no set order in which they must be turned on, it is considered helpful to start from one of the two middle projectors and then move outward.¹⁴ All projectors start in sharp focus.
- After a few minutes the second projector is turned on, followed a few minutes later by the third, and then the fourth a few minutes after that; it should take around 7–10 minutes for all four projectors to be turned on. The projectors can be turned on in any order.
- Once all projectors are on, the projectionist is then free to slowly move between projectors, gently and incrementally adjusting their focus, creating different visual patterns within the linear row of projections.¹⁵ Rather than throw a projection out of focus in one sudden move, the goal is to make them gradually drift in and out of focus; do a little then come back to it.¹⁶ Not all of the projectors need to be pulled completely out of focus; rather, variety is key in order for the images to create a broad range of optical effects.

Middle:

- For the first forty-five minutes of the performance the projectors remain stationary. At roughly the halfway point in the performance, the projectors begin to be gently manipulated by the

¹³ Information provided by Andrew Lampert.

¹⁴ Information provided by Andrew Lampert and Mark Webber.

¹⁵ Information provided by Andrew Lampert and Regina Greene.

¹⁶ Information provided by Andrew Lampert.



projectionist so that the projections very slowly merge into one single image during the remainder of the performance.

- Merging the images into one should take around 35 minutes and this should happen almost imperceptibly slowly.
- During this time the focus should also be continually shifted, as it was during the first half.
- As the images increasingly overlap, there will be some unavoidable keystoneing. Ideally, this will not be too exaggerated if care has been taken when positioning the projectors in advance (see 'SETTING UP THE PROJECTORS' below).

End:

- The end of the performance is determined by the end of the audio track (which fades out with about a minute remaining); in anticipation of this, each performer has a role to play in order to finish the performance:
 - By one minute prior to the end of the audio track the projectionist should have converged all the projections and turned off each projector, one by one. This process should be done with projectors being turned off minutes apart from one another.
 - While it is hard to ensure sharp focus is achieved when all the images are merged, ideally the last projector to be turned off should be projecting as sharp an image as possible, offering a bookend to the start of the performance.¹⁷ There are ways to ensure one projection is sharp by focusing it while still somewhat distinct, but it is up to the projectionist to determine how they do this.
 - Shortly after the final projector is turned off, the bassist stops playing.
 - After the bassist, the LSD player stops.
 - After the LSD player, the violinist stops (dampening the strings of the instrument).¹⁸
- The exact timing of these final steps is dependent on the musicians' flow; for example, if the musician is in the middle of a bow, they finish their movement.¹⁹
- A moment of darkness should be allowed after the music and projections finish.²⁰ Only a dim light should be on in order to allow the audience to leave the space. The lights should not be immediately brought up to full brightness as this detracts from the power and aftereffect of the work on the audience.²¹
- House lights can be turned on after around 5 to 10 minutes.

¹⁷ Information provided by Andrew Lampert

¹⁸ Suggestion from Rhys Chatham during rehearsals at Tate Liverpool, May 2019.

¹⁹ Information provided by Regina Greene and confirmed by Angharad Davies and Rhys Chatham.

²⁰ Information provided by Andrew Lampert, Andrea Lissoni and Regina Greene.

²¹ Information provided by Andrew Lampert.



MATERIAL TO BE PROVIDED TO THE PROJECTIONIST (by Tate)

The following media elements will be supplied by Tate:

- Exhibition film print to make 4 x 16 mm film loops:
 - Tate component number: TBC.
 - Duration: each loop is approx. 10 ft in length (or around two and a half arms' lengths).
 - Aspect ratio: 1.34:1.
 - Loops are to be prepared by the projectionist; they should be large enough so that they do not create tension in the projector, and small enough not to sag.

MATERIAL TO BE PROVIDED TO THE PROJECTIONIST (by the borrower)

The following should be provided for the projectionist:

- 4 x 16 mm projectors, either with variable frame rate, or two with 18 fps and two with 24/5 fps²²:
 - Kodak Pageant 250S are preferred owing to the ability to change frame rate between 18 and 24/5 fps while the projectors are running.²³
 - If only 24/5 fps projectors can be found (e.g. EIKI / ELF or Elmo slot loader projectors) then these are acceptable.
 - All four projectors must be equally bright and have the same lamp wattage.
 - It is recommended that at least one spare projector is at the site of the performance, and two spares if two speeds of projector are being used.
- 4 x identical lenses:
 - Ideally prime lenses with a focal length of 25 or 38 mm – depending on desired throw distance.
 - The artist preferred not to use zoom lenses as it creates the risk that the size of the image will change during the performance.²⁴
- 4 x halogen projector lamps (plus spares).
- 8 x rollers (in place of take-up reels).
- Materials to aid the gentle, incremental movement of the projectors (e.g. felt sheets).
- Transformers for the projectors (if required).
- 1 x 16 mm splicer and tape.

²² The artist preferred that the 16 mm projectors are able to shift between 18 fps and 24 fps as the sensation of the movement and flicker feels different at these rates. Information provided by Andrew Lampert.

²³ If there is a switch on the projector to move between 18 fps and 24 fps then the speed can be altered by the projectionist at will during the performance, but it is good to leave it at one speed for a considerable stretch of time rather than continuously going back and forth.

²⁴ Information provided by Andrew Lampert.



- Projector maintenance materials.
- 1 x projection platform large and strong enough to accommodate the projectionist and projectors (e.g. Prolyte StageDex 2000 x 1000 x 8000mm (1200mm/4ft deck legs)).²⁵
- Projector table(s):
 - It is of the utmost importance that the platform and tables are well secured and sturdy enough so as not to disturb the projectors/projections upon movement by the performer.
- 1 x projection screen or white wall surface/wall with a projection area painted the desired size:²⁶
 - The dimensions of the projection area should be generally proportional to the space.
 - The projected area needs to be at least the size of the four adjacent projections (whose individual size will be determined by the chosen projector lens and throw distance).
- Any additional materials that may be specified by the projectionist depending on the requirements of each display.

REHEARSALS

Criteria for rehearsals:

- At least three days should be set aside for installation and rehearsals.
- Rehearsals must take place in the same space as the performance.
- All performers, facilitators, the sound engineer and producer (or key producers) should attend the rehearsals.
- All of the rehearsals need not be of the same duration as the performance itself; rather, shorter rehearsal sessions are advised. At least two shorter rehearsal sessions are required.
- Time must be allocated for at least one full-length rehearsal in advance of the performance, but two full rehearsals are advised. These rehearsals will include the venue's full production team so that technical/backline considerations can be addressed and worked out.²⁷

Rehearsals provide an opportunity for the projectionist to:

- Work out how they can best manage their time, bearing in mind that while time management is important, they must also allow themselves to become absorbed in the performance in order to properly respond to the recording and the actions of the musicians.

²⁵ The platform is designed to allow people to stand and move below the projected images during the performance without affecting the projections. Information provided by Andrew Lampert.

²⁶ Both screens and wall projections have been used in the various activations of the work.

²⁷ Information provided by Andrew Lampert and by the Time-Based Media Conservation team.



- See how far they can push and pull the focus of the projectors, giving a good idea of the type of images one can create just through these very minimal actions.²⁸
- Get a true sense of all the small decisions that they can make over the course of the performance.
- Get a sense of how demanding, and potentially draining, performing this piece can be; the work of the projectionist is constant and can be very demanding, owing to the very gradual, imperceptibly slow nature of the changes and movements required of them, as well as monitoring and potentially dealing with technical failures. Rehearsals will allow a time to anticipate any consequences of this or any steps needed to make the individual more comfortable throughout.
- Assist in determining exactly where the musicians will sit in relation to each other, the PA system and the screen; musicians are normally positioned to the side of the film projections, and while the ability to see the screen is important, the musicians will be responding first and foremost to the artist's recording, not the projections.

SETTING UP THE PROJECTORS

Projectors chosen for display should:

- Run as silently as possible.
- Have consistent and matching frame rates.
- Have been fully serviced and cleaned.
- Have had new, identical lamps fitted to ensure matching and consistent brightness.

Once the projection platform has been fully installed, with the projection table in place, the projectors should be set up by the projectionist as follows:

- Position the projectors on top of the designated table(s).
- Ensure that the film path (rollers, gate, etc.) on all projectors (including any spares) has been cleaned. If necessary, clean these areas using compressed air, isopropyl alcohol and any other manufacturer-recommended materials and techniques.
- Each projector should be plugged in and tested to ensure they meet the above criteria.
- Once tested, the projectors should be arranged so that they are ready for the performance. In order to do this a number of factors need to be considered:
 - The projections should be of an equal size, i.e. the projectors should be side-by-side and an equal distance from the projection surface.

²⁸ Information provided by Rob Kennedy.



- The projected images should meet edge-to-edge.²⁹
- Keystoning of the projected images should be mitigated as far as possible, keeping in mind the starting positions, the final positions and everything in between; efforts to mitigate keystoning should not be applied just for the images as they first appear, but for the duration of the work. There are two main ways of arranging the projectors with keystoning in mind:
 - Firstly, arranged so that the projector corresponds to the projected image, as in fig.1.
 - Secondly, so that the outer two projectors project the inner images, and the inner two projectors project the outer two images, as in fig.2. This orientation was tested prior to the 2019 display at Tate Liverpool and was determined to be one of the best ways to mitigate keystoning during the second part of the performance, as the projectors are moved by the projectionist. This will, however, result in more keystoning for the first half of the performance.

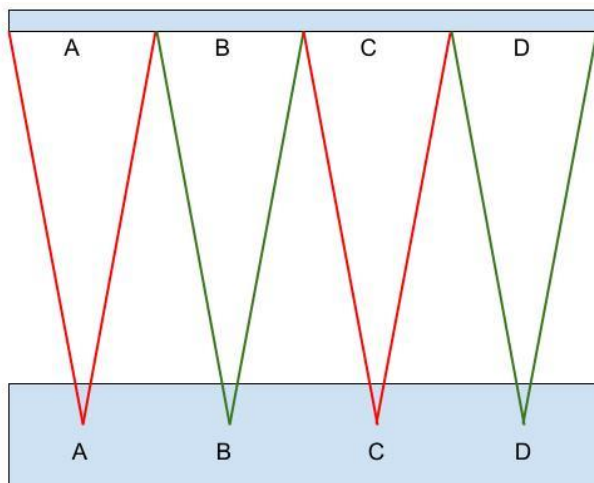


Fig.1
Diagram showing the projectors arranged so that each corresponds to the projected image

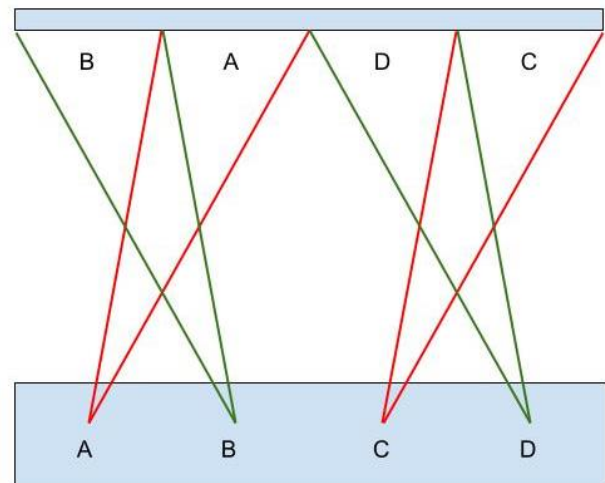


Fig.2
Diagram showing the projectors arranged so that the outer two projectors project the inner images, and the inner two projectors project the outer images

- There should be enough space, but no more than is necessary, for the projectionist to adjust the focus of each projector, and to be able to handle the projectors in such a way that they can comfortably move them from the front, ideally keeping the rear of the projector stable in order to merge the images slowly during the second half of the performance. Sudden or jerky movements when moving the projectors should be avoided.

²⁹ Information provided by Andrew Lampert.



- One must accept that, while every effort should be made to mitigate keystoneing, there will inevitably be some visible at some stage during the performance.³⁰
- Time and care should be taken to test the set-up in order that the projectionist is comfortable working in the ways that the artwork requires and that they are able to keep track of which image belongs to which projector – something that becomes harder to do as the performance progresses and the images overlap.³¹
- Once the precise set-up has been settled upon after sufficient testing and rehearsals, each projected image should be brought into sharp focus in preparation for the beginning of the performance.

MAKING 16 MM PROJECTION LOOPS

- A 16 mm silent black and white print of *Ten Years Alive on the Infinite Plain* contains film footage that must be cut and spliced together to make loops for a performance.
- As the film is an abstract animation of vertical lines, there is no true beginning or end.
- A loop is around 152 cm (5 ft) long.
- A loop must be long enough to run through the gate of a projector with enough slack to prevent tension problems maintaining a top or bottom loop.
- The print is struck from a duplicate negative made by splicing together multiple copies of the short original footage, and as a result there may be small bits of built-in lab leader that should not be used in the loops. Only make loops with the black and white animated footage.
- Make the loop by tape-splicing the two ends of the film together. The cleaner the splice, the better chance you have of the loop being strong.³²
- At least two extra 16 mm loops should be prepared and kept on the side to replace any loop that breaks or needs to be switched out during a performance.³³

TROUBLESHOOTING

- If the loops are experiencing a problem of any kind, or if a projector is making an unusual or unwanted sound or damaging the film in any way, make sure to stop the projector.
- Check the film loop for broken perforations or other problems, and make sure that the projector's pathway is not blocked or compromised in any other way.
- Keep extra loops on hand in case one needs to be swapped in.

³⁰ Information provided by Andrew Lampert and Mark Webber.

³¹ Information provided by Andrew Lampert.

³² Information provided by Andrew Lampert.

³³ Information provided by Andrew Lampert.



- If a loop must be changed or a projector has to be swapped out, this should be done as quickly as possible; let the other projectors remain running in the configuration they are in.³⁴
- If maintaining a top and bottom loop in the projector is a problem, try placing a daylight camera spool onto the bottom of one of the film loops as a counterweight. The spool will spin, and its weight may help with the overall tension.³⁵

REPORT CREATED BY: Louise Lawson, Hélia Marçal and Ana Ribeiro	DATE: May 2019
REPORT UPDATED BY: Duncan Harvey	DATE: Aug 2021

³⁴ Information provided by Andrew Lampert.

³⁵ Information provided by Andrew Lampert.