At the Thresholds of the Medium: CCTV, Playback, and Feedback Breaking the Possibilities of Video*

Lorenzo Lazzari
(Università Ca' Foscari Venezia)
ORCID: https://orcid.org/0000-0003-0936-943X

DOI: 10.54103/milanoup.232.c657

Abstract

By examining the video closed-circuit system, feedback, and the materiality of magnetic tape, this essay explores the influence these operational protocols had on experimentation with the video medium in the late 1970s. Originally conceived as a mere recording device for television images, the medium is subjected to performative actions that turn its limitations into strengths, revealing its unexpressed potential—as seen in the works of Goran Trbuljak (*Untitled [Cut]*), Michele Sambin (*VTR & I*), and Dalibor Martinis (*Open Reel*). All these videos include performative actions that are activated by the use of the ½-inch open-reel system, just before its complete disappearance in favor to the ¾-inch cassette system. The actions of the artists with the tape become integral to the work itself and, in combination with CCTV, feedback, and a particular use of magnetic tape, allow for a transgression of the purposes for which the medium was originally designed. What emerges relevant is a use of videotape that finds its artistic significance not in the space of the apparatus, but in that of the performance.

Keywords: Video Art; Feedback; Performance; Open Reel

Abstract

Esaminando il sistema video a circuito chiuso, il feedback e la materialità del nastro magnetico, questo saggio esplora l'influenza che questi protocolli operativi hanno avuto sulla sperimentazione con il medium video alla fine degli anni Settanta. Originariamente concepito come un semplice dispositivo di registrazione per immagini televisive, il medium è sottoposto ad azioni performative che ne trasformano i limiti in punti di forza, rivelandone il potenziale inespresso, come si vede nelle opere di Goran Trbuljak

* This research was funded under the Project PRIN 2022 PNRR (Code G53D23007070001) awarded by the Ministry of University and Research (MUR). The project is titled *ARTCHAE. Rediscovering video and installation art as an archaeology of telepresence* and is conducted in collaboration with the archive *Le Radici del Nuovo* (MEET | Digital Culture Center, Milan).

(Untitled [Cut]), Michele Sambin (VTR & I) e Dalibor Martinis (Open Reel). Tutti questi video includono azioni performative attivate dall'uso del sistema a bobina aperta da ½ pollice, poco prima della sua completa scomparsa a favore del sistema a cassetta da ¾ di pollice. Le azioni degli artisti con il nastro diventano parte integrante dell'opera stessa e, in combinazione con telecamere a circuito chiuso, feedback e un particolare utilizzo del nastro magnetico, consentono una trasgressione degli scopi per cui il medium era stato originariamente progettato. Ciò che emerge rilevante è un uso del videotape che trova il suo significato artistico non nello spazio dell'apparato, ma in quello della performance.

Parole chiave: Videoarte; Feedback; Performance; Open Reel

1. Introduction

The aim of this essay is to examine the extent to which the operative protocols of closed-circuit television (CCTV), monitor feedback, and usage of the magnetic tape profoundly influenced the production of certain artists' video works at the end of the 1970s. It is argued, in particular, that these two protocols and the materiality of video shaped the works so fundamentally that they pushed the medium to the limits of its technical and conceptual possibilities, revealing uses not originally anticipated in the design and operation of the electromagnetic moving image apparatus. In short, the essay explores a use of the medium at its thresholds, meaning that the action of artists with video moves on uncertain ground between the conventional application of videotape functioning and experimental uses through the manipulation of the tape itself.

The works examined are *Open Reel* (1976) by Dalibor Martinis, *Untitled [Cut]* (1976) by Goran Trbuljak, and *VTR & I* (1978) by Michele Sambin. All of these works were produced within the context of the Galleria del Cavallino. Founded in Venice in 1942 by Paolo and Gabriella Cardazzo, the gallery ceased operations in 2003 (Parolo 2017, 155; Parolo 2019b, 23), and its archive is now deposited at the Fondazione Giorgio Cini in Venice. Between 1974 and 1978, the gallery also functioned as a centre for the production of artists' video works, adopting an international perspective (Parolo 2017, 219; Parolo 2019b, 95–134), as well as an intermodal research on video, as it experimented with an installative character through music, painting, photography and performance (Saba 2022, 133).

The criteria for which these works have been chosen is that they are positioned at the thresholds of a technological change—at the end of a story. In fact, while the videos mentioned were produced in the second half of the decade, the ½-inch open-reel technology was employed. Considering the timing, this is curious, as it appears to lie at the margins of the technological standard then being established.

To elucidate this point, it should be noted that already in 1971 Sony introduced the U-matic ¾-inch cassette system, which was able to offer higher-quality

images than the open-reel, as well as a more reliable editing. However, it was more costly and thus used primarily in semi-professional environments (Bordina 2013, 225). But very soon, in the second half of the decade, it became the most used in art exhibition spaces and centers of production, because it was the most easily accessible format in terms of distribution, storage (Parolo 2017, 98) and exhibition displaying (Parolo 2019b, 136).

Moreover, the major revolution made possible within the U-matic system at the end of the decade and in the early 1980s was the emergence of post-production technologies that became accessible on the (professional) market—with differences in accessibility depending on the country—allowing artists to make precise cuts, mix images, and add effects. This directly affected the approach of artists, who began to focus more on the possibilities of the editing phase of video rather than on the peculiar real-time quality that had characterized the art experimentation with the ½-inch open-reel format (Leuzzi and Partridge 2016, 260, 296; Meigh-Andrews 2014, 189).

For these reasons, the use of the open-reel format by Martinis, Trbuljak, and Sambin, between 1976 and 1978 is quite unusual, as it appears to be a forced use of an already obsolete medium. If not motivated by economic constraints or the limited availability of U-matic technologies at the Galleria del Cavallino, their choice must have been made in accordance with a particular conceptual experimentation they intended to pursue with video—an approach for which the ¾-inch system was not a viable option, as it would not have achieved the desired result (Parolo 2019a, 187).

Certainly, there is a desire to make apparent the real-time quality fostered by the open-reel format. However, this could not be the only reason, as real-time images are also achievable with a ¾-inch cassette, even if its system encourages users to focus on the post-production phase, as discussed earlier. As will become evident later in the analysis of the works, it is the direct manipulation of the materiality of video technology—that is, the possibility of interacting physically with the magnetic tape—that led the artists to make this choice, transforming the obsolescence of ½-inch tape from a limitation into a virtue and a form of resistance against the rapidly changing nature of video formats in the market (Elsaesser 2018, 153).

Before turning to a detailed analysis of each work, it is necessary to consider what video technology is and for what purposes it was originally invented and distributed, both in professional and consumer markets. Subsequently, the functioning of CCTV must be outlined, with particular emphasis on the concept of feedback, in order to clarify the differing ways in which it is understood and applied across various contexts Observing those protocols is fundamental not only to conceptually understanding the works of Martinis, Trbuljak, and Sambin, but also to understanding how they were practically developed.

2. Video and Playback

Analogue video is an electromagnetic technology that emerged in the early 1950s to preserve the ephemeral images produced by television (Blom 2016, 12). The cathode ray tube (CRT), in which television images were visualized, had no capacity to record the sequences of electron beams striking its surface. Prior to the advent of video, the only means of preserving television content was by filming the screen with a film camera, like the *kinescope* ("TV Recording System" 1953, 227) system—a costly process that did not capture the television signal directly, but rather its representation as it appeared on the screen.

With the advent of video, by contrast, the image—encoded as an electrical signal—could be directly recorded onto magnetic tape in the form of magnetized track patterns. A split second later, these signals could be "read" by a machine capable of converting them back into an electrical signal and transmitting them to a CRT monitor, thereby rendering the image visible once again. This constituted the principal innovative feature of video: the possibility of instant playback—that is, the ability to view recorded images just moments after their capture, thereby bypassing the lengthy development processes required for cinematographic film in laboratories (D'Amico 1971, 35).

The other main difference between film and video is that on the former the images are indelibly impressed on the celluloid strip, while on magnetic tape they are "erasable" and "rewritable". In fact, as known, once the light hits a portion of a film there is no going back and the image is latently there: it is possible to reveal it with the development phase, or it can be exposed again, layering it with more light—but it is not possible to go back to a situation of unexposed emulsion. On the other hand, with video, images are not "impressed" on the tape surface: they are inscribed in magnetized particles that can indefinitely change their positive or negative state until the deterioration of the support itself. Because of this, images can be deleted and recorded again on the same portion of tape (Bonet et al. 2010, 15–17).

According to what has just been highlighted, it is evident that there is a potential for economic savings in the phase of video production, compared to film. In fact, if something is recorded incorrectly, it is not necessary to keep it and use a new part of the tape to record it again, like happens with film; rather, the mistake can be deleted and recorded over on the same piece of tape, thereby avoiding material costs. But, more than this, there is a question of time and space in the production of a video work.

Through playback, both time and space acquire a peculiar "dilatation." This is because the image just recorded can be seen again wherever there is electricity and a cable connection or airwave communication, a split second later, a few seconds later, or at a specific time set in advance—but the viewing does not have to wait for a mandatory development period, as in film. Where and when to look at the recorded images is thus at the complete discretion of who made them.

3. Video and CCTV

CCTV is an operative protocol in which the output signal of one or more video cameras is directly connected to one or more control monitors, displaying the images in real time. It originated in military and industrial contexts and evolved across diverse domains, including surveillance, security, media, and entertainment (Deane 2015), always with the idea of interacting visually with an object or environment at a distance, without being present. CCTV can also be achieved with or without videotape technology, as the recording of those images is optional and can be omitted if not needed (Blom 2016, 25). At the same time, the opposite is not so true, as the use of CCTV in video practices is quite fundamental.

In fact, it is possible to view the live images produced by a video camera not only through the viewfinder, but also by connecting a monitor via CCTV. This offers enormous advantages. First of all, the image can be blown up allowing for more detailed control of visual elements. Secondly, the monitor screen can be rotated 180°, facing not the operator but the same object, environment, or person that the video camera is capturing. This means that, for example, a performer can see herself or himself while performing in front of the camera, adjusting and modifying the performance in response to the image coming from the camera (Blom 2016, 36–38).

On the one hand, this is of course related, again, to surveillance: surveilling the self while performing, checking the correctness of posture, acting, etc.; playing with the image of the self, interacting visually with it. But there is another possibility: playing with the space framed by the image, as it is precisely knowable in real time on the monitor in CCTV mode. The movement of the artist can then be not just preemptively planned, but can also respond to the portion of space—whether small or large—that is visible on the control monitor, a key theme in the exploration of the self, as addressed in Miriam De Rosa's essay in this volume.

The possibility of monitoring the image of the self is today taken for granted, as it is embedded in every telepresence webcam application. In these settings, the user simultaneously views both the interlocutor and their own image, dividing their attention to monitor their posture, if not the environment visible within the frame of the video call. The very fact that this is taken for granted represents a form of "tacit cinematic knowledge," (Boguska et al. 2024, 12) whereby the operational modes of video and its artistic practices have been assimilated into domains such as work and in its gestures (13–14).

At the same time, this possibility of audiovisual self-response derives from a mechanism that is pre-cinematic, one which artistic video practices have, in turn, incorporated: feedback.

4. Video and Feedback

The above-mentioned qualities facilitate an immediate review of events captured by the video camera and, when necessary, adjustments based on observations—that is, a response to what is immediately seen. In cybernetics, this recursive process involving action, observation, and response is known as feedback, a self-regulating mechanism operative in both machines and living organisms. Feedback enables the correction of a process while it is ongoing by gathering information from both the environment and the process itself, simultaneously converting this information into input that influences the further development of the process (Mey 2023, 37). For example, in the human body, the ability to hold vertical equilibrium relies on a series of automatic and unconscious adjustments that enable us to counteract gravity, sustain posture, and prevent falling during movement or action.

What does this concept of feedback have to do with video? It is possible to approach this relationship from two fronts—respectively, inside and outside the circuit, a distinction that I propose to clarify the different uses of video feedback. First, speaking of feedback that occurs *inside* the circuit means to consider the feedback generated within the video apparatus itself. In brief, what the video camera is capturing is its own output image, which becomes a new input, enhancing the "metamorphic nature" (Lischi 2020, 22) of the video image. To achieve this, CCTV must be configured in such a way that the camera lens is directed toward the control monitor displaying the video output. This *mise en abyme* generates a kind of image collapse, resulting in mesmerizing effects—well known in early video art works by, for example, Wojciech Bruszewski, Nam June Paik, Stephen Partridge, Skip Sweeney, Woody and Steina Vasulka, among others (Bonet et al. 2010, 116–26; Meigh-Andrews 2014, 173–83).

The responses the artist has to the image visible on the monitor are directed toward the continued manipulation of the *mise en abyme* effect, resulting in a constant flow of variation. This process feeds the CCTV system indefinitely, like a gargantuan machine with an insatiable hunger for abstract images—images that are themselves the product of its own digestion. In this case, since the feedback responses occur inside the circuit, there are not necessarily any variations or interactions with the environment in which the video apparatus is situated, as the feedback operates autonomously, recursively producing and consuming images.

A different matter is feedback *outside* the circuit. This means there is no need for the video camera to be pointed directly at the control monitor, as the self-regulated actions are occurring in the environment outside the circuit. It means that the person operating the video camera is indeed checking the output on the control monitor, but in order to modify the way the interaction between the video camera and the environment takes place. These interactions

may include those involving the performer, if there is one in front of the camera—who, depending on the spatial placement of the control monitor, could also be the operator.

The result of the performance is thus influenced by its own representation displayed on the control monitor, while the video image is, in turn, influenced by the actions of the performer—in a never-ending cross-reference. This dynamic is well known to artists who have combined video and performance as one of their main means of artistic expression, such as Vito Acconci, Douglas Davis, Dan Graham, Kit Galloway and Sherrie Rabinowitz, Sanja Iveković, Joan Jonas, Les Levine, and others (Levine 2017, 32–33; Marcoci 2011, 51–54; Paulsen 2017, chap. 2, chap. 4).

Now that the characteristics of playback, CCTV, and feedback in relation to video have been highlighted, the argument can proceed with the analysis of the three works by Martinis, Trbuljak, and Sambin. The discussion of these works is aimed at drawing attention to how the complete or partial combination of playback, CCTV, and feedback is employed in their production, as a *conditio sine qua non* for the existence of the works themselves and, at the same time, as a form of experimentation on the limits of the media itself.

5. Dalibor Martinis: Unwrapping the System

As its name suggests, *Open Reel* (1976) by Dalibor Martinis is a work that explores one of the core elements of the videographic medium itself: the magnetic tape that wraps and unwraps around two reels, which in the early days of video were not enclosed in a cassette but left exposed at the top of the VTR. Its mechanism was exactly the same as that of an audio recorder: the unrecorded tape unspools from the first reel, passes through the erase/recording/playback head system, and wraps in the second reel, continuing until the length of the tape is finished. Everything happens within the VTR system.

In Martinis's work, part of this process is halted before it takes place and is displaced elsewhere, far from the VTR. To explain this, it is first essential to describe what is shown in the resulting 3'40" black-and-white ½-inch video. The video camera frames only the artist's head, focused closely on it against a neutral background, which is simply a blank surface. In one hand, the artist holds one end of a magnetic tape, which he presses and fixes to one side of his head. His head then begins to rotate on its own axis, without moving out of the video frame. As a result, the tape he holds begins to wrap around his head, layer upon layer, becoming self-securing. Throughout the entire duration of the video, only this action is shown—until Martinis's head is completely covered by tape and, suddenly, the video image disappears (Martinis 1976).

Figure 1. *Open Reel* (Dalibor Martinis, 1976). Still from video, b/w, sound, 3 min. 4 sec.

It is then that the viewer realizes what has happened during the entire video: the artist's head served as a reel for the tape—specifically, the second reel of the VTR that was recording the action itself. The reel that should have wound the tape was replaced by Martinis's head, positioned far from the VTR and directly in front of the recording camera. It is as if the apparatus were watching its own "evisceration," with part of its "body" taken elsewhere, "recording the image of its own existence" (Martinis 1977, 24). But this elsewhere is not arbitrary: it is the artist's head—the mind that conceived the work of art itself. The video is, at the same time, tautological, witnessing its own act of birth into the world as well as its own death—a return to the mind, after being expropriated from the mechanical body of the VTR.

First of all, as mentioned in the introduction, this conceptual operation by Martinis is very practical and material, and required the open-reel system: it is evident that with a closed cassette system it would have been impossible to substitute the second reel with the artist's head. Secondly, there is the use of CCTV, even if mostly imperceptible. In fact, there are moments at the beginning of the video in which we see Martinis looking straight ahead but slightly off-center, as happens in Vito Acconci's *Centers* (1971), which, as Kris Paulsen explained, is done to check the self-image in the control monitor, set up in CCTV mode. In Martinis's case, he was checking the correct positioning of his head in the

center of the frame and, at the same time, verifying that the tape was wrapping properly. This is evident because at one point he releases the finger holding the tape, as he knows from the control monitor that the tape is now secured through the wrapping. This response of the artist to the video is a form of feedback, because it would not have happened if Martinis had not been watching himself through video.

Finally, there is presumably playback. The video was recorded in the context of the Motovun Encounters of 1976 in Croatia, promoted by the Galleria del Cavallino (Benčić 2024, 53). As it was a context of hybrid production and display of works, it is possible that *Open Reel* was performed live. What does this mean? It means that if there was an audience present during the performance, there must have been a second monitor facing the public and showing the playback from the VTR, not just the CCTV monitor that Martinis was observing. This is because, without playback, the public would have continued to see the images on the monitor even after the tape had run out, thus missing the proper experience of the conceptual work. As said, CCTV does not need the recording of the tape and could show images even without it. But with playback enabled, the monitor would have shown exactly what had just been recorded on tape and, once the tape ended, simply nothing, as experienced from the video preserved. However, as no photographs of the performance showing the audience have been retrieved, this live playback component remains a supposition.

6. Goran Trbuljak: Death in a Split Second

Untitled [Cut] (1976) by Goran Trbuljak was realized in the same context as Martinis's work, in Motovun (Benčić 2024, 53). Trbuljak's black-and-white video lasts barely thirty seconds and depicts one basic action: cutting the ongoing magnetic tape. The camera is static on a tripod, tilted down to frame just the VTR in which two loaded open reels are spinning. A pair of scissors enters the frame and, suddenly, cuts the tape just before the recording/playback head. The viewer sees the cutting and, a split second later, the image of the VTR disappears, replaced by noise, and then the video ends.

Why the image disappears is due to the same reason it happens in Martinis's *Open Reel*: there is no more tape to be read by the metal head of the VTR. But while in Martinis's work this occurs because the reel of tape ends by itself, in *Untitled [Cut]* there is an external intervention—the cutting of the tape. The video camera is again looking at its own core memory—the tape—but also testifying to its killing by recording it (Susovski 1977, 10–12). Like a living being, it can see the scissors approaching to cut the tape, while being capable of doing nothing—just testifying.

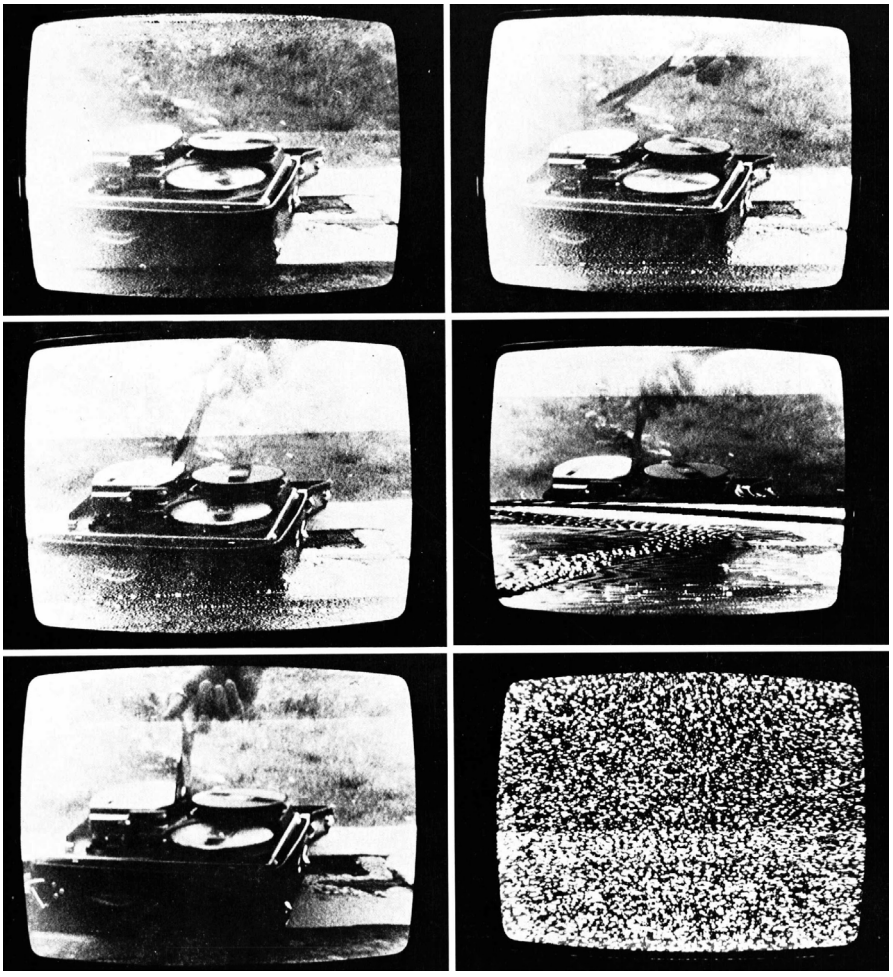

Figure 2–7. *Untitled [Cut]* (Goran Trbuljak, 1976). Stills from video, b/w, silent, 25 sec.

What is even more uncanny is that the image does not disappear at the exact moment of the cut, but a split second later, as if a brain is still receiving visual input from the eyes just after death. In Trbuljak's work, this occurs because the viewer is not watching the CCTV signal from the camera—because if that were the case, the image of the VTR would continue to be shown even after the cut, as mentioned before. Instead, the viewer is watching the playback—what has just been recorded onto the tape.

Because of this, there is little more to see, due to the small physical space between the point of the cut and the magnetic head. In those few millimetres, the head is still recording images before the tape truly ends. This final "finger" of tape thus corresponds to the exact measure of time the video has to witness its own death.

As said, CCTV was not used in this piece. Instead, as is evident, playback is the main subject of the action performed in the video, as without it, conceptually and operationally, the piece wouldn't have worked—the video would not have been able to see its tape cut while being "alive." It is also possible to argue that a form of feedback was employed, even if it does not trigger any concrete sequence of further events. In fact, the noise displayed at the end of the tape is the response to the cutting—a particular, short response that signals the end of communication after testifying to a forewarned "no signal."

The feedback is very short, just a split second, but it functions in a way that warns the viewer about what is going to happen—the end of the tape caused by the cut—and then happens immediately after. Here, feedback functions as a sudden reaction to the witnessing of what is not meant to be seen by the videocamera: the very moment marking the end of the medium itself.

7. Michele Sambin: Reinterpreting the Self

VTR & I (1978) is a video performance by Michele Sambin, first presented during a video workshop at Galleria del Cavallino, and later at Palazzo dei Diamanti in Ferrara and at the gallery of Opera Bevilacqua La Masa in Venice—now Istituzione Fondazione Bevilacqua La Masa (Parolo 2017, 245). The first difference compared to the two other works analysed is the presence of a complex technological setup, consisting of two VTRs, two monitors, and one video camera (in addition to another video camera connected to a video mixer and a U-matic ¾-inch recorder used just for documentation) (Sambin 1978).

The centre of the performance video scene is occupied—just as in the works by Martinis and Trbuljak—by the core of the medium: the magnetic tape. However, in this case, it is looped between two VTRs, with a distance between them that results in approximately 20 seconds of tape. The first VTR is connected to the video camera and set to record. The second VTR is in playback mode, reading what was recorded by the first with a delay of 20 seconds. At their side, there are the two CRT monitors. The first one, on the left, displays a CCTV feed from the video camera, while the second, on the right, shows the playback images. Finally, the video camera is pointed toward this second monitor. The performer, Sambin himself, is positioned between the video camera and the monitor displaying the playback.

Sambin begins the performance by vocalising non-verbal sounds while moving his head, with the sounds and images immediately reproduced via CCTV. After 20 seconds, they also appear on the second monitor as playback. Sambin then gradually modifies his actions in response to these delayed images—an initial level of feedback occurring outside the circuit. However, because the camera is positioned in front of both his head and the playback monitor in the background, the CCTV feed on the left displays a mix of the live performance

and its 20 second delayed playback. This composite is recorded again by the first VTR, creating a second level of feedback—this time occurring inside the circuit.

Figure 8. *VTR & I* (Michele Sambin, 1978). Still from video, b/n, sound, 13 min. 51 sec.

The tape continues its endless journey, looping between the two VTRs, even when Sambin moves outside the frame of the video camera to position himself behind it and begin manipulating the tilt, zoom, and focus. The video camera is now directed solely at the playback monitor, with the performer reinterpreting the recorded images through camera movements, which remain in feedback thanks to the CCTV and the looping system. Lap after lap, the continuous superimposition of recording and playback renders the forms and sounds increasingly uncertain, blurred, and distorted, until the image and the voice from the beginning—Sambin himself—are no longer recognisable before the tapes ends, after mostly 14 minutes.

It is evident how essential playback, CCTV, and feedback are to the existence of this work of art, all operating together in a recursive exploration of the self and its representations through image and sound. Particularly, feedback is explored both outside and inside the circuit: outside, because Sambin responds with his own body to the images he sees; inside, because the video camera is

directed at its own system, while being manipulated in a way that generates a continuous flow of changes in response.

8. Conclusions

As highlighted in all three works analyzed, the direct manipulation of the ½-inch magnetic tape was fundamental to their successful execution: in Martinis's case, because the tape was wrapped outside the reel; in Trbuljak's, because it was cut in the middle of the recording; and in Sambin's, because it was looped to create a distance between two VTRs. None of these actions would have been possible with the ¾-inch U-matic cassette, as the tape inside it was not physically accessible.

The possibility of accessing the tape also opens up the potential to use it spatially—that is, to use the videotape outside its apparatus. This is evident in *Open Reel* and *VTR & I*, where the tape moves, wrapping around the artist's head or looping between machines, but always outside the VTR circuit, in a space that does not belong to the apparatus, but to the performance. Even in *Untitled [Cut]* this is, in a way, true. Once cut, the tape no longer serves any functional purpose for the video apparatus, as it can no longer pass through the playback/recording head just a split second after the cut. It continues spinning with a loose end, agitating into the space beyond the VTR, exposed to centrifugal force.

In addition, the combined use—even when partial—of playback, CCTV, and feedback enables the "improper" use of the videotape: in Martinis and Trbuljak, by allowing both the viewer and the apparatus to "see" the body of video itself—its inscription onto tape and, simultaneously, its death; in Sambin, by playing with the possibility of re-recording over the same portion of tape, fostering a distorted gaze at the self—the performer—while continuously reinterpreting the resulting representation until it is entirely altered. If video was originally conceived as a medium to preserve memory, this particular mode of use does quite the opposite, arbitrarily reworking memory until it is ultimately destroyed.

To resume, video is taken by these three artists, studied in detail, not to conform to its normal functioning, but instead to break it, using the medium at the thresholds of how it is supposed to be used, both conceptually and practically. Today, these practices can be examined through the lens of media archaeology, interpreting the use of videotape as a form of "hacking electronic media" (Parikka 2012, 139). Such practices intervene in the standard circuital flow of the magnetic tape, twisting and deviating it by interacting directly in the space *between* the two reels—between the actions of wrapping and unwrapping.

This "hacking" is, in a sense, what opens the possibility of moving beyond the space of the apparatus into that of performance. All three artists here abandon medium specificity and its spatial and operational limits. I suggest that this

shifting is allowed by an underlying action present in all three videos, which may or may not be intentional on the part of the artists: killing the tape—something I have attempted to render visible in the subtitles of each work analysis. It should also be noted that, etymologically, "hacking" shares something with the act of killing, as it can mean "to cut roughly, cut with chopping blows", "to chop" in the sense of tearing something or somebody into pieces (Etymonline 2025). While this form of killing is evident in Trbuljak's *Untitled [Cut]*—explicit in both the presence of the term "death" in the subtitles I proposed and in the act of cutting itself—it warrants further elucidation in the other two works.

In Martinis's work, the killing is manifested through the action of "unwrapping." As mentioned, the tape is meant to travel from one reel to the other. But if it is pulled from a third element (the performer) outside the system, the apparatus ceases to function properly. In Sambin's case, the killing is embedded in the very process of image registration: the apparatus is designed to record and store an image indefinitely, but in *VTR & I* there is a continuous act of "reinterpretation," rendering the mnemonic function of the VTR purposeless.

But as noted in the introduction, the open-reel system by the late 1970s was already dying due to obsolescence and the transition to the ¾-inch cassette. The act of killing the tape, as I read it in all three works, may be understood as something ritualistic—a final farewell to an early stage of a technology that did not survive the decade, ultimately surpassed by the closed system of the cassette. Even today, in the digital domain, the idea of the cassette survives in the concept of a closed storage system—something not supposed to be accessible to human hands except for maintenance: hard drives, SD cards, solid-state disks, and so on. To lose the possibility of accessing the materiality of video with the body is to lose the possibility of a performative action that engages with the materiality of the medium itself. But in the end, video—much more than film—is a medium whose information is bound to something that, at its source, is not tangible at all: electricity, magnetism, polarized particles. To abandon the possibility of a physical interaction with the support was, perhaps, the linear path and destiny of the video world.

References

"TV Recording System." 1953. *Popular Mechanics*, April.

Benčić, Branka, ed. 2024. *The Motovun Encounter 1972–1984*. Museum of Modern and Contemporary Art, Rijeka.

Blom, Ina. 2016. *The Autobiography of Video: The Life and Times of a Memory Technology*. Sternberg Press.

Boguska, Rebecca, Guilherme Machado, Rebecca Puchta, and Marin Reljić. 2024. "Tacit Cinematic Knowledge: An Operative Term." In *Tacit Cinematic Knowledge: Approaches and Practices*, edited by Rebecca Boguska, Guilherme Machado, Rebecca Puchta, and Marin Reljić. Meson Press.

Bonet, Eugeni, Joaquim Dols, Antoni Mercader, and Antoni Muntadas. 2010. *En torno al vídeo*. Universidad del País Vasco.

Bordina, Alessandro. 2013. "The History and Technological Characteristics of Video Production and Reception Devices." In *Preserving and Exhibiting Media Art: Challenges and Perspectives*, edited by Julia Noordegraaf, Cosetta G. Saba, Barbara Le Maître, and Vinzenz Hediger. Amsterdam University Press.

D'Amico, Margarita. 1971. *Lo audiovisual en expansión*. Monte Ávila Editores.

Deane, Cormac. 2015. "The Control Room: A Media Archaeology." *Culture Machine* 16. Accessed September 2, 2025. https://culturemachine.net/vol-16-drone-cultures/the-control-room.

Elsaesser, Thomas. 2018. "Trapped in Amber: The New Materialities of Memory." *Panoptikum* 19 (26): 144–58. https://doi.org/10.26881/pan.2018.19.10.

Etymonline. 2025. "Hacker." *Etymology Online*. Accessed September 2, 2025. https://www.etymonline.com/word/hacker.

Levine, Les. 2017. "One-Gun Video Art." In *Video Writings by Artists (1970–1990)*, edited by Eugeni Bonet, 22–37. Mousse Publishing.

Leuzzi, Laura, and Stephen Partridge, eds. 2016. *REWIND|Italia: Early Video Art in Italy / I primi anni della videoarte in Italia*. John Libbey Publishing.

Lischi, Sandra. 2020. *La lezione della videoarte*. Carocci Editore.

Marcoci, Roxana, ed. 2011. *Sanja Iveković: Sweet Violence*. Museum of Modern Art.

Martinis, Dalibor. 1976. *Open Reel*. National Museum of Modern Art, Zagreb. Accessed September 2, 2025. https://nmmu.hr/en/2023/10/03/dalibor-martinis-open-reel-1976/.

Martinis, Dalibor. 1977. "Untitled." *Spot* 10.

Meigh-Andrews, Chris. 2014. *A History of Video Art*, 2nd edition. Bloomsbury Academic.

Mey, Adeena. 2023. "Curating's Technological Unconscious: The History of Cybernetics and the Gaian Transformation of Curation." In *The Helsinki Biennial Art Mediation Forum 2023: An Anthology*. HAM Helsinki Art Museum.

Parikka, Jussi. 2012. *What is Media Archaeology?*. Polity Press.

Parolo, Lisa. 2017. "Per una storia della videoarte italiana negli anni Settanta: Il fondo archivistico della galleria del Cavallino di Venezia (1970–1984). Riesame storico-critico delle fonti e individuazione di nuovi metodi di catalogazione digitale." PhD diss., Università degli Studi di Udine.

Parolo, Lisa. 2019a. "Gli artisti (video) del Cavallino. Contesti, percorsi e opere del centro di produzione di video arte." In *La galleria del Cavallino. Vetrina e Officina 1966-2003*, 175–99. Antiga Edizioni.

Parolo, Lisa. 2019b. *Video arte in Italia negli anni Settanta. La produzione della galleria del cavallino di Venezia*. Bulzoni Editore.

Paulsen, Kris. 2017. *Here/There: Telepresence, Touch, and Art at the Interface*. E-book. The MIT Press.

Saba, Cosetta G. 2022. "Excursus sui modi di produzione e di disseminazione del video in ambito artistico in Italia dagli anni Settanta a oggi." In *Il video rende felici. Videoarte in Italia*, edited by Cosetta Saba and Valentina Valentini. Treccani.

Sambin, Michele. 1978. *VTR & I – Spiegazione*. Accessed June 30, 2025. https://michelesambin.com/projects/vtr-and-i-spiegazione-loop/.

Susovski, Marijan. 1977. "Video in Yugoslavia." *Spot* 10: 10–12.