

ACOUSTIC SHAPINGS: *Sound, Film and Sculpture*

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By solely focusing on the visual component of a film, the medium had been wronged. Nora Alter analyses artist films in order to reveal how music and sound play a crucial role in the interpretation and understanding of films, especially those involving sculpture.

Visit the website www.tijdschriftkunstlicht.nl for fragments of the artist films referred to in the text.

Despite an ever-growing body of scholarship in film and media studies that pays attention to the importance of the acoustic, scholars have, to this day, turned a deaf ear to the integral role of sound in artist films. The dominance of the visual and pictorial codes, I want to argue, ultimately constrains and limits the way in which meaning is produced and received in art films, especially in those that are concerned with sculpture. The discussion of sound in cinema has coalesced around the technological advent of synchronized recording, but it is important to keep in mind that silent films were rarely entirely silent, nor were they conceived to be so: rhythm and musical composition played a crucial role in their overall effect. As early as 1910-1912, the Italian brothers Bruno Corra and Arnaldo Ginna made short, hand-colored films (*Accordo cromatico* and *Canto di Primavera*) that were structured according to music by Mendelssohn and Chopin. In France between 1912 and 1914, Leopold Survage sought to use the new celluloid medium to reconcile movement, rhythm, music and color.¹ And in the 1920s, Hans Richter, Walter Ruttmann, Viking Eggeling, and Fernand Léger created dynamic abstract visual compositions that were choreographed to a variety of musical forms.² For the most part, however, these early experiments were conceptually more closely related to principles of painting than to sculpture.

Generally, film historians and critics address the relationship between film and the other arts by relating the image track to pictorialist or painterly visuality and the sound track to music or prose. For instance, Peter Wollen, in his important essay *The Two Avant-Gardes*, proclaims that ‘One group came from painting. The other from theatre (Eisenstein), and futurist sound-poetry (Vertov).’³ Although Wollen acknowledges that cinema offers more opportu-

nities for the cross-fertilization of painting, writing, music and theatre than any other art, he conspicuously neglects to mention any possible relationship between experimental film and sculpture. This lacuna is peculiar since film has manifested a fairly consistent relationship to sculpture throughout its relatively short history. Writing in 1911, Ricciotto Canudo in *The Birth of the Sixth Art* hypothesizes that film has the potential to be the ‘superb conciliation of the Rhythm of Space (the Plastic Arts) and the Rhythm of Time (Music and Poetry).’ He continues to emphasize that ‘The new manifestation of Art should really be more precisely a *Painting and a Sculpture developing in Time*, as in music and poetry’.⁴

Filming Sculpture

In his 1948 review of Hans Richter’s film *Dreams That Money Can Buy* (1947), Siegfried Kracauer maintains that the artist has once again made a vital contribution to the visual arts.⁵ According to Kracauer, Richter ‘transfers for the first time essential forms of modern art to the projection screen (...) *Dreams That Money Can Buy* confirms the secret dream-life of drawings, paintings, and sculpture.’⁶ In particular, Kracauer singles out the sequences in *Dreams That Money Can Buy* that Richter made in collaboration with Alexander Calder, Marcel Duchamp, and Fernand Léger, arguing that they break new ground in both film and sculpture.⁷ Kracauer’s review is significant not only because it draws attention to the ways in which Richter’s creative use of the camera in filming the sculpture produces novel forms on the celluloid, but also because it suggests that by endowing sculpture with directed movement, temporality, and sound, Richter’s film pushes sculpture into a new dimension. Instead of looking at sculpture independently of time and space, the viewer must now see it as part of its temporal, spatial, and sonic context. Indeed, Kracauer directly addresses the intersection between film, sound, and sculpture.

Kracauer also comments on the manner in which the soundtrack and the visuals work in tandem in Richter’s film. Whereas on the surface this interplay or montage of sound and image in film seems utterly obvious, in the rush toward narratological interpretation, the sound component of film is overlooked almost as often as is film’s sculptural dimension. This oversight is even more prevalent in discussions about art and cinema. Indeed, it can

be found in early debates centered on the introduction of sound to the seventh art. Thus, for example, Rudolph Arnheim in *A New Laocoön: Artistic Composites and the Talking Film* (1938), argues against the addition of sound, precisely because of cinema’s perceived relationship to the visual arts: ‘It is obvious that speech cannot be attached to the immobile image (painting, photography); but it is equally ill-suited for the silent film, whose means of expression resemble those of painting. It was precisely the absence of speech that made the silent film develop a style of its own, capable of condensing the dramatic situation.’⁸ René Clair, in *The Art of Sound* (1929) nostalgically observes that sound cinema ‘has conquered the world of voices, but it has lost the world of dreams.’⁹ And Alberto Cavalcanti, in *Sound in Films* (1939), recalls that there was a common adage amongst serious filmmakers and artists that ‘silence meant art’.¹⁰

Kracauer’s stress on music in his review of *Dreams That Money Can Buy* is important, for he suggests—in an argument similar to Canudo’s—that the addition of sound serves to mediate between film and sculpture while at the same time expanding the conceptual horizons of both media. My argument is that sculpture, while visually and temporally fixed by the filmic process, is also made dynamic with the addition of the acoustic layer. Indeed, in many cases sound in films about sculpture functions on different registers, expanding both the cinematic frame beyond the diegesis, and the parameters of the sculpture featured beyond the visual form.

Dreams That Money Can Buy is comprised of several episodes, each a collaboration with a different artist. Each episode includes fictional characters and the artists interacting in some way with artworks. The fourth sequence, *The Street Without Law*, includes the reworking of Duchamp’s kinetic *Rotorelief* sculptures featured in his early spiral film, *Anemic Cinema* (1926). In Richter’s film, Duchamp’s *Rotorelief* (*Chinese Lantern*) and *Rotorelief* (*Goldfish*), *Rotoreliefs* are spun to a soundtrack composed by John Cage. The speed of the rotation as well as details such as the fish circling in the cinematic frame are musically synchronized—notes and chords in Cage’s composition are matched to the visual blur of the fish, accenting both the audio and the visual components. Or, to put it crudely, in trade jargon, they are ‘mickey-moused’. As sound theorist Michel Chion explains: ‘Synch points natu-

rally signify in relation to the content of the scene and the film's overall dynamics. As such, they give the audiovisual flow its phrasing, just as chords or cadences, which are also vertical meetings of elements, can give phrasing to a sequence of music.¹¹ The modern music of Cage combined with the visually compelling and transfixing rotations creates a hypnotic audio-visual sequence that suspends time and place as it temporally distracts the spectator from the diegesis of *Dreams That Money Can Buy*. In this film, music compounds and exaggerates the abstract visuals working closely in tandem with them. Together they open up a meditative or contemplative space outside of the frame of the narrative.

Similarly, in *Ballet* Calder places his mobiles in movement to music composed by Paul Bowles. There are, however, two important differences between the way in which music functions in this part of the film and the way it functioned in the Duchamp segment. First, in the *Rotorelief* sculptures, mechanized and regulated movement is part of the kinetic design, whereas Calder's mobiles hang in a space, their motion produced by uncontrollable or chance elements of varying air currents. The effect of movement in the film is created by the camera as it moves around the suspended sculptures. The addition of non-diegetic music produces an increased dynamic effect. Second, in the Calder segment ceramic masks of human faces suddenly make an appearance amongst the mobiles. As the camera focuses in on these representational sculptures, the music changes becoming 'threatening'. Loud chords are struck, suggesting that a 'stranger' has entered into the interior realm of the abstract forms. The shift in music both announces and highlights the masks. Just as they are representational forms so too the music shifts to adopt narrative codes that indicate alarm and change. In the Duchamp sequence, spectatorial reverie and meditation are encouraged; in *Ballet* a dramatic insertion occurs rupturing the contemplative mood and opening the door to Calder's next sequence, *Circus*. *Circus* documents the artist's collection of small hand-crafted wire figures. Calder would transport these creations in a suitcase with him on his travels, taking them out occasionally to stage intimate performances. His mobile circus set included stock figures of entertainers, animals, and props. For *Dreams That Money Can Buy* Calder recreates one of these shows for Richter's camera. The close-up of the camera on the figures is set to the music of David Diamond

and produces a fascinating performance in which the spectator is drawn into the imaginary world. Music establishes the circus narrative as well as setting the pace and determining the movements of the sculptural figures. In both of the Calder sequences, the compositions by Bowles and Diamond expand the cinematic frame beyond the diegesis, and the sculptural parameters of the mobiles beyond the purely visual. The silent forms captured by the camera eye are amplified and dynamized through direct aural interferences to register a space beyond that which is visible and contained within the mute cinematic frame.

Léger's contribution to Richter's film, *The Girl with the Prefabricated Heart*, references his work in film, such as *Ballet Mecanique* (1942), as well as his paintings, such as *La Grande Julie* (1945). The sequence involves the animation or 'birth' of a female window mannequin and follows the figure through her meeting and courtship with a male mannequin, their engagement, and her flight from marriage. The camera films the static mannequins (reminiscent of Barbie and Ken dolls) whose physical positions change in a rudimentary fashion while their expressions remain constant. Importantly, the mannequins do not speak; instead the narrative is produced entirely by the sound track on which Libby Holman and Josh White sing the ironic ballad *The Girl with the Prefabricated Heart* by John Latouche. The lyrics provide the bittersweet narrative and push the sculptures into an animated diegesis. Further, the addition of a narrative structure or story that proceeds chronologically produces a concept of temporality and forward movement. At the same time, by visually matching the song to the mannequins, the ballad's meaning is expanded to include comment on the possible effects of mass production and advertising on constructions of the self.

The camera in *Dreams That Money Can Buy* does not discriminate between living beings and inanimate sculptures. Rather, it freezes what is before it on the same representational plane and renders all that it captures interchangeable. Animation and differentiation occur on the level of the soundtrack, the voice and non-diegetic music unfreezing the sculptures and placing them in a dynamic historical condition. The addition of sound enables inanimate objects and structures to 'speak' and tell their stories.

The sound track plays an important role in creating an added dimension to sculptural repre-

sentations in Richter's film. If cinema is essentially two-dimensional, then, as Claudia Gorbman notes, 'all sound exists in three dimensions; music as sound gave back, or at least compensated for the lack of, the spatial dimension of reality so uncannily depicted in the new medium.'¹² In addition to adding another spatial dimension, sound and especially music also enhances movement and temporality.¹³ An image can be frozen, can be static like a sculpture, but in order for music to come into being, it must be played. As the narrator of Jean Luc Godard's *Allemagne 90 neuf zero* (1991) explains with regard to the impossibility of narrating time, it would be 'a bit like holding for an hour one single note, one chord, and trying to pass it off as music.' Music, like time, must move forward in order to exist. If music is fast forwarded or put into slow motion, it is no longer the same music. In order for it to make sense, it has to follow a tempo and rhythm. The etymology of *cinema* goes back to the Greek word for movement. It is a double movement: not only the movement that is suggested within the frame but also the movement of the frames of celluloid as they pass through both the camera and the projector. Since music has to move in order to exist, perhaps it is more closely an inherent and integral part of cinema than the images. As sound theoretician Michel Chion observes in contrast to vision, sound 'presupposes movement from the outset.'¹⁴ He continues, 'As the trace of a movement or a trajectory, sound thus has its own temporal dynamic.' The movement of the music, like that of history, is inexorable; it cannot be frozen or stilled.

Sculpting Film

If in the films of sculptures that I have just discussed the camera animates the objects and expands their physical spaces beyond the visible into the acoustic, in works such as Robert Smithson's *The Spiral Jetty* (1972) the cinematic machine and the sculpture converge into a single entity, with sound as the central player. What I want to introduce here and come back to in a moment is the idea that this metamorphosis (whereby the represented subject – sculpture – becomes the projecting object – film –) opens the way for the audio-visual medium of videotape, which in many ways facilitates this convergence.

Smithson's thirty-five minute, 16 mm film, has all the lurid sensationalism of a gothic suspense movie, complete with a dead-pan voice-over and

delirious cutting. At one point, the narrator relates the legend of a large whirlpool in the Great Salt Lake that drained the water into deep underground tunnels in the earth leading to the Pacific Ocean. The spiral form of the sculpture, which in an aerial shot resembles a film canister, is thus related to the whirlpool, becoming a metaphor for the passage to the underworld. The film casts the dump trucks, grader, and large bulldozer used to construct the sculpture as large prehistoric dinosaurs, building the spiral with their engines screaming and the boulders loudly crashing into the shallow water. Much of the footage is shot from helicopters vertiginously spiraling and circling around the large finished work, jockeying to pin the reflection of the sun directly in its spiral core. Near the end of the film, the artist manically runs along the jetty while being tracked on film from a helicopter overhead.

On one level, Smithson's *Spiral Jetty* through its title references Chris Marker's *La jetée* (the jetty, 1962). Marker's self-reflexive film, composed almost entirely of still photographs, is preoccupied with how time and memory are encoded within the cinematic apparatus. The category of time is also central to Smithson's artistic practice, and he created sculptures based on the principle of entropy. Entropy, or the process of natural deterioration and decay, is an integral component of celluloid film. According to film historian Cherchi Usai, film contains within itself its own destruction and obsolescence, since each time it is projected its material base is eroded.¹⁵ The operative process in both the site-specific earthwork *Spiral Jetty* and the (non-site specific) film *Spiral Jetty* is entropy. The film can be taken as a documentary recording of the construction of the earthwork sculpture (before entropy set in) in Utah, but it is much more than that. It is also a work of art in its own right, and the earthwork sculpture is in many ways the stage set for the filmic product. It is precisely this ambivalence that interests me, as well as the manner in which the film and the sculpture are completely interlaced. What ultimately pushes the film beyond the status of documentary, I want to suggest, is the soundtrack.

Smithson clearly spent a considerable amount of time composing the soundtrack for this film. Like the soundtrack of Godard's *Histoire(s) du cinéma* (1988-1998), which has been issued as a separate audio CD, the soundtrack of *The Spiral Jetty* is so dense that it would hold together even if it were played without images. To begin with, there are the

diegetic noises that correspond to the images; the film opens with the image and sound of gurgling and bursting gas bubbles, followed by the noise of a truck, which we see driving down an unpaved road, and the film ends with the image of a helicopter and the chopping, whirring noises of its propeller blades. Then there are non-diegetic noises. These include the sound of a metronome ticking as pieces of paper tumble down the slope of what the voice-over describes as 'earth's history'. The back and forth ticking sound of the metronome parallels the alternating shots taken from the back and front of the moving vehicle on its way down dirt roads toward the Great Salt Lake. Another instance of non-diegetic sound is the electronic humming, vibrating, and echoing music that fills the acoustic space as the camera tracks the skeletons of dinosaurs. And finally there is the disembodied voice-over by Smithson who speaks to the spectator from beyond both the cinematic space and the geographic site of the *Spiral Jetty*. The grain of Smithson's voice haunts the film with quasi-philosophical and fantastical musings. But it is not just through language that meaning is constructed; this also occurs through the amplification and muting of diegetic sounds. In the sequence depicting the construction of the jetty, the noise of machinery is exaggerated in contrast to the almost silent shots of the lake during which only the slightest lapping noises are audible. The soundtrack thus radically transforms the viewer's experience of the earthwork. The sculpture and the lake may be fixed in time and space by the film, but they are brought to life by the soundtrack.

Andy Warhol's *The Chelsea Girls*, a split-screen film of 1966, pushed the intersection of sound, film, and sculpture in yet another direction. Here the soundtrack determines the montage of the two screens. The film, which is made up of various unedited scenes of unforgettable mayhem mostly shot in rooms of the Chelsea Hotel in New York City, is comprised of twelve thirty-five-minute reels, two of which are projected at any given time. Each of the reels has recorded sound, however, during the screening only one soundtrack is played at a time. Warhol left the decisions of the order in which the reels would be projected, how they would be paired, and which of the two would run with sound at any particular moment, to the film's projectionists. Thus, the composition of this film is significantly different at every screening. But what I want to highlight here is that the particular

screen that commands the viewer's attention at any given moment is determined by which one of the two runs with sound. The sound element, which Warhol recorded live, as it happened in the rooms, heightens the film's immediacy, and drives not only the narrative of the film, but also the viewer's perception.

A similar tactic - though not quite as radical since the role of the projectionist was not nearly as crucial as in Warhol's film - was used in 1975 by Godard and Anne Marie Mieville in *Numero deux*, in which the screen (video, I might add) is split into as many as four sections.

The practice of showing multiple images simultaneously has recently resurfaced in a proliferation of multiple-screen, projected-image installations in galleries and museums. Once again, it is the soundtrack of these multi-screen experiments that drives the viewer's experience of the montage. But now, in many of these gallery installations, the montage is three dimensional, as the screens are spread throughout the gallery space, which in turn not only shifts the filmic components away from the primacy of the visual and toward aural and tactile realms, but employs sound to sculpt the site of the exhibition and to direct the viewer through the space of the work. The effect is something like that of a mobile montage as the gallery visitor is led through the space, through the built environment, from screen to screen by aural cues. For example, Stan Douglas's *Hors-Champs* (off-screen, 1992) consists of a double-sided screen on which two separate but related image tracks are projected. A single soundtrack unifies the two visual recordings. In both sets of images Douglas' camera captures jazz musicians playing their instruments: one is the official 'authorized' version, whereas the other, like a B-side of a record, consists of all of the out-takes that were never used—those left 'off-screen/hors-champs'. The title of the work thus connotes sound that is off-screen, out of the recorded visual frame. However, there is more. As Stan Douglas explains, '*Hors-champs* presents the performance of four American musicians who either lived in France during the Free Jazz moment, or who still reside there today....Their presence in that country may be considered continuous with the history of black American musicians emigrating to France, which extends back at least as far as the arrival of Josephine Baker and Sydney Bechet on European soil. The music they play is based on Albert Ayler's

1965 composition, *Spirits Rejoice*, and is composed of four basic music materials: a gospel melody, an attenuated call and response, a heraldic fanfare and *La Marseillaise*.¹⁶ The soundtrack thus pushes the double-screen sculpture into a historical-political trajectory.

Installing Sound: Cinematic Sculptures

Since the mid-1990s, video installations and sound sculptures have been pervasive in contemporary art. Indeed, videotape and in particular DVD have replaced celluloid as the preferred exhibition medium. This phenomenon, in my view, is partly due to the facility which video allows for the manipulation of sound. Because the camera records sound simultaneously with images onto the videotape or DVD, an organic wholeness or unity exists between sound and image that is ontologically impossible with film. Video is also easier to exhibit. Even with the latest film technology (and there have been some significant advancements in this field), it is still easier and less risky in terms of technological malfunction, for example, to loop a video or DVD than it is to loop a film projector. In addition, timing devices, pre-programming of volume control, and the placement of acoustic panels, (all easily manipulated with video) contribute specifically to the channeling of sound and the construction of a sonic space. For example, the work of Tony Oursler depends on video technology. Oursler creates puppets on whose surface videos of speaking faces are projected. Often these sculptures are tucked away in corners or installed in other out-of-the-way places, and attention is drawn to their presence by their 'voices'.

Media artist Christian Marclay has produced several projects that examine the interrelationship of film, video, art, and sound. His 1995 *Telephones* consists of a sound collage of short movie extracts of easily recognizable voices of actors talking on the phone. Marclay's four-screen, fourteen-minute looped *Video Quartet* (2002) montages clips from films in which various musical instruments and songs are featured. The sound is carefully synchronized as in *Numero deux*, and the viewer's attention is directed by which screens have been amplified at any given moment. In Marclay's installations such as *Crossfire* (2007), the spectator is placed within a total sound-visual system in the center of four screens on which are featured shooting sequences - both images and soundtracks are played - from

violent films by such directors as Tarantino, de Palma, Scorsese, and Peckinpah. The spectator is caught in an audio-visual shoot-out or crossfire. More powerful than the images are the at-times-deafening explosions on the soundtrack.

Renée Green's *Standardized Octagonal Units for Imagined and Existing Systems* (2002) extends the field of film/video and sculpture into the highly ephemeral domain of pure sound sculpture. Also known as *S.O.U.s*, this work was first installed in the expansive gardens of the palace in Kassel, Germany during the Documenta XI exhibition. Interspersed throughout the wooded park were eight sculpture pavilions, each equipped with a 'listening bench' and a sound system broadcasting a recording of a voice whispering the names of places such as real and fantastical islands. The sound emanating from these often partially hidden sculpture pavilions served to attract and lead spectators from one unit to the next. During the evenings, in particular, the pavilions could only be detected by tracking their barely perceptible murmurings. One pavilion included a monitor on which played a fifty-three-minute videoloop entitled *Elsewhere?*. But the other units offered very little visual stimulus, transporting the visitor instead to imaginary places solely via sound. The visual component in these units was left to the visitor's imagination, and, of course, to a certain extent, to the memory of the one unit with the videotape. Green's *S.O.U.s*, was evocative of the many video/sculptural installations of the 1990s. But at the same time the sound units pointed toward pure sound installations and sound art. Green blurred the boundary between film/videotape, sculpture, and sound. Kracauer's observation that Richter's mode of filming sculpture in *Dreams that Money Can Buy* opened the way for art to explore hitherto uncharted temporal, spatial, and sonic dimensions comes into full fruition with the development of a sound art that expands sculpture significantly beyond the visual and into a predominantly acoustical space.

- 1 Unfortunately the films of Corra and Ginna have been lost, however for details regarding them see their essay *Musica Cromatica* (1913). Survae explained his relationship to music and color as 'L'élément fondamental de mon art dynamique est la forme visuelle colorée, analogue au son de la musique par son rôle.' Leopold Survae 'Le Rythme Colore' in *Les Soirées de Paris*, Paris, 26 July – 27 August 1914, pp. 426-429.
- 2 See for example Richter's series of *Rythmus* films (1921-1925), or Ruttmann's *Opus* studies (1921-1923), or Eggeling's *Symphonie Diagonale* (1924).
- 3 P. Wollen, 'The Two Avant-Gardes', in: *Readings and Writings: Semiotic Counter-Strategies*, New York 1982, pp. 92-104, pp. 92-104 (94).
- 4 R. Canudo, 'The Birth of the Sixth Art (1911)' in: Richard Abel (ed.), *French Film Theory and Criticism: 1907-1929* vol. 1, Princeton 1988, pp. 58-66, pp. 58-66 (59).
- 5 S. Kracauer, 'Kunst und Film Zu Hans Richter: Träume für Geld', *Neue Zürcher Zeitung*, 25.1.1948. Reprinted in: *Hans Richter: Filmist Rhythmus* (2003), pp. 123-126.
- 6 *Ibid.*, p. 126.
- 7 Richter's film is divided into seven parts, each scripted by an artist in the New York exile community. Part one, *Desire* by Max Ernst, is based on the surrealist artist's 1934 novel *Une Semaine de Bonté*; the second segment, *The Girl With the Prefabricated Heart*, is by Léger; part three, *Ruth, Roses and Revolvers*, is essentially a self-portrait of Man Ray; the fourth part, *The Street Without Law*, is by Duchamp; episodes five and six are by Calder and the final part is by Richter himself. For a more detailed analysis of the film and how it fits into Richter's filmic oeuvre see my 'Hans Richter in Exile: Translating the Avant-Garde', in: S. Eckmann and L. Koepnick (ed.), *Caught By Politics: Hitler Exiles and American Visual Culture*, New York 2007, pp. 223-243.
- 8 R. Arnheim, 'A New Laocoön: Artistic Composites and the Talking Film', in: E. Weiss and J. Belton (ed.), *Film Sound: Theory and Practice*, New York 1985, pp. 112-115 (114).
- 9 R. Clair, 'The Art of Sound' in: E. Weiss and J. Belton (ed.), *Film Sound: Theory and Practice*, New York 1985, pp. 92-95 (95).
- 10 A. Cavalcanti, 'Sound in Films', in: E. Weiss and J. Belton (ed.), *Film Sound: Theory and Practice*, New York 1985, pp. 98-111 (101).
- 11 M. Chion, C. Gorbman (ed. and trans.), *Audio-vision: Sound on Screen* (1990), New York 1994, p. 59.
- 12 C. Gorbman, *Unheard Melodies*, Bloomington 1987, p. 37.
- 13 As W. Uricchio has argued, 'Cinema drew upon the traditions of realist depiction consolidated by photography earlier in the nineteenth century (traditions derived from the rules of Albertian perspective, and in turn pushed into an apparent third dimension by the stereograph), and extended them into an illusory fourth dimension of duration and movement.' See his 'Ways of Seeing: The New Vision in Early Nonfiction Film', in: D. Hertogs and N. de Klerk (ed.), *Uncharted Territory: Essays on Early Nonfiction Film*, Amsterdam 1997, pp. 119-131 (122).
- 14 M. Chion, C. Gorbman (ed. and trans.), *Audio-vision: Sound on Screen* (1990), New York 1994, p. 9.
- 15 C. Usai, *The Death of Cinema: History, Cultural Memory and the Digital Age*, London 2001.
- 16 S. Douglas, 'Hors-champs, 1992', in: M. Archer and G. Hilty (ed.), *Voice Over: Sound and Vision in Current Art*, London 1998, pp. 25-31 (31).