Expanded Cinema: Art, Performance, Film
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of the Author'. Common to nearly all US work, however, was the exploration of new forms of subjectivity in art, and a reinvigorated expressionism that challenged the formal boundaries of art media.

The interpretation of expanded cinema in the UK, and in Europe generally, took a different turn. It was partly centred in the London Filmmakers Co-operative (LFMC) and ‘structural-materialist’ film around the early 1970s, but also included work, like David Dye’s Mirror Film 1971, Tony Hill’s Floor Film 1973 and Tony Sinden’s Behold Vertical Devices 1974, that was conceived for gallery space rather than the screen. In all of these, the projectors or monitors, the process and material, were primary signifiers in their own right, as well as channels for images. Similarly, Filmaktion’s multiple-screen gallery events also compelled new and different kinds of spectatorship. Less absorptive and participatory than in the American variants, the intent was to provoke differences in perception rather than new totalities and fusions.

Such differences were acknowledged in Annabel Nicolson’s incisive and insightful essay ‘Artist as Filmmaker’, December 1972, for the ‘artists’ films’ issue of the UK monthly journal Art and Artists. Nicolson distinguishes artists who make films, such as Dan Graham, David Dye and John Hilliard, from artist-filmmakers (she names Carolee Schneemann, Tony Conrad, Paul Sharits and the UK structural filmmakers). Although respecting both groups, she did not in fact think they should be confused with each other in their shared use of two or more screens. While conceptual artists extend into film the methods and concerns of the other current arts, structural filmmakers turn to ‘multi-screen work as a projection expanded event’. Expanded cinema is not just a question of using many screens, or of taking the light beam into gallery space. The key difference is whether or not a work is predetermined, is already made, as the record of an event that has previously taken place, and so can be recognised independently of its projected instantiation; or conversely, whether it is made in and through its projection, ‘initiating the drama in the film process’. The lines are never fixed, of course, and Dye’s hand-held projectors, moving frames and shifting scales in performance align this ‘gallery artist’ with the expanded cinema associated with the LFMC, just as (conversely) the street scene in filmmaker Tony Hill’s participatory Floor Film is preordained by being shot in advance of the live event for which it is designed.

Nicolson’s call for ‘initiating the drama in the film process’ echoes her citation in the essay of Paul Sharits’s famous clarion-cry to ‘abandon imitation and illusion and enter directly the higher drama’ of frames, filmdrops, emulsion, projection, screen, shutter, surface and the other material and retinal-psychological data of the film machine. This ‘higher drama’ is already lightly ironised by Sharits, perhaps glancing at film’s narrative mode in the same vein as the faint (or mock?) allusion to words and literature in the title of Anthony McCall’s wholly visual Line Describing a Cone 1973.

Ironic or not, the word ‘drama’ would seem to smuggle narrative into avant-garde film where it was otherwise suppressed, except that – across both continents, and for over fifty years – drama itself had long shed its
own narrative coil, questioning its own modes and discourse so that, as a fully modernist art, ambiguity and ellipsis were far more characteristic of it than classical narrative storytelling. The ‘dramatic’ cover of the issue of the magazine in which Nicolson’s article appears perhaps bears this out, if indirectly: a shot of Le Grice’s *Horror Film* 1972, a live work in which the silhouettes of Nicolson and Gill Eatherley appear to manipulate overlapping skeletons in three-strip colour projection, so that the barriers are merged between performer, image, screen and objects.

The same issue of *Art and Artists* carried other texts that defined or questioned expanded cinema in terms of film’s autonomy as an art practice and its ‘specific-site’: the gallery or the cinema? Even then, as often now, private galleries represented ‘artists who made films’, while artist-filmmakers turned to the collective self-help orbit of the LFMC. Nicolson names pioneering galleries such as the Lisson, Situation and Nigel Greenwood who showed time-based art. Their disadvantage was that, before loop projection (and video transfer), the films were only shown ‘at unadvertised times’ or when ‘a reasonable number’ of people had gathered. The artist-filmmakers turned to other means. Cinema spaces were cleared of seats for multi-screen projection events (as at the LFMC itself, in its various venues across central and north London), while independent or ‘public’ galleries, such as the ICA and Gallery House in London, the Bristol Arnolfini and Liverpool’s Walker Art Gallery hosted memorable expanded cinema shows throughout the 1970s.

Despite these pioneering ventures, private galleries were off-limits to most LFMC filmmakers, although in his *Art and Artists* article ‘REAL TIME’ – a term emblematically taken over from computer language – Le Grice argues that expanded cinema needs gallery-scale space to activate its key contribution to the film experience: the equivalence between shooting the film and projecting it. Also contributing to *Art and Artists* was Peter Gidal, with ‘Film as Film’ – an early version of his ‘structural-materialism’, before this term had yet emerged – and a review of Gene Youngblood’s *Expanded Cinema. Critical of Youngblood’s ‘romantic, technological idealism’,20 Gidal singles out for praise Youngblood’s own description of Michael Snow’s *Wavelength* 1967 as ‘a pure drama of confrontation’ – again, drama absorbed into process – in which the ‘spectator’s self-recognition is an experience rather than a meaning’.21 been undermined by the dispersal of the visual field in expanded cinema.

Gidal’s writings and films were a crucial influence on UK expanded cinema, but he himself made no multi-screen work. His own films were wholly concerned with repetition, identification, duration, focus and the act of viewing in the single-screen format. His characteristically close-up and hand-held camerawork positions the visual space of filmmaking in relation to a spectator who engages and disengages with that process. Typically, he uses sequenced and repeated shots to question recognition and difference as fundamental facts of viewing. The autonomy of these strategies would have been undermined by the dispersal of the visual field in expanded cinema.

But if his own practice was not compatible with multi-screen projection, his theoretical outlook was, especially in emphasising what
(in 1972) he called the ‘inherent properties’ of film, such as tactility, light, illusion, framing, the minimalist stare and abstraction. Many of the expanded and multi-screen filmmakers who figure in his writings (such as Materialist Film 1989) also acknowledge Gidal’s impact on them as thinker and polemicist, so that he was a material presence for UK expanded cinema even though he did not take part in its direct manifestations.

Perhaps surprisingly for a supposed purist, Gidal’s review of Youngblood’s then new book – while rightly sceptical of its claim that videocassettes would create a new genre of abstract films for home viewing instead of a mass market for conventional movies – cannily predicts the artistic possibilities of a process-oriented, spontaneous video-art. Video art did not in fact fully emerge in the UK until a few years later in the mid-1970s, notably through David Hall, whose earliest works for television in 1971 were still shot on 16mm. When video art did finally move into a wholly electronic domain, as in Hall’s Vidicon Inscriptions 1974–5, a feedback delay installation, it was largely cast in opposition to film as a medium and practice, partly because as an ‘emerging’ art form – video art was battling for funding and recognition in a crowded field dominated by filmmakers.

But there were also more substantial artistic differences between film and video. Video could aim for direct TV transmission – ‘art for television’ – and various attempts were made to construct TV ‘interventions’ based on Hall’s own Seven TV Pieces 1971. But video was also inherently more gallery-oriented and installation-based than film. It did not need darkened rooms, and the disposition of monitors in gallery space often had a sculptural or live-performance element in its making and showing. It was an electronic real-time medium (hence the title of Le Grice’s 1973 essay), and arguably it was closer to the other contemporary arts than film, since it had no links back into film history and narrative fiction. Despite the dominance of single-screen works that were easier to exhibit than complex multi-monitor installations, video was inherently an expanded multi-channel medium from the start, the electronic signal feeding all its audio-visual outputs.

The antagonism between film and video art communities lasted until it was made redundant by the spread of digital media (in fact, digital video) into all kinds of practice. But if the film-versus-video argument now looks quaint, this impression masks important developments by which late twentieth-century art practices embraced – and to an extent were swallowed by – new media arts. Formerly marginal activities such as video art have, in the different guise of ‘gallery projections’, become the art mainstream. No current exhibition of contemporary art is complete without them. But in the 1970s, video artists were unlikely to have defined their work as ‘expanded cinema’, or any kind of cinema at all.

The picture thirty years on is quite different, and recent rapprochements (some of them visible in this book) usefully relocate installation video art within a concept of expanded cinema that is no longer tied to the film medium. As developed by Malcolm Le Grice, the idea of the ‘Cinematic’ crosses media boundaries, recasting the founding notion
of kinetics for a digital environment. In the same way, the earliest forms of expanded cinema – by Vanderbeek, Warhol, Schneemann, for example – freely combined film and video projection. Paradoxically, many pioneers of expanded cinema were keen to jettison film technology. Even in the 1960s, many artists thought that the one-way traffic of cinema was an outmoded system for social communications based on interactivity. But neither the old nor the newer technologies had yet been fully enough explored in art contexts for them to be so prematurely cast aside or restructured. In this respect, the more utopian makers of expanded cinema were wandering into a far more commercialised future than they suspected. In the end, their ideas were co-opted by the industries whose ideologies they personally resisted, but on which they relied for sponsorship and technical support.

But utopian and ‘spiritualising’ kinds of expanded cinema were also challenged by other kinds that stripped down and explored the material components of their respective media – light and filmstrip projection in film, the video signal and cathode ray tube in video. In this respect, they exemplified the kinds of analytic investigation that could not be bypassed in a headlong rush to the multimedia future. Some were exercises in slow time; others dealt in repetition and cycles; and yet others exploited chance and non-synchronous events. All of these can be seen in installations by Chris Welsby such as Shore Line Two 1979 that deploy six loops of the sea in ‘wide-screen’ multi-projection, but equally they are found in pared-down live performances by Annabel Nicolson that use no more ‘apparatus’ than a box of matches and a text for two performers (Perilous Vision 1975) or a paper bird and a spinning microphone (Jaded Vision 1973). In their different ways, both artists evoke nature and natural processes, but with minimal metaphor and symbolism. Another kind of poetics of technics was associated with Filmaktion projection performances, discussed in detail throughout this book, and recently rescued from oblivion by a new generation of film scholars and curators. Filmaktion’s Polish equivalent, the Workshop of the Film Form in Łódź, was also a loose group with many branches and variants, albeit more structured institutionally by its association with the State Film School. It lasted through the 1970s and into the Solidarity period, when some of its members were self-exiled from their country under martial law from 1981–3. As international conceptual and materialist artists, they participated in the experiments with sound, image and motion that characterised the European avant-garde.

Perhaps best-known for such precise deconstructions of the film process as Wojciech Bruszewski’s Matchbox 1975, in which synch-sound is slipped out of phase with its image and then restored, Film Form artists also made expanded and live video events. At the Knokke festival in 1974, Józef Robakowski’s Mirror Performance gave spectators a visual battering when he projected his hole-punched flash-frame film Test 1971 directly at them, provoking journalists in the audience to fire back their flash-cameras in response. Paweł Kwiek’s Fluxus-like and conceptual Comment 1972 was a verbal film with no projection; instead, the artist in the auditorium read out a
text attacking the mainstream cinema. Robakowski’s two-channel video *Exercises for Two Hands* 1976 was a performative or gestural ‘body-video’ piece in which the filmmaker randomly waved two cameras in the air, relinquishing visual control over the material that is screened.

In these and related works, states historian Łukasz Ronduda, the Workshop of the Film Form aimed ‘to prove the absence of a correspondence between the world and language’, thus ‘releasing film from the hold of literature’. More formal and theoretical than New York live-art of the previous decade, the Polish avant-garde of the 1970s nonetheless recalls Schneemann’s and Robert Whitman’s anti-authoritarian stance even as it heightens the ideological agenda. It also expanded the cinema differently in the form of the ‘assemblage’ film, not in this case by assembling found footage but by joint participation in making the work. For 22x 1971, Robakowski gave twenty-two people the raw film stock on which to mark, scratch and chisel their own visual statements. The result is a group statement without camera or director. Paweł Kwiek’s assemblages took a different (and prescient) turn, in which non-professionals, including young people, made their own films as a form of social action and empowerment. Here, the aim is to expand and question cinema as an institution, an ambition still pursued by media radicals via digital technology. Of course today the means of production are in everyone’s hands – everyone, that is, with access to the technology – but this media democracy is also thoroughly privatised, to which alternative kinds of collective production are an antidote.

Much of this and similar 1970s activity was forgotten or suppressed for many years, as taste and media arts culture moved elsewhere through the 1980s and 1990s. It has been belatedly rediscovered by curators and audiences in recent years, and several contributors to this book rightly focus on the long gap between now-classic expanded cinema of earlier times and the fresh waves of multi-screen performative art that have since newly emerged. But expanded cinema never quite died. Instead it went more deeply underground, leaving its traces in the ‘little magazines’ that keep the flame of experimental art burning in hard times. An extensive – and scabrous – example is filmmaker Anna Thew’s 1998 essay ‘As Mainstream Flicks the Underground Flickers’, a review of British experimental film exhibition in the 1990s, published in the journal *Eyeball – Sex and Horror in World Cinema*.

Thew’s article is pugnacious and takes no prisoners. It veers from direct scatological attacks on the art and video establishment – an eclectic crew – to vivid insights into the fate of expanded cinema at its least visible, popular and (in the eyes of the art world) acceptable moment, when it was apparently about to be superseded by the rise of ‘gallery video’, a wholly different phenomenon. Thew herself provocatively programmed Lis Rhodes’s two-screen direct-film *Light Music* with Genet’s *Chant d’amour 1950*, Betty Boop cartoons, films by Takahiko Iimura, Derek Jarman, Jean Matheue, and – twenty years after *Aspen*’s publication of ‘The Death of the Author’ and avant-garde films in the same issue – a reading of Barthes’s *Camera Lucida* by New Romantic filmmaker Bruno de Florence, ‘in an abortive series of film-meets-
art-gallery at the MILCH [gallery] Charing Cross Road' in 1996. Light Music, a tough-minded, camerless minimalist work of 1975–7, was leading a second life at this point, including a 1997 'hybrid' screening with the Cage/Cunningham-influenced dance group RA in 'a 30 foot mega-projection'. ‘How can abstract flirt with camp so closely?’ Thew asked. ‘Well here it did. The link between Light Music and camp is its theatricality.’ Thew wrenched Light Music from its original moorings to make it ‘disco-like’, drawing out its ‘shuddering, pulsating frame’. Of other ‘direct’ or raw-stock films by Rhodes, Steve Farrer and Ian Kerr, she wrote: ‘The important thing is that such films can cost so little to make in relation to the dramatic environmental/theatrical effect they achieve.’ This intriguing idea – the dramaturgy of expanded cinema – presciently evoked the narrative thread in Jackie Hatfield’s own revisionist history of the genre.

Thew’s enthusiasm for the work that she vigorously screened in independent cinemas and the LFMC was only matched by her personal venom at what she saw as the orthodoxies of structural film and its supporters. For Thew, the Underground was ‘vital, throbbing, seething, bubbling in London’ in the late 1990s, an impression not generally shared but certainly true of her own programming at that time – under the rubric FLUX – which revealed classic expanded works as well as new experimental films to fresh audiences for Conrad’s The Flicker 1966, Balch and Burroughs’s The Cut-Ups 1966, Warhol’s Couch 1964 and Schneemann’s In Quest of Meat Joy 1969. Her personal battle to ‘trash the ghetto exclusivity of the fringe audience’ was wrong-footed, much to her anger, by the sudden rise to fame of a quite distinct kind of artists’ film in the exhibition Spellbound (Hayward Gallery, 1996). In 1998 Thew saw Douglas Gordon’s 24 Hour Psycho as ‘a betrayal of the underground, ignoring its history ... the next smart thing to be seen with after Damien Hirst’.

Plus ça change as far as Gordon and Hirst are concerned, but a different kind of change was on way for expanded cinema just when it seemed to be outmoded by the new popularity of video and film projection in the gallery (‘the gallery’ meaning here, of course, the public museum and the private gallery: expanded cinema by definition has always burst beyond the confines of the single screen and the black box). The return of the repressed, including the rediscovery by younger film- and videomakers of structural film and related work, sparked off new waves of activity from around the year 2000. Metamkine in France, Luis Recoder/Sandra Gibson and Bruce McClure in the USA, Dirk de Bruyn in Australia, Mirza/Butler and Simon Payne in the UK are among the many film and digital artists who have recently reinvented the art of multi-projection. Festivals such as Lumen (under Will Rose, Leeds), Kill Your Timid Notion (Dundee, London), Diversions (Edinburgh) and the important film workshop no.w.here (London, since 2004) have programmed and commissioned expanded cinema films and events. Older forms of ‘live-art’ expanded cinema have been rediscovered, and some of its original makers have been impelled to perform them again or to make new work, in both film and digital formats, after decades of lean years for multi-screen art.
Where does this leave the ‘troubled relationship’ between narrative and expanded cinema? In her AHRC research proposal, which was the springboard for the events that led to this book, Jackie Hatfield’s original contention was that expanded cinema and its narrative dimension had been historically neglected (including by me) in favour of single screen and abstract/formalist experiment. This charge opened up ‘the space of reception’, which Duncan White suggested as a guiding thread through the maze of expanded practice when we set out to answer at least part of Jackie Hatfield’s research question after her early and lamented death. Narrative codes, after all, imply the response of a viewer as a reader. Their reception is quite different from that evoked in and by abstract screen space.

We do not claim that we have answered the problem, and certainly not in the way that Jackie Hatfield would have done had she lived to see her project to fruition. And we still do not have a consensus on what constitutes narrative in expanded media, where the traditional narratological devices of character, identification and plot are at best vestigial and dispersed, or very often non-existent. But I don’t think that she equated narrative only or perhaps even mainly with storytelling. Her own multi-screen work was personal and allusive, autobiographical and enacted, but was never drama in any straightforward sense. Her preoccupations were closer to Carolee Schneemann’s sense of ‘the interpenetrations and displacements which occur between various sense stimuli’ and ‘between the body and the environment’, making a ‘total fabric’ in which ‘vision is not a fact but an aggregate of sensations’.36 And she herself had eclectic and wide tastes – and passions – in art and film, as witnessed by her enthusiasm for such non-narrative artists and mentors as Malcolm Le Grice and David Hall.37

But her question made us look again at some (until recently) neglected work, notably by Vanderbeek and Schneemann, two formative figures whose imagistic and incantatory multi-dimensional media art has at least as many claims to modernity and postmodernity as that of their more abstract peers;38 to detect more clearly the politics in the poetics of ‘confrontational’ media art from 1970s Poland to the contemporary gallery; and to explore the figurative dimension of post-formalist performative video by UK artists such as Catherine Elwes, Tony Sinden, Tamara Krikorian, Kevin Atherton, Kate Meynell and others who have been unjustly neglected in the wake of the spectacular-commodity explosion of gallery video and its consumerist assumptions.39 The development of mainstream gallery video as a genre in fact puts the vexed and troubling question of narrative into high relief, since the gallery’s current default setting is the acknowledged but unanalysed and uncritical acceptance of narrative cinema – replaying it, re-enacting it, duplicating it and fetishising its modes of address. Jackie Hatfield’s was a very different vision. Uniquely, she forced attention to the ‘higher drama’ of images and to the unseen margins of cinematic space in its expanded field.
1. See the reprinted manifesto by Carolee Schneemann in this book.

2. This essay, like the book itself, focuses on expanded cinema after the 1960s, but there is a long ancestry to expanded cinema in experimental light-play projection from the earliest era of abstract cinema, especially among Bauhaus artists. For a concise summary, see Wulf Herzogenrath, 'Light-play and Kinetic Theatre as Parallels to Absolute Film', *Film as Film*, Hayward Gallery, London 1979. Methuen sold this tradition by first referring to the new trend as 'absolute cinema' in April 1964, adopting the new term 'Expanded Cinema' a year later, but he was describing the same phenomena.

3. For other early stage, screen and projection projects by Wassily Kandinsky, Oskar Schlemmer, László Moholy-Nagy, Walter Gropius, Andor Weininger, and Roman Cemys see Chapter 5 of Berghaus 2005. But even prior to these, Berghaus illustrates an April 1917 production by the Ballets Russes in Rome of Feu d'Artifice (Fireworks) by the Italian Futurist Giacomo Balla, in which the choreography for moving and light-emanating objects translated Stravinsky's music into the abstract language of the stage (p.115).


7. Ibid.


10. *Movie Journal*, 3 June 1965, p.188.


16. Ibid. p.20.

17. Ibid. p.23.

18. McCall, himself, in interviews with Scott MacDonald (1982–6), called it a 'type of narrative film' (Scott MacDonald. *A Critical Cinema 2*, University of California Press, 1992, p.167). George Baker expands this to argue that narrative is 'still foregrounded' in *Line Describing a Cone*, whose 'title makes this inescapable, with its play on the word 'describing', and also because of film's inability in its temporal extension to divorce itself of a narrative dimension'. See George Baker, 'Film Beyond its Limits', *Anthony McCall: Film Installations*, Mead Gallery, Warwick Arts Centre, 2004, p.6. The claim that film and time-based media are narrative arts by definition is challenged by Malcolm Le Grice in his essay for this book, which argues that 'however powerful in our culture, neither perspective nor narrative are inevitable'.


23. See Malcolm Le Grice's presentation for *The Live Record* study day on expanded cinema, BFI Southbank, December 2008. Available online at www.rewind.ac.uk/expanded/Narrative/BFI_MLG_Talk_1.html

24. See the comprehensive online essay *Defining Filmaktion* by Lucy Reynolds, at the British Artists' Film and Video Study Collection, www.studycollection.co.uk/filmaktion/index.html


28. Ibid., p.67.

29. For Mirza/Butler's 2009/10 project *The Museum of Non-Participation*, curators and the public were invited to choose and organise the configuration of the work: see www.artangel.org.uk/projects/2009/the_museum_of_non_participation#.

30. See essays by Duncan White, Jonathan Walley and Steven Ball in this book.


32. See the essay by Nicky Hanlyn in this book. *Light Music* was shown in the former oil tanks beneath Tate Modern during the Expanded Cinema conference, April 2009. The film is now usually projected onto two opposing walls, with zoomers to create a smoke-effect, but They's review confirms that it was previously shown on the screens side by side.


34. Ibid.

35. See essays by Jonathan Walley and Steven Ball in this book, and interviews with artists.


37. Jackie Hatfield interviewed many UK artists of this era for *Rewind – Artists' Video in the 70s and 80s*, accessible at www.rewind.ac.uk/rewind/index.php/

38. See Mark Bartlett's essay on Vanderbeek in this book.

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This study of expanded cinema was initially proposed by Dr Jackie Hatfield, artist and scholar, based at the University of Dundee. Jackie was concerned that current thinking had been primarily formalist, and she made the case that the role of narrative in this field should be both acknowledged and explored. Her arguments won funding for a two-year research project from the Arts and Humanities Research Council (AHRC), to whom we are deeply indebted. Tragically, Jackie died before her own researches had properly begun, and it was left to the team she had appointed to complete the task, inspired by her enthusiasm and dedication. The project was now based at the British Artists’ Film and Video Study Collection at Central Saint Martins College of Art and Design (CSM, University of the Arts London) and the team comprised Dr Duncan White (key researcher) and David Curtis (project leader), with a steering committee of artists and academics: Malcolm Le Grice, A.L. Rees (RCA), Stephen Partridge (University of Dundee) and Chris Meigh-Andrews (University of Central Lancashire). As planned by Jackie, during the course of the project we invited other leading artists and experts in the field to contribute to our exploration. Many of the essays in this volume began life as contributions to two expanded cinema conferences we organised, though they appear here in much revised and expanded form. In order to extend the scope and balance of the book, we also commissioned a number of wholly new essays from artists, theorists and critics, to take up topics that were raised at the conferences and in subsequent seminars at CSM. We thank all the contributors for their insights, and for their patience during the editing process. Other very valuable contributions to our conferences together with the original versions of texts published here can be accessed via the website detailed below. Many other individuals have also contributed to the success of our project and deserve our profound thanks, notably, Mark Webber (independent curator), Stuart Comer (Curator of Film, Tate Modern), Rhidian Davies and Marko Daniels (Curators of Events at BFI Southbank and Tate Modern respectively, who helped to plan and hosted our conferences), Roger Thorp, Rebecca Fortey and Emma Woodiwiss at Tate Publishing, and our CSM colleagues at ICFAR and in Research. The streamed video record of both expanded cinema conferences, including some complete performances by artists, can be found at www.rewind.ac.uk/expanded

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Hooykaas, Mike Leggett, Adam Lockhart, Lynn Loo, Robin Martin, Bryony McIntyre, Jonas Mekas, Werner Nekes, Annabel Nicolson, Lis Rhodes, Carolee Schneemann, Felicity Sparrow, Chris Sharits, Sara Vanderbeek and Robert Whitman.
'Expanded cinema' is an elastic name for many sorts of film and projection event. It is notoriously difficult to pin down or define. At full stretch, it embraces the most contradictory dimensions of film and video art, from the vividly spectacular to the starkly materialist. Stan Vanderbeek's synthetic multimedia Movie-Drome of the 1960s, for example, is in high contrast to the analytic and primal cinema of 1970s Filmaktion screenings in the UK. Some kinds of expanded cinema widen the field of vision so far that they dissolve cinema itself as a separate entity, merging it into cybernetic space, as envisaged in Gene Youngblood's seminal book of 1970 or in Carolee Schneemann's manifesto-like performance scripts of the same era. Other variants seek film's ontology in the medium's simplest elements, such as the projector light-beam or the bare bulb. In 'paracinema', the notion of the film medium is itself questioned, and the cinematic is sought outside or beyond the film machine. Here, expanded cinema is a form of live art, linked to theatre and performance rather than to recorded media as such.

Such was the mixture in the air when the term expanded cinema was first used in the mid-1960s, notably by Vanderbeek and Schneemann in the context of their multimedia performances. Jonas Mekas in his regular Village Voice film reviews of 1964 through to 1966 also heralds an 'absolute' - by 1965, 'expanded' - cinema in the crucible of multimedia spectacle, optical experiment and film performance by the New York and international underground. In his prescient essay 'On the Expanding Eye', February 1964, Mekas first saw this trend in the flicker optics and techno-synaesthesia of Brion Gysin and Ian Somerville, and in the rapid-eye single-frame films of Gregory Markopoulos and Robert Breer.

In June 1964, Mekas widened his frame to include further subversions of the 'one-image' cinema. Glancing sideways at the 'multiple screens and multiple images' of the IBM World Fair display (designed by Charles and Ray Eames), Mekas links the handheld projectors, multi-screens and live-action at the 'Fantastic Gardens' event at Judson Church; Harry Smith’s slide and projector shows; getting rid of the photographic filmstrip, as in Stan Brakhage's collage-film Mothlight and Storm de Hirsch's painted and hand-scraped Divinities; Barbara Rubin's decision to show only camera-originales, not print copies, of her films; pure light films by Nam June Paik, Peter Kubelka
and George Maciunas; flicker films; and Salvador Dali’s proposal for contact lenses that ‘throw coloured images on our retinas while we sleep’.

Eclectic as it is – and this is only one of many such lists in Mekas’s reviews of expanded cinema, which soon added ‘dance that uses cinema integrally’7 – it focuses on an aspect of North American expanded cinema that continues into its latest variations today, approvingly called by Mekas in 1964 the ‘spiritualization of the image’.8 For Mekas, expanded cinema instantiate the primacy of the dream as an analogy for film, into which it might be finally absorbed by virtue of shared hypnagogic imagery and the dissolution of the senses. In what he termed ‘Baudelairean cinema’ Mekas found this too in the incantatory and surreal live-art film and projection performances of Harry Smith and Jack Smith. In this respect, Mekas echoes the late-Romantic sensibility of the fusion of all the senses, and the symbolist origins of the first European avant-gardes.

Other major manifestations of expanded cinema in the USA were drawn into this artistic netscape, even though their practitioners’ origins were in modernist painting (Schneemann, Vanderbeek) and theatre (Robert Whitman), not in symbolism. In one of his earliest uses of the term – ‘The Expanded Cinema of Robert Whitman’, June 19659 – Mekas explores Whitman’s combination of improvised play, disrupted or elliptical narrative, dressing up and film projection. In his next reviews, Mekas surveys the widest manifestations of the expanded arts, confounding expectations of medium-specificity even at a time when the avant-garde film was seeking a new kind of autonomy. His topics include ‘film happenings’ and ‘shadow play’,10 More on Expanded Cinema – Rauschenberg, Oldenburg, Whitman,11 the Exploding Plastic Inevitable, the new term ‘intermedia’ and USC artist Steve Durkee’s statement that ‘the strobe is the digital trip’12 (this in 1966).

The overall vision in this work, elaborated at the end of the decade by Gene Youngblood, had three aspects. The first was to melt down all art forms, including film, into multimedia and live-action events. The second was to explore electronic technologies and the coming of cyberspace, as heralded by Marshall McLuhan. The third was to break down the barrier between artist and audience through new kinds of participation. Each of these challenged existing notions of cinema as a commercialised regime of passive consumption and entertainment.

Among the many modes of expanded cinema there were of course differences. While some pioneered the utopian new field of computer graphic imaging, others – notably Jack Smith – sifted the dystopian debris of daily life and mass culture. In between were performance and projection events, from Jud Yalkut’s rock-based light-shows to the more aggressive and politicised (i.e. anti-Vietnam War) live art of Schneemann. There were many surprising conjunctions, as when Vanderbeek filmed Robert Morris and Schneemann enacting Morris’s duet-performance Site at the Judson Church in 1964, an extract of which was included in the inventive box-style magazine Aspen in 1967 along with historic abstract films by Hans Richter and László Moholy-Nagy and the first translation of Roland Barthes’s seminal essay ‘The Death
The Live Record
This first section of Expanded Cinema: Art, Performance, Film attempts to give some perspective on the diverse and interconnected history of expanded cinema. Experimental, event based and often collective in approach, expanded cinema is more a loosely knit set of practices than a coherent movement. It is international in scope, with artists and experimental filmmakers from America, the UK, Europe and Australia engaging at various moments in practices associated with expanded cinema. There are and have been arguably different expanded cinemas responding in different ways to the question of ‘cinema’, itself a concept that has expanded into fields of media culture more broadly. While each of the chapters in this section of the book and beyond consider a wide range of practices, there are a number of key works that stand out in significance and which are returned to and reinterpreted from varying perspectives. By looking at questions such as ‘liveness’, the use of the body, the camera, the projector, space, time and performance in expanded cinema, I hope, in this first chapter, to connect some of the key issues that might help map a form of filmmaking that challenges the relationship between the production and the reception of moving images in a variety of ways.

The Live Image
In her ‘Expanded Cinema: Free Form Recollections of New York’, September 1970, reprinted in this volume, Carolee Schneemann identifies a key moment in the history of expanded cinema. She describes the scene in New York City in the early 1960s and the movement away from a static painterly practice to a mobile, live and ‘kinetic’ engagement with the cinematographic image. It is a personal as well as collective journey marked and populated by the Judson Church Dance; Robert Morris; Robert Whitman; USCO; the Expanded Cinema Programme of November 1966 at the Filmmakers’ Cinematheque; Allan Kaprow and Claes Oldenburg’s happenings; the Fluxus concerts of La Monte Young; and the performances of Yoko Ono and Nam June Paik. This maelstrom of activity contextualises early expanded cinema within a broader ferment of artists, filmmakers, poets and musicians seeking artistic and social change.

Schneemann’s work is particularly relevant because of how she coupled the sense of a collective, physical energy with a re-evaluation of
vision and movement. Schneemann understood expanded cinema to be a form of 'kinetic theatre'. The principles of light and movement in film were applied to the actionist principles of Abstract Expressionist painting in order to move away from the body as image toward body as image carrier. 'We wanted to make visible ... we were visible carriers ... We moved we never stopped we became “figures” “images” mediatised by the media we had liberated.' Frustrated with appearing as an 'image' in the work of her male contemporaries, Schneemann incorporated the camera and the projector as performance tools. The happenings movement in the US and Europe used film primarily for the purposes of documenting and rehearsing events. Schneemann and the performers with whom she collaborated reversed this relationship so that the performer's body could reoccupy the film image. She 'inhabited her pictures as a real person.' As Schneemann notes in retrospect: 'I had to get that nude off the canvas, frozen flesh to art history's conjunction of perceptual erotics and an immobilising social position.' It was a question of exploding the two dimensions of the image by exploring the physical conditions of cinema, rechanneling 'visual imagery as sensation'.

In Snows 1967 (fig.1) Schneemann produced a kinetic theatre piece combining performance and film in order to 'extend the visual densities' of the live event. Viet-Flakes 1965, Schneemann's 16mm film made using close-up lenses and magnifying glasses to 'travel within' newspaper photographs of the Vietnam War, was projected onto a white disc at the back of the stage, while dual projectors swung 360 degrees across the space. Performers improvised their various roles within fixed sequences, responding to the images, each
other and audience-activated electronic systems so that ‘movement and related imagery spilled onto’ the “snow bound” audience.” Part of a series of performances which incorporated film, including Ghost Rev 1966 and Illinois Central 1968, Schneemann’s work from this period held as its central purpose a concern with reoccupying the uncanny distances of the cinematic image and its related forms of media reception.

The evidence of the personal experience of the Vietnamese was reaching us at a great remove, through reproduced photographs – the situation depicted in a twilight zone between its unknown outcome and the ambivalent role played by the photographer.5

Film reanimated the static and estranged images while the performance reanimated the films, producing an expanded cinema located in the production and transmission of images. Images of horror and slaughter became a site of habitation and action. Schneemann’s instinct was to ‘attack’ the ‘media celluloid’ and its ‘flat linear dimension’ to give it ‘flesh’ by making it visceral and ‘live’.

Expanded cinema is often associated with liveness, ‘immediacy’, an emphasis on ‘primary experience’ and the directness of viewing. Schneemann combined film projection, slides and live performance to create a living and visceral ‘kinetic theatre’. Steve Dwoskin describes expanded cinema as being a ‘live relationship’ that is ‘within the audience’ and is ‘constantly shifting’.5 Stan Vanderbeek, in many ways a pioneer of live multi-projection, calls for an expanded cinema that acts as a ‘direct form of communication’, a live form of what he calls ‘culture intercom’.

In the UK, the collaborations between Mike Leggett and Ian Breakwell, such as their performance Unword 1970 (fig. 2), incorporated 8mm footage of performances filmed on previous evenings, screened to accompany the live event.

The ‘liveness’ of expanded cinema develops out of a broader movement in the avant-garde symptomatic of what Stuart Laing identifies as the ‘underground paradigm of the live event’.5 The influence of cinema, television and other media technologies on the temporal conditions of space and consciousness (or better, space and the conditions of perception) was challenged, Laing suggests, by a branch of experimental filmmaking and artistic activity that emphasised ‘the cultural process (“performance”, “happening”) rather than the fixed product’.5 At a time when broadcasting technologies and live media were beginning to collapse space and time – not just in the cinema auditorium but in the living room, the street and the workplace – artists and filmmakers created live expanded events in order to disrupt the usual channels of production and consumption within the new live culture.
The Past Present:
Time, Media and Space in Expanded Cinema

Annabel Nicolson’s *Reel Time* 1973 expresses just such a concern for the fleeting, the ephemeral and the unfixed quality of the live or living event. As it is being projected, the film, showing the artist operating a sewing machine, is passed precariously through an actual sewing machine operated by Nicolson. Another projector is positioned in order to throw her shadow onto a second screen. Members of the audience are called upon to read from the sewing machine’s instruction manual in the intermittent light (Amy Taubin, for instance, was one reader at the Festival of Independent Avant-Garde Film, London, 1973). All traces of what is a multi-faceted film action exist only in a handful of photographs, written accounts and the memory of its audience. The film itself is repeatedly punctured and erased by the sewing machine. As with Schneemann’s work, ‘vision is not a fact, but an aggregate of sensations’ (see Schneemann’s *Free Form Recollections of New York*, pp.91–7). Nicolson’s work points to the dilemma of assessing evidence as separate or distinct from the work, a dilemma that is in itself part of the broader conceptual position of expanded cinema. With a Fluxus-like antagonism towards any form of aesthetic objecthood, early works associated with expanded cinema challenged the value-status of film products that circulate in the commodified arena of cinema by existing only in the present tense of performance. Nonetheless, in order to properly understand expanded cinema, notions such as ‘immediacy’, ‘liveness’ and the ‘present tense’ need clarification. UK expanded cinema of the late 1960s and early to mid-1970s, such as Nicolson’s *Reel Time*, was
characterised by attempts to challenge the 'economic and social function cinema has been called upon to perform' by prioritising the role of the viewer and focusing on the immediate experience of film projection. Malcolm Le Grice's work After Leonardo 1973 is symptomatic of this repositioning of the viewer. After Leonardo (fig. 48, p.164) is a live multi-projection performance using six screens in which a paper reproduction of Leonardo da Vinci's Mona Lisa is pasted to a blank screen; on the other screens various filmed images of the same reproduction appear and disappear. Le Grice – like other artists at the time – is interested in an 'activation' of the role of the spectator making connections between the various images. With all its alternating roughness, After Leonardo is a work in and about the present tense of experiencing a work in production.

Yet it may be more complicated. As the piece has been repeatedly performed it has become to some extent a study of the present through or in terms of its performances in the past. The photocopy of the Mona Lisa seems to be playing on this in a way that is similar to Schneemann's use of newspaper images. Reproduction and re-filming are at the heart of the work. Indeed, documentation of previous performances of After Leonardo has been subsequently integrated into the performance. In some versions Le Grice reads aloud the dates and locations of previous showings. More recently, actual footage of previous performances has been embedded into the material creating an almost phantasmagorical engagement with its previous incarnations. Repetition and reanimation are an important aspect of the work's presence or liveness.

In After Leonardo, a section of Sigmund Freud's essay on Leonardo da Vinci is read aloud as a part of the film's soundtrack, citing Freud's notion of 'perseveration' (obsessive repetition) and the way in which childhood memories relate to actual childhood experiences. Leonardo's famous and somewhat fantastical recollection of a vulture landing in his cot when he was a baby and thrusting its tail into his mouth is not so much remembered directly but constructed from the evidence of various accounts of the event repeated to (and by) Leonardo during his childhood. Through repetition (or perseveration) it has become a tangible event constructed as much through the process of remembering as through direct encounter. Similarly, After Leonardo situates itself in terms of the repeated account, as the reproduced moment of projection becomes the material of the film.

After Leonardo's apparent process of seeing and re-seeing – the way in which we see differently once something seen before is seen again and again in an altered context – suggests that the relative position of artist and viewer is not only interdependent but interchangeable. (Leonardo himself reused or copied the features of the Mona Lisa in a number of his works.) Indeed, just such an investigation of the cinematic (as past and present) in relation to the spectator's so-called 'immediate' experience – whether it is the immediate but distant past of an overseas war or the very personal memory of a character-defining experience – seems to have remained a consistent part of what is meant by expanded cinema, particularly in terms of the space occupied by
the viewer and how the space or context of reception can itself act as a kind of material in the work.

As with Nam June Paik's Fluxus work Zen for Film 1962, which gathers the marks and dirt of its previous screenings, William Raban's 2'45" 1973, engages with these broader conceptual concerns directly. Inspired by John Cage's score for chance happenings 4'33" 1952, 2'45" is a live rendering of the record in production (see fig.9, p.46). Over the course of several screenings a reel of film is projected and simultaneously filmed in an auditorium. The film cannot be re-presented unless it is being re-filmed. The primary experience of watching and the secondary experience of representation are to some extent merged, and the film-performance acts as a 'live record' in the making. Immediate past is fused with immediate present to create what Raban calls a 'mise en abyme ... of space and time'. More to the point, the work sets up a tension between space, time and the medium.

Advocates of performance art often decry the use of media in order to document and so commodify the moment of performance. Peggy Phelan calls for an 'ontology of performance' based on 'representation without reproduction':

Performance's only life is in the present. It cannot be saved, recorded, documented, or otherwise participate in the circulation of representations of representations ... Performance occurs over a time which will not be repeated ... and disappears into memory, into the realm of invisibility and the unconscious where it eludes regulation and control.

Yet it is precisely in the way expanded cinema engages with the so-called devices of 'regulation and control', the media of reproduction and the systems of memory and experience that since the invention of cinema have become an integral aspect of everyday experience – the camera, the projector, the video monitor, the reproduced image – that allows it to challenge, somewhat uniquely, the modern mediated conditions of space and time. Cinema, a medium of the past, is re-engaged with as a set of devices in and of the present.

Space
One filmmaker who firmly occupies just such a terrain is Werner Nekes. In 1967 Nekes made Schnitte Für ABABA, a performative work in which the projector becomes a mobile instrument. In an unlikely reversal, the projector, operated by Nekes, is carried like a camera, traversing the immediate
environment and projecting the film onto walls, floors and people. Found footage of policemen is used as the film’s leader material, while coloured leader, normally meant as a message to the projectionist (green leader is an instruction that the film is at its beginning; red, that it is at its end – a clear message to a clearly defined recipient, something other artists such as Morgan Fisher have played on more fully in works like Projection Instructions 1976) is cut into a pattern of red and green flashes and becomes a play on film as a medium for carrying and delivering information. The secondary and hidden accessories of the medium are its visible content. In fact, the very notion of the film’s ‘content’ is to some extent negated, or at least made subordinate to the ‘action’ of the film. Passing precariously through the space, the cinematic material has to be ‘read’ according to the conditions and context of an audience. The space or immediate context of the film’s projection (the conditions in which it is received, conditions normally made invisible as a part of cinematic presentation) becomes the ‘content’ of Schnitte Für ABABA.

Nekes was part of a Hamburg group of filmmakers and artists in the 1960s who, like Schneemann in the US and the Filmaktion group in the UK, identified with the radical movements of the time. Film (and cinema) was considered to be a tool for social and aesthetic activation, not through its content so much as through its direct use. It signals an important moment in a history of filmmaking that engages with the conditions and realities of representation; a moment in which film moves out of the traditional projection space.

VALIE EXPORT’s Tapp und Tastkino (Touch Cinema) 1968 (fig.4) is an infamous example of such transgressions. EXPORT, a friend of Nekes and herself part of an important generation of Viennese artists who combined various forms of media and performance, seeks to split film up ‘into its formal components, before putting them back together in a new way’. Formal components such as the screen, the theatre, the projector, light and celluloid are all subject to a displacement or reordering – or in some cases done away with completely. For Tapp und Tastkino EXPORT positioned herself outside cinemas on busy city streets with a box strapped to her chest. The box, open at both ends, was made to resemble a stage, and passers-by were
solicited to reach inside and ‘touch EXPORT’s bare breasts hidden behind the box’s makeshift curtain’, expanding (or perhaps more accurately, collapsing) the boundaries of cinematic space in order to demonstrate how the physical realities of gendered relations are constructed as part of cinema-going.19 For EXPORT, the question of expanded cinema was a question of ‘Expanded Reality’ (see her essay on page 288 of this book). Artists made films like Tapp und Tastkino and Schnitte Für ABABA in order to demonstrate that the mechanisms of cinema are not simply used to represent social environments but have become part of how social environments are constructed.

Toy Bodies/Double Visions
This direct use of the body, as we have seen in the work of Carolee Schneemann, is often a vital aspect of expanded cinema. By replacing the screen with the body, Nekes’s work Operation 1968 (fig.3), like EXPORT’s Tapp und Tastkino, transforms the supposedly ‘neutral space’ of the usually ‘invisible’ screen into a less stable, living surface that is already marked. Footage of what appears to be quite invasive abdominal surgery is projected onto the filmmaker’s bare torso creating an uncanny sense of displacement. A number of experiments induce a similar form of doubling. Malcolm Le Grice’s Horror Film I 1971 combines the physical, live body with colour projections, shadowplay and the aural recordings of the artist breathing. Peter Weibel’s Action Lecture 1967, in which the real body and its representation overlap (a film is projected directly onto Weibel’s body as he addresses the audience), calls for a new cinematic apparatus in which ‘the world is no longer simulated; rather the possibility of producing the world is demonstrated’.16 Rosalind Krauss notes that such a tactic of doubling the real and its representation disrupts the normalised channels of experience. As reality and its representation take on equal status, or become equally material, subject to the conditions of their construction, a field of duplicity and multiple perspectives is opened up. ‘In being seen in conjunction with the original, the double destroys the pure singularity of the first.’17

Many of these physical expanded cinema strategies are reminiscent of the pranks and hoaxes of early Dada and its iconoclastic severing of the image from its support. The doubling of the real body with its representation in works like Nekes’s Operation, EXPORT’s Tapp und Tastkino, or Weibel’s word projections is in some ways a visual and tactile joke that puns on the idea of something being ‘live’ (or ‘real’) – a living organism – in a way most reminiscent perhaps of Marcel Duchamp’s Anemic Cinema 1926, where tricks of the eye and sleights of language combine to disarm the audience. Duchamp’s ‘roto-reliefs’, mechanised, illusionary devices, trick the brain into perceiving spatial depth – into experiencing a physical encounter with a bloodless machine. Coupled with the revolving rhyming sentences, Duchamp critiques the notion of ‘looking into’ (cinema as a kind of entry point) as a seductive and auto-erotic site of exchange. Indeed, the works of Nekes, EXPORT, Weibel and Duchamp share an impulse for what Thomas Elsaesser calls Dada’s:

Expanded Cinema: The Live Record
model or metaphor for representing the relation of body to social environment, or even for conceptualising the art-work as event, rather than as object, no longer as products but as circuits of exchange for different energies and intensities, for the different aggregate states matter can be subjected to between substance and sign through an act of transposition, assemblage, division, and intermittence. The cinema, in other words.\textsuperscript{18}

Like Duchamp, Nekes, who is well known for his extensive collection of early optical devices, is interested in ‘cinema as an optical toy’ (or for Duchamp, a ‘philosophical toy’), an interest he shares with a number of practitioners associated with expanded cinema.\textsuperscript{19}

While its direct origins may well lie in the ‘live paradigm’ of 1960s art movements, expanded cinema often operates as an archaeology of cinema’s elusive origins, informing a recurring interest in outmoded optical technologies. Yet the archaeological process is complicated. On the one hand cinema has its origins in the technological analysis of movement; on the other, they lie in the theatrical application of these new devices.\textsuperscript{20} Indeed, the sense of spectacle in expanded cinema (in works such as Operation, Tapp und Tastkino and Action Lecture) suggests an engagement with these mixed origins and seems to inform its hybrid character, combining a Duchampian fascination for the analysis of seeing with an interest in surprise, displacement and physical interaction. Nekes has described how the thaumatrope or ‘miracle turn’ helped him investigate the ‘persistence of vision’, while Tony Sinden claims that his first piece of expanded cinema was made using a magic lantern projecting an image of his disembodied head onto the snowy street outside his window.\textsuperscript{21}

Jeff Keen is perhaps the best example of a filmmaker exploring these kinds of optical theatrics, though his use of toy products designed for children. Kid cameras, kid slide projectors and kid drawing devices, not to mention toy soldiers, comics and magazines, all feature in his work. Well versed in Dada and Surrealism, Keen tends to shirk formalism for an intuitive energy by untethering expression from formal assumptions regarding language. He develops a personalised iconography of informal relationships inspired in equal measure by Surrealism and Concrete Poetry (in particular the work of Bob Cobbing, who provides the soundtrack for Maruo-Movie 1967), as well as films of the US underground, notably the work of Jack Smith. A kind of pop scavenger, Keen uses the popular motifs, themes and mythologies of post-war American cinema as the raw material for his single and multi-screen films and videos. He also integrates live performance into his work—not only in early experiments such as Autumn Feast 1968, which includes a live soundtrack, but in later works where he develops the Surrealist persona of Dr Gaz. ‘Ray Day Film [is] sometimes a full-scale performance piece with four actors, sometimes a one-man show, sometimes a multi-screen barrage of 16mm, 8mm and colour slide images set against multi-source soundtracks.’\textsuperscript{22}
Double Screens and the Everyday
Within his particular brand of expanded cinema, Keen makes innovative use of the double-screen. In *The Pink Auto* 1965 (fig.5), a group of loosely identified characters traverse alternating but recognisable landscapes and pursue unspecified goals within a shifting thematic and mythical interplay. Part of *The Pink Auto* is situated in the city dump where Keen and his protagonists build mock movie sets from reclaimed waste products. Reminiscent of Pop and Junk Art (although Keen claims his key influence is André Breton), the work has a tactile directness in which everything is raw material including places and landscapes of common experience. An abandoned Volkswagen Beetle, in itself a visual joke aimed at the motion and mobility of the movies, is painted pink in an act of melancholic transformation, as paint becomes a kind of magical substance (like film) of conversion and re-appropriation. The two screens suggest Keen is holding a comic-book mirror up to the world exploring the way illusion, fantasy and the real are more commonly filtered through the lens of cinema.

Some of the earliest and most influential experiments with double-screen films were made by Andy Warhol. *Outer and Inner Space* 1965 is a clever mirror work in which Edie Sedgwick appears to be in conversation with a televised version of herself. *Chelsea Girls* 1966 is similarly dissonant, as the usual parallel editing of cinematic time is replaced with simultaneity. In both works it is less a question of what is on the screens than what is between them, as characters talk to unseen protagonists, voices collide, and the increased uncertainty of what is out of frame creates an odd sense of claustrophobia within the screens themselves. The two screens both depend upon and nullify one another.
Similarly, Keen seems to situate his work in the space between given settings as they are experienced (the streets of an English seaside town) and the experience of a setting as it is represented in the movies (the western, war films, noir and suspense thrillers). Hence the doubling of the screens is used to set up odd moments of feedback, strange parallels and juxtapositions, as well as moments of crossing from one world to another. The combining and crossing-over creates a charged form of cultural association through which Keen is able to reconfigure the found narratives of an ‘environment in which a person’s relationship to things is more stimulating than the things found in it’. As in Warhol’s double-screen films, protagonists perform across the boundaries of inherited and enacted identities like the plastic dolls (male and female) that melt and dissolve in Keen’s films, literally and figuratively pulping the substance and nature of prefabricated models of identity, whether familiar or fantastical.

Keen would often directly integrate the domestic by incorporating Super-8 home-movie footage of his immediate family. Memory, dressing up, ‘making a scene’; the films show a given set of behaviours not so much captured as induced by the presence of the camera. We find this boundary crossing of the spheres of everyday life in other double-screen expanded cinema works, such as Gill Eatherley’s task-oriented work Aperture Sweep 1973. In this live performance, the left screen shows a silhouette of Eatherley sweeping with a broom on a white surface (see fig. 43, p. 151). The right screen is clear and becomes a field of activity for the performer, Eatherley herself, who uses a broom attached to a microphone to produce a loud sweeping of the blank screen. The arrangement is organised around an almost physical boundary between the two screens as Eatherley concentrates her efforts on sweeping the edge of each screen, marking the gendered thresholds that often define the physical as well as psychological boundary of the film image and the real situation of the film’s projection.

Like Keen, Eatherley collapses the boundary between cinema and everyday life. There is also an obvious tension between the performer (the real Eatherley) and the representation of the performer as she tries to imitate what’s on the screen. The performance (but not the film) ends with the theatrical rejection of her labour. As in the work of Mary Kelly, Joan Jonas, Sally Potter, Catherine Elwes or Martha Rosler, Eatherley uses a revised moving-image form in order to make strange the manner in which roles are learned by imitating what we see on screens. A similar technique is used by Sally Potter in her early double-screen film Play 1971. Just how an image is performed or how it is made transferable through imitation and repetition is again an important characteristic of expanded works. Aperture Sweep throws into relief the relationship between on-screen and off-screen material so that the processes of identification (physical, cultural and gendered) of cinema and filmmaking are openly disrupted. Eatherley, like Schneemann, Nicolson and others, reoccupies the image by opening up and activating the way in which it is made.
Participation: Film and Video

Much of this work takes as its cue the performer impersonating the live construction of an on-screen persona (another good example of this is Marilyn Halford’s work Hands Knees and Booms-a-Daisy 1973). In some works, this kind of participation in the construction of identity via the screen is extended to the audience. In her work Auf+Ab+An+Zu, first performed in 1968, Value EXPORT draws over the top of the projected image, attempting to trace the outline of a figure. Once demonstrated, the action is repeated and EXPORT invites spectators to participate in the drawing/painting of the film. The invitation suggests that authorial control is displaced and responsibility for how the film is completed is handed over to the audience. The projection event becomes a site of interaction rather than one based on the fixed and regulated role of the audience.

This takes further Schneemann’s use of electronic trigger devices and is perhaps where early video art becomes an important part of the development of expanded cinema. EXPORT herself used video as soon as it was available, as part of performances prioritising the presence and role of the viewer, performances that begin to critically explore the question of location, participation and audience interaction. ‘The technical flexibility of video made possible the stage-management of time and space, pioneering the way for subsequent developments in interactive media and participatory cinema, it lent itself to delving inside its mechanisms, to looping and networking multiple channels, or to combining recording and playback technologies as gallery artefacts.’

David Hall’s Progressive Recession (fig.6), first installed in the Serpentine Gallery in 1975, is a good example of this revision of locatedness and reception in practices associated with expanded cinema. As the viewer moves through the space, he/she is progressively distanced from his/her image. The image is not being recorded but is being played or fed back by what Hall calls the ‘analogical mirror’ of the video-camera-monitor circuit. Suddenly, video made possible an instantaneous sense of interaction pointing to a new set of spatial and temporal conditions to be considered in terms of any new ‘cinematic environment’. Like Bruce Nauman, Tina Keane or Stephen Partridge, Hall created a potentially participatory piece in which the viewer becomes part of the work. Symptomatic of an altered field of authorship, the subject of the piece becomes the role of the viewer observing not only the work but his or her engagement with it.

As with interventions in the cinema, the gallery is used in a work like Progressive Recession as an important site of experimentation in which artists and filmmakers can test the way media is received as well as its impact on and relationship with an audience. 101 TV Sets, a collaboration between Hall and Tony Sinden, was also installed in the Serpentine Gallery in 1975 and operates in sharp contrast to the sense of participatory engagement of Progressive Recession. A work of dissonant, multi-channel overload, it echoes something of the visual overload associated with Vanderbeek’s Movie-Drome 1966. Yet what can often get obscured by the absorbing narratives of art history
is the inherent sense of being between that characterises expanded cinema. Filmmakers exploded the cinema, revolted against its concrete and cultural constraints. There was no easy or seamless transition to the gallery. It was much more of a movement back and forth as process and event took the place of product and distribution. As with 101 TV Sets, it became a question of establishing new contexts of reception as an essential aspect of the work’s production. Developing out of ideas from his time in the Artist Placement Group in the mid-to late 1960s, it is the context of reception that Hall not only concerns himself with, but utilises as the very material of his work:

By context I mean the inevitable, unavoidable consciousness of physical environment through to perceived cultural framework – a phenomenological issue. A concept, once manifest externally in whatever form – can’t be read in isolation as though in a void, but is necessarily read within its specific context and this context invariably influences, even shapes, that reading. With this recognition the choice of context must necessarily be given equal consideration from the outset, the two integrated are the condition of a perceived experience.36

Combining his interests in film, cinema and video, Hall expanded his practice into television, creating three-minute interventions that interrupted national broadcasts in 1971. As Jackie Hatfield has pointed out, ‘with his seminal televisual artworks … Hall coalesced his ideas about context and
concept; which he argues, are inextricably linked. The cinematic is expanded into the most immediate conditions of perceived experience in Hall’s work. The gallery was not an answer; it was a point of transition, part of a restless enquiry into reception and experience that moved between media and the spaces of reception. Whether it is the cinema, the gallery, domestic interiors or the street, works associated with expanded cinema engage with the context of reception and the physical conditions of vision, activating received narratives that define the means of cinematic production and communication. Expanded cinema sets up what Paul Sharits defines as ‘locational’ moving-image works; it acts as a means of creating visual situations defined by their potential for radical change and altered forms of perception, unfixing the stable qualities of traditional cinema and its products.
5 Ibid., p.76.
6 Dwoskin 1975, p.236.
9 Ibid.
11 Jean Piaget, whose writings have had a perhaps more lasting influence on Le Grice, developed similar observations: ‘The existence of false memories... offer themselves to the conscious with the same characteristics of vividness or apparent reality as true memories. I myself for example, have a very precise, very detailed, and very lively memory of having been the object of a kidnapping when I was still a child strapped to my carriage. I recall a series of precise details of the site of this adventure, the struggle between my nanny and the thief, the arrival of passersby, the policeman, etc’. When I was fifteen, the nanny wrote to my parents that she had invented the whole story and that she herself had been responsible for the scratches on my forehead, etc. In other words, about the age of five or six, I must have heard the story of this kidnapping which my parents then believed and, using this story, I invented a visual memory which today still remains’. Jean Piaget, The Child and Reality, New York: Penguin, 1972, pp.43–4.
12 See William Raban’s essay in this volume.
13 Phelan 1993, pp.147–8.
16 Michalka 2004.
18 Elsaesser 1986, p.15.
19 House in his museum in Offenbach, the collection has been displayed internationally, including at the Hayward Gallery in London (2004–5).
20 ‘The pre-history of cinema, as mentioned earlier, comprises two quite distinct strands: that of the spaces and places where the new mass-public gathered for entertainment – fairs, circuses, travelling opticians, vaudeville and nickelodeons – and that of the optical or scientific toys, such as the zoetrope or the phenakistoscope, where images – painted, printed or photographed – deceived the eye into perceiving movement and continuity where there was merely intermittence.’ Elsaesser 1986, p.23.
21 Tony Sinden in correspondence with the author.
24 See Judith Mayne on the use of ‘thresholds’ in avant-garde films made by female artists in Mayne 1990.
26 Quoted in Jackie Hatfield, ‘Another Piece: David Hall’, Hatfield 2006, p.201. The Artist Placement Group (APG) was founded in 1966. Its objectives were in fact complex and sophisticated: to initiate a long-term pattern of disturbances within the power structures and information flow of the organisations involved, taking effect perhaps over a quarter of a century, in order to have a profound influence on the nature of society. Members included John Latham and Barbara Stveni – but also Stuart Brisley, Ian Breakwell, Garth Evans and David Hall. See Mick Hartnay, ‘INT/VENTIONS: Some Instances of Confrontation with British Broadcasting’ in Knight 1996.
From Invisible Orchestras to Invisible Cinema

The oblation of the spectator by the cinematic dispositif or apparatus was initially achieved in the picture palaces of the early 1910s, the first structures built principally for the projection of films. Yet it is possible to identify its pre-history in the architecture of Richard Wagner and its post-history in television, a development condensed into less than a hundred years, from the consecration of Wagner’s Festspielhaus in Bayreuth in 1876 to the opening of Peter Kubelka’s Invisible Cinema designed for Anthology Film Archives, New York, in 1970. The link between the two – and the subject of this essay – is the invisibility of the cinematic dispositif and its coming into visibility in the expanded cinema of the 1970s.

After years of preparation and construction, the Festspielhaus in Bayreuth was consecrated in 1876 for the exclusive presentation of Wagner’s music-dramas. Otto Bruckwald drew up the final plans, but the structure was deeply influenced by Wagner, the architect Gottfried Semper, and their failed collaboration on a Munich opera house, itself influenced by a range of mid-nineteenth-century sites of immersive illusion from the panorama to the diorama.1 Wagner delineated the central innovations of the Festspielhaus in an essay first published in 1873, while the theatre in Bayreuth was under construction (fig.7). As he saw it, the radical recalibration of the European theatre began with the now-famous concealment of the orchestra:

To explain the plan of the festival-theatre now in course of erection at Bayreuth I believe I cannot do better than to begin with the need I felt at first, that of rendering invisible the mechanical source of its music, to wit the orchestra; for this one requirement led step by step to a total transformation of our neo-European Theatre.2
Theodor Adorno has highlighted the importance of concealing the means of production for the construction of the phantasmagoria: 'The occultation of production by means of the outward appearance of the product – that is the formal law governing the works of Richard Wagner.' Adorno emphasises the concealment of production rather than the production of concealment. The former belongs to the commodity-form, where 'a definite social relation between men themselves [assumes] the phantasmagoric form of a relation between things'. The production of concealment, however much it is part of the same dialectic, belongs less to an underlying commodity logic than to the dispositif in which cinema would come to thrive. For the concealment of the orchestra at Bayreuth proved to be but the first in a series of innovations, many of which translated so easily into cinematic terms as to seem prophetic. 'With a dramatic representation ... it is a matter of focusing the eye itself upon a picture; and that can only be done by leading it away from any sight of bodies lying in between, such as the technical apparatus for projecting the picture.' As Adorno well understood, the spectatorial conditions at Bayreuth constituted the conditions of reception that would prevail over cinema two generations later. It was indeed apparent, if not to Nietzsche, then to those in Wagner's circle: 'Perform this symphony in a darkened room with a sunken orchestra and show pictures moving past in the background – and you will see how all the Levis and all the cold neighbors of today, whose unfeeling natures give such pain to a poor heart, will all fall into ecstasy.' Friedrich Kittler states emphatically that it is 'the revolutionary darkness of the Festspielhaus – to which all the darknesses of our cinemas date back'. This striking anticipation of cinema – its darkened room, invisible orchestra, and moving pictures – may
be less prophecy than symptom of a much broader shift in spectatorship and images, of which Wagner and cinema were a part. But the cinematic dispositif owes an obvious and significant debt to the Bayreuth theatre, perhaps greater than to any other single technology of spectatorship in the nineteenth century, a technology rooted not only in the concealment of its own production but in the invisibility of its spectators.

In his overview of nineteenth-century theatre design, Beat Wyss spells out the implications of such an approach for an archaeology of cinema. He distinguishes Wagner’s theatre from the Baroque ‘black box’ and links it, instead, to the illusionism of concurrent dioramas and panoramas.

At Bayreuth,

[t]he public exists exclusively for the work of art, and in the auditorium, as a corpus it is literally extinguished. Here, it is pitch black so that the stage light can shine all the more brightly … In the strictest sense, the tiered theatre was succeeded by the cinema auditorium rather than the modern theatre. So that the appearance of the projected image can reign, the empirical being of the spectator must be extinguished.3

Cinematic exhibition venues did not immediately adopt the model of the ‘theatron’, that is, ‘a room made ready for no other purpose than his [the spectator’s] looking in, and that for looking straight in front of him’. Several decades passed before the projection of film and the Wagnerian spectatorial dispositif were fused in the architectural and projective structures known as picture palaces. Yet it is not until after World War Two and the demise of the classical period of the cinematic dispositif, with the radical practices of expanded cinema that we return fully to the question of the cinematic dispositif. Indeed, the revolutionary technology of invisibility in the Festspielhaus most clearly showed its age in the coercive normativity of Peter Kubelka’s and Anthology Film Archives’ Invisible Cinema.

In 1970, Anthology Film Archives – the film museum founded to promote American avant-garde film and its European predecessors – opened its doors to the general public. In the manifesto describing its new theatre, Anthology asserted that where early movie houses grew out of vaudeville and were hardly appropriate for the art of film, the aptly named Invisible Cinema, conceived by Peter Kubelka in 1958, was a ‘machine for viewing’ in which stadium seating, hooded seats, complete darkness, single-source sound equipment, and strict decorum ensured that the viewer would ‘not have any sense of the presence of walls or the size of the auditorium (fig. 8). He should have only the white screen, isolated in darkness, as his guide to scale and distance.’11 Kubelka’s Invisible Cinema attempted to purge anything that exceeded the image – even exit signs were a reluctant concession to fire codes. While Invisible Cinema was lauded as ‘the first true cinema’ and ‘a projective and spectatorial dispositif, generated by [the American avant-garde] movement’s radical revision of the cinematic institution and apparatus’,
Kubelka was unambiguous: ‘The concept of Invisible Cinema has nothing to do with the special aims of Anthology Film Archives’. In 1970, with various forms of expanded cinema ranging from the West Coast across the European continent, Invisible Cinema was less an avant-garde reconfiguration of the classical cinema than a bulwark against its avant-garde corruption. Where Paul Sharits argued that ‘one may find it necessary to construct systems involving either no projector at all or more than one projector and more than one flat screen, and more than one volumetric space between them’, Kubelka insisted: ‘This kind of cinema is not for multimedia, multi-screen, multiple speakers or for action mixed with film ... There is nothing really radical in this project, this is a normal cinema.’

Realised in 1970 but conceived in 1958, Invisible Cinema’s design and principles took form long before expanded cinema coalesced into a conspicuous force. Kubelka’s primary rival was television. From the moment the theatre opened its doors to the public Kubelka asserted, ‘This ... is normal cinema. If it looks different, it’s because other theatres are abnormal. They are like living rooms equipped with huge television sets.’ Invisible Cinema was conceived and implemented as a buffer against the televisualisation of movies, not as an extension of an avant-garde project. Rather than see Invisible Cinema as the realisation of a uniquely avant-garde dispositif, one must emphasise a certain incongruity, conceptual and historical, at play in the Anthology Film Archives theatre: on the one hand, a film programme aimed at consolidating a particular vision of advanced experimental film – Landow, Sharits, Jacobs, and others – and on the other hand, a cinema that worked to shore up the conditions of reception taken more or less for granted since the 1920s and now threatened by multimedia and expanded cinema within the ranks of the film avant-garde and by the increasingly dominant televisual distribution of movies in society at large. Indeed, the name ‘Invisible Cinema’ is something of a retronym: only in the half-light of television and multimedia must one champion the invisibility of classical cinema.

That invisibility first became entrenched after World War I and was widely theorised and debated by the 1920s. Anthology’s manifesto skips over the decades between early cinema and the present — that is, the years of normative cinematic invisibility — such that its description of Invisible Cinema is nearly identical to the accounts of irate critics from the 1910s: ‘The auditorium is so dark that we are unable to recognise our immediate neighbor. We only perceive the luminous rectangle on the wall opposite us.’ In each case, the setting disappears so that the spectator can be more fully absorbed in the projected image. As one early visitor to Invisible Cinema put it, ‘I was so shaken up by the picture that the novelty of the theatre wore off ... Maybe that’s how it should be.’ That’s largely how it had been for decades. The movie theatre’s greatest task, according to interwar critics, resided in rendering itself superfluous. In 1925, Jean Goudal gave voice to the conditions that would later prevail at Invisible Cinema:
Let’s go into a cinema where the perforated celluloid is purring in the darkness. On entering, our gaze is guided by the luminous ray to the screen where for two hours it will remain fixed... Our problems evaporate, our neighbors disappear. Our body itself submits to a sort of temporary depersonalization which takes away the feeling of its own existence. We are nothing but two eyes riveted to ten square meters of white canvas... The darkness of the auditorium destroys the rivalry of real images that would contradict the ones on the screen.\(^{17}\)

The turns of phrase are quite nearly Kubelka’s. In Goudal’s cinematic experience, the purring in the darkness induces a ‘conscious hallucination’.\(^{18}\) The spectatorial experience of \textit{Invisible Cinema} was, in the words of one reviewer, ‘rather like floating in a vast, benign space, looking at a rectangular-shaped hallucination of almost drug-induced clarity’.\(^{19}\) In its most important aspects, then, \textit{Invisible Cinema} was a classical cinema.

But the cinema at Anthology was a two-pronged apparatus: \textit{Invisible Cinema} (a theatre) and \textit{Essential Cinema} (a film canon). As announced in Anthology’s manifesto:

What are the essentials of the film experience? Which films embody the heights of the art of cinema? The creation of \textit{Anthology Film Archives} has been an ambitious attempt to provide answers to these questions; the first of which is physical — to construct a theatre in which films can be seen under the best conditions; and the second critical — to define the art of film in terms of selected works which indicate its essence and its perimeters.\(^{20}\)

\textit{Essential Cinema} was a cyclical programme of several hundred films arranged alphabetically according to author and screened as an extended loop.\(^{21}\) Although no postwar European avant-garde films were included, excepting those by Peter Kubelka, there was a strong emphasis on the formal and the recently emergent structural film: if not Malcolm Le Grice and the Heins, then George Landow, Paul Sharits and Ken Jacobs.\(^{22}\) Situated within this discursive, even museological context — looking at rather than looking through film — the materiality of film began to come into visibility. As Eric de Bruyn argues in relation to the physical and discursive institution that was Anthology, ‘The spectator was transported to another world, but this world coincided with the surface of the film itself that was subjected to the critical judgement of the spectator.’\(^{23}\) In sum, the theatre was not an avant-garde cinematic apparatus to complement the avant-garde film programme, but an invisible cinema for the exhibition of visible film. The incongruity of this juxtaposition cannot be overstated. Anne Friedberg has characterised the phenomenological tangle — ‘twin paradoxes’ — in which the spectator/viewer/user is generally caught when facing the screen: ‘of mobility and immobility (the mobility of images; the immobility of the spectator) and of materiality and immateriality (the material space of the theatre, domicile, or office and immateriality of the
cinematic, televisual, or computer image). Invisible Cinema immobilised its viewers forcefully, but – combined with a heavily structuralist avant-garde film programme – largely reversed the material/immaterial opposition asserted by Friedberg: the strange virtuality of Invisible Cinema was composed of a space that insisted on its immateriality and images that, however fleeting, maintained their own materiality no less adamantly.

Invisibility Visible

Just before an airplane breaks the sound barrier, sound waves become visible on the wings of the plane. The sudden visibility of sound just as sound ends is an apt instance of that great pattern of being that reveals new and opposite forms just as the earlier forms reach their peak performance.

Marshall McLuhan’s media archaeological twist on Hegel’s owl of Minerva can be applied literally to the cinematic dispositif in the 1970s. Beginning in the late 1960s, film theorists in France – and later England and America – began to theorise the all-consuming power of an institution that had already begun its irreversible fall from power. Indeed, the silver screen proved itself a Hydra; its decapitation led to a multitude of multiplex and television screens that have only proliferated further since. (Today, the film industry glibly – or despondently – refers to theatrical releases as the first stage of DVD marketing, itself soon to be an outdated technology.) Much has been made recently of the revolutionary energy in the outmoded, first identified by Walter Benjamin in relation to Surrealism. The first hints of cinematic obsolescence were detected in the early 1970s. But alongside ‘revolutionary nihilism’, what was suddenly visible – through the lens of new and opposite forms of aesthetic expression: television, video, and expanded cinema – was cinematic invisibility.

A prime example is Nam June Paik’s Zen for Film 1962, a film composed of clear leader and the scratches and dust that accumulate thereon with each screening. In 1968, John Cage compared the work to his own 4’33” 1952, whose minutes of scored silence were filled with the incidental noise of the concert hall, and to Robert Rauschenberg’s White Paintings 1951, whose name is amply descriptive. ‘Now, offhand, you might say that all three actions are the same’, Cage remarked, ‘but they’re quite different.’ The first two works become, respectively, ‘the sounds of the environment’, and ‘airports for particles of dust and shadows that are in the environment’. But when Zen for Film is projected,

what you see is the dust that has collected on the film. I think that’s somewhat similar to the case of the Rauschenberg painting, though the focus is more intense. The nature of the environment is more on the film, different from the dust and shadows that are the environment falling on the painting, and thus less free.
Three years later, Paik offered his rebuttal. Paik’s 1971 declaration—anticipated already by his introduction of Zen for TV 1963: television sets, exhibited like sculptures, with minimal to no signals—embraced precisely the conditions Kubelka rejected. ‘The nature of environment is much more on TV than on film or painting. In fact, TV (its random movement of tiny electrons) IS the environment of today.’\(^{20}\) Gene Youngblood—champion of a West Coast, McLuhanesque breed of expanded cinema—voiced nearly the same prognosis a year prior: ‘The cinema isn’t just something inside the environment; the intermedia network of cinema, television, radio, magazines, books, and newspapers is our environment.’\(^{30}\) Cage, Paik and Youngblood are in agreement, however, on one crucial point: that the ‘environment’ of cinema is not the movie theatre itself.

Such a backdrop may help us resituate the expanded cinema of the London Filmmakers Co-operative (LFMC), all too often understood in terms of formalist navel-gazing or polemical apparatus critique. In this regard, William Raban’s expanded cinema work 2'45’’ (first performed in 1973; fig. 9) is exemplary. The title directly signals a debt to Cage. The 2 minute and 45 second running time—the length of a hundred-foot reel of 16mm film—marks an implicit debt to Warhol, whose Screen Tests were all shot on hundred-foot rolls. But whereas Warhol shot at sound speed (24fps) and projected at silent speed (16fps), slowing the film down to make a ‘stillie’ out of a ‘movie’, Raban’s work unfolded in real time, similar to Paik’s Zen for Film, as was made evident on the first day of the multi-day performance. On day one, Raban set
up a camera, loaded with the hundred-foot reel of black-and-white negative film, behind the audience. He then turned on a projector without any film, stood at the front and announced: ‘245” (give the place date and time): a camera is filming the audience watching the blank screen. Sounds of the projection and the audience’s responses are being recorded.3 At the next performance – generally the following day, after developing the film to black-and-white negative – the performance was repeated, now with the film negative in the projector. By the third performance, always two minutes and forty-five seconds long, an audience would watch a (negative) audience watching an audience watching a blank screen. Even as I have left out some important details, the contours and the significance of the work should be clear. After one hundred years of invisibility – beginning in Bayreuth and culminating in the film palaces erected throughout the twentieth century – the audience reappeared, seeped in the material reality of celluloid, chemicals, screens, darkness, and projected light. But this reappearance took place under new historical conditions.

Raban performed the piece throughout the 1970s, but its full meaning was perhaps first apparent when a certain technological obsolescence came into effect at the end of the decade. As Raban recently reflected:

I would very much like to do this film performance again. When I did it in the ‘70s I used an old newsreel camera that was able to record the sound straight onto a magnetic stripe on the picture negative. A large part of television news was still being shot on 16mm film using the same single-system sound. The film stock for these cameras is no longer available so it would be complicated to do it again without using video.52

Hardly an assertion of the ontological autonomy of film, this description clearly positions 245” in dialogue with video and television even more than with cinema. As Wulf Herzogenrath explained a year after the premiere of 245”:

Films by Andy Warhol (Empire State Building), Agnes Varda (Cleo from Five to Seven) have utilized the possibilities of filming in real-time, but they remain exceptions. By contrast, real-time and time continuum are two elements of many videotapes. They are basic presuppositions of every video-installation which involves the viewer by means of camera and monitor, and play an important role in many tapes.53

Raban’s 245” is a dialectical sublation of Paik’s and Youngblood’s turn from the cinematic environment towards an ‘intermedia network of cinema and television, which now functions as nothing less than the nervous system of mankind’ on the one hand, and Kubelka’s complete rejection of television in Invisible Cinema on the other.54

On Cinematic Invisibility: Expanded Cinema Between Wagner and Television
Rather than the 'real time and real space' asserted by various affiliates of the LFMC, the invisible space of cinema is made visible through the real time of television. In other words, rather than replace mediated space and time with immediate space and time, at issue are conflicting registers of spatial and temporal mediation. A migration to video would strip the piece of its critical edge and beauty, namely, the transposition of a video (or closed-circuit television) logic onto the cinematic realm whereby the collapse of production and exhibition time quite nearly creates the impression of real-time transmissions multiplied into feedback loops.

Raban's 2'45" functions precisely in this 'quite nearly'. The tonal reversals, the dark space of projection, the life-size image, the day(s)-long lag time, the depiction of an (other) audience (physically distinct from, but visually all-but-identical to the present audience): these elements belong to a history of cinema not yet engulfed by television or, conversely, a history of television not yet freed from the constraints of cinema. Removed from a progressive teleology, the work articulates the otherwise imperceptible reality of temporal mediation as a dialectical sublation of cinematic invisibility and real-time broadcast — and the visual regimes of which they form a part: the space in which 2'45" unfolds is not the unmediated environment of Cage's 4'33" but neither is it constituted by the electronic environment of television. It does not form a branch of an intermedia global network and is not a self-contained closed-circuit loop. It is a twilight space in which the invisibility of cinema is caught in the real time of televisual feedback. Might not many LFMC works — perhaps the Co-op itself — be understood as real-time feedback loops in cinematic spaces? Can we finally begin to understand the Co-op not as a negation of the cinematic dispositif, but as the aesthetic exploration of its sudden visibility, that is, the sudden visibility of cinema just as cinema ends?

**Postscript**

In December 2008, Raban performed a new version of 2'45" — not on video, but on 35mm film. The new piece — now lasting and titled 4'22" to account for the extra length of a four hundred-foot roll of 35mm film — marks another crucial development in cinematic invisibility: the disappearance of theatres as dominant sites for the reception of movies. 4'22" does not seek to revive celluloid projection so much as preserve it — a fact reflected in the turn to 35mm, the preferred gauge not only of cinephiles, but of archivists. 4'22" will survive through its digital documentation and archival preservation. Though performed at the National Film Theatre in London, 4'22" is not long for the world of movie theatres. Instead, the combination of 35mm and digital documentation paves the way towards the mediatised archive and museum. For the work to survive, the vital link to the cinematic dispositif must be severed. A generation after its premiere, 2'45" has morphed from an exploration of the newfound visibility of the cinematic dispositif to a symptom of its conclusive disappearance.


Wagner 1873, p.333.


Wagner 1873, p.335.

See P. Adams Sitney, "Introduction", in Sitney 1975, pp.vii–viii. This explication of Invisible Cinema was first published as part of the manifesto issued by Anthology Film Archives at its opening on 30 November 1970. See Kubelka's first articulation of this idea in a letter republished in Peter Kubelka, "Invisible Cinema" (1959), in Schlemmer 1973, pp.40–1. For additional reminiscences, see Sitney, "The Search for the Invisible Cinema", Grey Room, no.18, 2005.


The term 'expanded cinema' was coined in 1965 by the remarkable filmmaker and artist Stan Vanderbeek. However, like the man himself, both his conception of the term and his most significant works in the 'genre' have fallen into obscurity. The following essay will establish that Vanderbeek's conception of expanded cinema had a meaning radically different from the other traditions now known by that name. His vision, brewing since the 1950s, developed alongside but independently of the material and formalist strategies then driving experimental cinema. With remarkable prescience, his concept of expanded cinema was formed by his early encounters with Information and Computing Technologies (ICT). Vanderbeek had great facility with language, often devising puns and coinages in his pursuit of unconventional terms and phrasing for what he understood to be an emerging, radically new image regime enabled by the rapidly developing sciences of ICT during the 1960s and 1970s. Expanded cinema, for Vanderbeek, was modelled on what he called the 'culture intercom', which by 1970 had become a political aesthetic theory and practice that he termed 'socialimagestics'. The term intentionally conflates the 'social', the 'imagistic', and Brecht's term 'gestics', while referencing a specifically political theatre.²

Vanderbeek is best known for his contribution to avant-garde experimental film between 1956 and 1969. The literature and exhibition records of the period firmly canonise him as a filmmaker, and he is widely acknowledged as one of the first to actually produce multiple-screen installations. Yet, his greatest efforts went into experiments that combined media-forms – an 'intermedia' – stressing rather than subverting the specific differential qualities of the media combined.³ The list is impressive and includes film, TV, video, computer animation and graphics, pre-software punch-card computer programming, installation, projection, telephone
transmission, theatre, happenings, and computer-controlled planetarium media. He also left a substantial body of both published and unpublished writings. Today, the two most dominant identities that cling to him are first, the dome-obsessed pioneer; and second, the experimental animator. However, Vanderbeek was much more than either of these; he was also a creative and theoretical writer of extraordinary facility, a powerful educator, technopragmatist and inventor, and a radical social visionary. My aim here is to elucidate these claims.

A few biographical details are relevant to put Vanderbeek’s aesthetic motives into historical and cultural context. In June 1945, having turned eighteen, he enlisted in the Navy, although he never left the base on Long Island, New York, where he was stationed. After living at a distance from the atrocities and catastrophes of World War II, he experienced through newspapers and radio the dropping of atomic bombs on Hiroshima and Nagasaki, events which were later to figure powerfully in his films. This might help explain his deeply ambivalent relationship to technology, perhaps the most important focus of his entire opus. Because Vanderbeek’s first experiences of war were limited to non-visual media, he was all the more receptive to the visual power of mass media during the Vietnam era. This apparent shift between two mass-media epochs became the pivot around which his later works revolved, all of them critical of the benefits and disadvantages of technology for the social good, and all of them raising consciousness about the stakes of technological ‘progress’. The two subjects that obsessed him most were the problems of social violence and communication, and they became the two axes along which his aesthetic thought developed.

Vanderbeek’s aesthetic education was informed by, and traversed, most of the main artistic schools of his time, from Fluxus and experimental film, to experimental work in art and technology and broadcast media. He was a pioneer in what would later come to be called public art, information art, digital and locative media. After studying drawing, painting and architecture at the remarkably philanthropic Cooper Union, Vanderbeek attended Black Mountain College at the height of its radicality. There he came into contact with the American avant-garde poetry of Charles Olson, Robert Creeley and Robert Duncan, and with such avant-garde artists as John Cage, Merce Cunningham, Robert Rauschenberg and Buckminster Fuller among others. After returning to New York in the late 1950s, he worked on projects with Robert Morris, Allan Kaprow, Claes Oldenburg, Cunningham and Cage, Yvonne Rainer, and George Macunias, who listed him in the Fluxus Codex. He was a keynote speaker for Experiments in Art and Technology’s (EAT) 9 Evenings in 1966. He became one of the most sought-after artists on both the US national and international stages, living a very itinerant life travelling, teaching, screening his films, and exhibiting. Between 1970 and 1971, he was simultaneously one of the first Fellows at György Kepes’s Center for Advanced Visual Studies at MIT and artist-in-residence at the famed Television as Art programme founded by Fred Barzyk at the TV and radio station WGBH in
Boston, where he was involved in the development of new colourisation technologies, experimenting with Nam June Paik’s video synthesiser, which was invented there, and where he produced one of his most significant expanded cinema works, Violence Sonata 1970, discussed below. In the mid-1970s, he was professor at the University of South Florida, and from the late 1970s until his early death from cancer in 1984 he was founder and chair of the Film and Media programme at the University of Maryland, Baltimore.

Vanderbeek’s career trajectory can broadly be summarised as moving from multi-screen and multi-projection performances that sought, like happenings, to activate the cinematic space and alter audience reception/participation, and towards a conception of multimedia as communication. It is this development of the notion of the ‘culture intercom’ that is vital to the history and theory of expanded cinema.

His first move in this direction coincided with his literal move from New York’s East Village to a community in Stony Point, New York, funded by a wealthy patron, where Cage and Cunningham also lived. There, between 1963 and 1965, he built the ‘work’ for which he is best known, Movie-Drome. The work has, not without some irony, achieved cult status, based on a few images of the structure and of a screening there in 1964. Using funds from the Rockefeller Foundation, Vanderbeek bought a grain silo dome to use as an ‘infinite projection screen’, on which he trained a wide array of projectors to fill the concave surface with a dense collage of moving imagery selected from found and handmade slides, his stop-motion animated films, and ‘electronic collages’ produced with very high-end ‘video’ equipment from the TV studios in which he had worked. A large audience was invited, including art-world luminaries (Warhol, directors of museums, curators), who were asked to lie on the Movie-Drome’s floor in order to view the audiovisual extravaganza. While a brilliant landmark attempt at pushing the boundaries of expanded cinema, it was also a brilliant failure in technical and aesthetic terms; both the sound equipment and several projectors failed shortly into the screening, and the event was brought to a premature end. Vanderbeek soon abandoned the Movie-Drome because he was unable to resolve two problems: the interference of projector noise with the audio component of the work, and the reflective surface of the dome itself that interfered with the quality of the still and moving imagery. Nonetheless, Vanderbeek never abandoned the core concepts of Movie-Drome, and it should be understood as the first model for the culture intercom elaborated in the 1965 image-text essay Culture Intercom and Expanded Cinema: A Proposal and Manifesto.

Before discussing three major and successful culture intercom works, more must be said about the political aesthetic that motivated Vanderbeek’s concept of expanded cinema. He rejected both the dichotomy between Hollywood and the Sitney/Mekas aesthetic ideology of poetic ‘visionary’ filmmaking dominant in the American avant-garde, and the materialist formalism that relies only on the properties of a single medium, film, fundamental to the Gidal/Le Grice aesthetic approach in the UK. Vanderbeek sought a form of expanded cinema that would resolve the antinomy between
public works and private visions. Figure 10 is a visual manifesto of social imagistics that brings us closer to the social stakes at the heart of Vanderbeek’s strategies to cut across prescriptive definitions of techniques and medias.

This is not only a taxonomy of media forms, but one in which Vanderbeek suggests a redistribution of control over the visual means of production – the political aesthetic strategy of social imagistics. This diagram is not quite a diagram – it is a free form set of relations drawn between then-emerging forms of telecommunications like spy satellite systems, and the use of swimming pools as FM broadcasting dishes through which to disseminate the dream works created in TV-Dream Theatres. The diagram’s data appears to be loosely ‘organised’ beneath the two main headings: ‘Artist in TV Residence’ and ‘Artist in Residence to the World’. Extreme as this looks, it is important to remember that Artist in TV Residence is modelled on an actual programme of that name at WGBH Boston, with which Vanderbeek was deeply involved in 1970. His social imagistics manifesto suggests setting up a multimedia organisation on a nationwide basis, analogous to the Federal Communications Commission (FCC), which oversees and regulates the US national broadcasting networks. This drawing is more a work of conceptual art than a classification system. It demonstrates the potential for radical media linkages, and offers a critique of the limits of the techno-imaginaries produced by the mainstream. In Vanderbeek’s own words:

I have been preoccupied with computer graphics and video/graphics since 1965 and image/environments via films, slides before that (the ‘movie-drome’) and before that it was just animated films and movie making, leaving me standing here in my overalls, the view that each of the separate medias were coming together into some coherent larger matrix; these notes are to only guess at the sense of developing techniques and simultaneous sense of form that is shaping the flux of near/art...
The revolutionary impacts of the 1960s social movements coincided with these revolutionary innovations in telephony and broadcast technologies, each of which was made possible only by the convergences of computation and human communication. Indeed, Vanderbeek was working within the context of early digital technologies and the origins of the internet. In 1969, ARPA-net was founded at MIT under the leadership of J.C.R. Licklider in the Man and Computer (MAC) research group; from 1970 Vanderbeek would join MIT as a fellow at the Center for Advanced Visual Studies (CAVS). Licklider was one of many theorists of the 1960s who advocated – and was able to implement – research programmes that aimed to bridge the gap between humans and machines. His influential 1960 essay ‘Man-Computer Symbiosis’ specified ‘symbiosis’ as a ‘subclass of man-machine systems’, refining cybernetics inventor Norbert Wiener’s formulation of an earlier era. His metaphor significantly elides the difference between the biological and the mechanical, stressing interdependence and ‘interactivity with living information’, rather than mere mechanical and computational substitution for human physical and intellectual effort. Licklider’s 1968 essay ‘The Computer as a Communication Device’ announces one of the utopian views of technology that, until recently, has been largely dominant in cyberspace: ‘In a few years, men will be able to communicate more effectively through a machine than face to face.’ His definition of efficacy, however, is quite remarkable:

Creative, interactive communication requires a plastic or moldable medium that can be modeled, a dynamic medium in which premises will flow into consequences, and above all a common medium that can be contributed to and experimented with by all. Such a medium is at hand – the programmed digital computer.‘ [my emphasis]

Encapsulated in these few lines is a socialist, participatory epistemology, creative and interactive, that has been lost in translation, so to speak, as the essential relational conditions of logic, commonality, and social inclusion have been compromised and often lost through both academic and market influences.

Exactly what has been lost appears a few paragraphs later, as Licklider makes fully explicit the hidden social agenda. ‘Society’, he asserts, ‘rightly distrusts the modeling done by a single mind ... the requirement is for communication, which we now define concisely as “Co-operative modeling” – cooperation in the construction, maintenance, and use of a model’ (my emphasis). Of crucial importance here is the triple mode in which cooperation, if it is to resist the dominance of a single mind (fascism), must be pursued. Without involvement at the level of net architecture – at the levels of construction and maintenance – use will be subjugated by a single mind. Licklider effectively created the concept of an operational social network based on what is now known by the open-source term ‘mindshare’. In a similar way, Vanderbeek sought to combine his performative/communications model of political aesthetics with digital media.
Vanderbeek's 1965 image-text piece 'Culture Intercom and Expanded Cinema: A Manifesto and Proposal' sets out a very similar vision to Licklider's.

I propose the following: That immediate research begin on the possibility of an international picture-language using fundamentally motion pictures. That we research immediately existing audio-visual devices, to combine these devices into an educational tool, that I shall call an "experience machine" or a culture-intercom"… The establishment of audio-visual research centers … preferably on an international scale … These centers to explore the existing audio-visual hardware … The development of new image-making devices … (the storage and transfer of image materials, motions pictures, television, computers, video-tape, etc …) … The immediate development of prototype theatres, hereafter called 'Movie-Dromes' that incorporate the use of such projection hardware.¹

The 'Movie-Drome' as culture intercom was commensurate with Licklider’s Co-operative modelling. The 'culture intercom' is an 'experience machine' designed to invent and to produce collaboratively communication forms for a new society. It aims to counter the peculiar and dangerous unpredictability of human action on itself and the world, through 'theatre'. But, these culture intercom 'theatres' are expanded cinemas which use, redesign and invent audio-visual technologies specifically for social ends, for inter-communication.

To concretise Vanderbeek's socialimagentic, communications conception of expanded cinema, I now turn to three of his culture intercom works.²

Figures 11 to 13 show Vanderbeek's remarkable and quite complex culture intercom Violence Sonata, produced at WGBH on 12 January 1970. This work is entirely unknown today in its full complexity. The main aesthetic strategy is based on the information science concept of feedback. In the days leading up to its broadcast, Violence Sonata was announced in the form of a 'pre-event' in print and on the radio, and on the day the work was produced, it was 'simulcast' to home audiences asked to place two television sets side-by-side, each tuned to different channels, one showing the in-studio events, and the other, presenters commenting on them. Telephone call-ins were broadcast live as part of the TV-Theatre, which included an audience of three hundred in the WGBH studio, staged intermedia, expanded cinema, happenings and other theatrical events which now functioned at the level of mass broadcasting. The form of the 'post-event', like the 'pre-event', was journalistic. Vanderbeek described this work as an 'information concert' with a Dada political aesthetic, and as the first work of anti-TV in which the walls of mass media were torn down and converted into a 'People's Park TV'.³
Vanderbeek conceptualised the theme of violence as a three-act play: *Man, Man to Man, and Man to Woman* (Fig. 12). The Man section thematised types of violence of man in general, while Man to Man focused more narrowly on masculinity in relation to race and friendship, and the third section, remarkably for its time, dealt with gender and sexuality in the context of race through a soap opera-like treatment of a white man and black woman lying in bed, smoking, presumably after just having had sex. Their dialogue directly addresses racial, class and gender differences.

*Violence Sonata*, through this matrix of broadcast feedback loops, engaged the most contentious sociopolitical issues of the period: war, gender, sexism and race and the causal relations between them. It is also an acute and relational social critique of both form and content. Vanderbeek understood that social change cannot be achieved through the critique of social norms alone, but that communication technologies, their construction, maintenance and use, must be exposed as feedback networks that reinforced not collective, co-operative modelling, but the one-way transmission of normative and normalising social, cultural and political values. He understood that ‘form’ may be defined as the resistance to change and is one of power’s main instruments, and therefore forms of production must themselves be assessed for their political consequences, at the level of their collective impacts. No technology is politically neutral. He viewed communication networks as nodes where struggles for power played themselves out, not simply as points
of autonomous and neutral information dissemination. *Violence Sonata* attempts to make the mechanism of media control manifest in all its intermedia and interconnected complexity, from dissemination to reception and back again.

Vanderbeek understood the cinematic apparatus as a distributed system that produced normalising values through the distribution of a very limited range of audiovisual patterns. It is not just that the medium is the message, but that the networks of media types—TV, film, magazines, newspapers, radio, telephone, computers—act in concert to dominate the senses with only a small range of possible messages and experiences. The culture intercom aimed to demonstrate the potential for communal, interactive and participatory forms of communication and audiovisual relations operating as a national and even global artist-driven intermedia production company. The TV studio was, in Vanderbeek’s terms, simply the largest optical bench in the world, where cinema expands not merely formally and technically, but through the production and distribution of global image flows with mass audience reach (fig.13). The negative shadow and spectre of the culture intercom is of course today’s very limited, market-dominated web.

Another of Vanderbeek’s remarkable and little-known works that shows his approach to public intermedia networks was *Telephone Mural: Panels for the Walls of the World 1970* (fig.14), also produced while he was a fellow at CAVS. This work is the first artistic use of what would become known as faxing. Using Xerox’s second teletypewriter design, he transmitted still collages to multiple sites around the US, including the Walker Art Center, children’s and science museums, and art schools. The murals ranged from ten by twenty feet to ten by forty feet, and from between 153 and 300 telecopied sheets. Its modular, cellular production through A4 size increments, the six minutes per unit it took to transmit them, and the slow, time-based process of hanging the mural on location, made this a thoroughly ‘cinematic’ work in terms of both production and reception. Formally, it fits the model of performative materialist structuralism, where the telephone/teletypewriter system becomes a cinematic apparatus, while the scale of the image requires that viewing to combine the one-way cinematic flow of sequences with that of

![Image of Telephone Mural: Panels for the Walls of the World 1970](image-url)
left-to-right and top-to-bottom reading. The work is thus sited in the intermedia space between telephone/telexcopy technology and schools and science centres as active, participatory sites of aesthetic experience coequal with mainstream venues of galleries, museums and cinemas.

But the work is more than the process of transmission and the finished mural. It consists of all the information of the entire process, including the four mural variations at all locations, the original collages copied through transmission, the carbon images produced by the transmission process, the records of transmission times and costs, the press releases, the proposals sent to potential transmission sites, etc. Going beyond the ‘information concert concept’ of Violence Sonata, and other works of the period that used the telephone, Telephone Mural was the first telephone transmission work also conceived as an information piece, a piece about information and its modalities of communication. With its means of distribution, its mediation of authorship, its multi-locality, and the necessary collaboration of each host site, Telephone Mural created a participatory, social network required to realise the work as well as the collective effort – at the level of ‘architecture’, maintenance, and use of the technologies – necessary to bring it off.

This work understood for the first time that the telephone/telexcopy combination allowed for the erasure of the material differences between audio and visual information (today the quintessential character of digital media). It radically demonstrated a new method for the dissemination of specifically audiovisual works, not limited to voice or text transmissions. But this technological engagement of public and private labour also transforms the social production of communication itself, by recognising that the experience of the work takes place in both perceptual and epistemological registers of reception – that is, in the negotiable space between sequential seeing/read ing along the synchronic and diachronic axes where meaning is made. Thus, Vanderbeek was able to reconceive the cinematic apparatus aspects of Movie-Drome and Violence Sonata as a distributed and collaborative communications system for audiovisual patterns freed from spatial and temporal constraints.

In 1972, Vanderbeek successfully realised projection on the concave interior of a domed surface. Cine Dreams (fig.15), produced at the Strasenburgh Planetarium in Rochester, New York, was an eight-hour long audiovisual extravaganza that used every conceivable projection device, all of which were programmed seamlessly and continuously by the planetarium’s computerised
controller. Vanderbeek purposely intended to put his audiences to sleep with this pseudo-scientific event, hoping to produce a collective dream in the large crowd that lay on the floor of the planetarium between 11pm and 7am. And as in *Violence Sonata*, he organised the visual materials thematically, while temporally the visual themes were organised around the period of deep REM sleep. *Cine Dreams* was a combination of happening and social movement dream-in. Again, Vanderbeek’s strategy was to reach large, everyday publics. *Cine Dreams* was another attempt to go outside mass media and mainstream art venues, and to use the educational mandate of planetariums (over three hundred in the US at the time) as the culture intercom *par excellence*. Donald Hall, planetarium director, said of the work: ‘*Cine Dreams* received more attention from a wider range of people’ than any other special show given at the Planetarium.¹⁰

*Cine Dreams* applied Vanderbeek’s socialimagistics hypothesis that ‘mind models’ and ‘mind sets’ are collectively produced by means of the ‘film-on-going experience of our national image patterning process’, that ‘image imprinting’ is an arguably concrete result of spectacle culture, that such image patterning fundamentally alters subjectivity, and that even though such alterations derive from inimical sources, they are the very substance that the culture intercom attempts to access and sociopolitically transform into a new, socially positive *pouvoir-savoir* of a ‘new artist/citizen’.¹¹ It can be argued that sleep and dream became a form of non-normative collective activity in *Cine Dreams*. It was a collective happening – a socially inclusive one – and a demonstration that other forms of collective knowledge practices, social *savoirs*, are possible.

Vanderbeek’s radical shift from film per se to centres of mass-media dissemination was not pursued for formal reasons. He had two main aims: to achieve the greatest communication reach and exposure, while attempting to *invent* audio-visual technologies specifically for social ends, for *intercommunication*. If American visionary and UK materialist/formalist expanded cinemas sought the simultaneous demystification of signification and the materially specific conditions of media, then Vanderbeek’s great contribution to this territory is something quite different. It consists in his socialimagistic critique of the networks of the expanded moving-image apparatus of information and communication technologies; and of his remarkable and prescient pragmatic ‘visionary’ solutions by which they can be put under the control of direct collective and social participation. Vanderbeek sought not only to activate the audience as epistemologists, seekers of knowledge via the cinematic experience; not only as historians, narrators of their own temporal ‘cinematic’ moments; but to cast them as actors in processes of collective invention and interpretation, through transforming the *uses* of mass-media technologies, in spaces that were at that time radically other to the centres of art production and reception.
The narrative Hollywood Movie probably hasn’t any idea that its essential ‘genetic’ coding will allow it to evolutionize into ‘abstronics’ graphic/ethos/ cinemasympathies, video-graphics, and larger scaled image matrix systems (global image transfers) that are as yet unlabeled visual flows via/vis computers, synthesizers in sight and sound, ‘instamatics’ – kodak-ghosts, the ‘still’ and movie role for video cassettes, stereo sights and sound systems. All of the methods of image use and re-use are active in the process of finding uses for these new forms... Let us imagine ‘visual/acupuncture’?^{7}

Vanderbeek’s expanded cinema, the revolutionary visual stage he foresaw, has come and gone, as he feared it would. But the principles of socialimagestics – a de-essentialising of media forms through their promiscuous hybridity and joined with theatrical strategies – still hold. They require that we begin to imagine new political aesthetic strategies able to apprehend, by way of analogy, that the ‘new cybernetic movie art’ – the web – has expanded beyond the living room to achieve a truly daunting ubiquity. Expanded cinema can only be resuscitated on the hypothesis of post-web manipulated moving image-making, in analogy to Vanderbeek’s post-filmic experimental culture interoms. Can we, in this epidemic/epistemic image regime, dare to imagine visual/acupuncture?

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1 Vanderbeek realised many forms of expanded cinema works using multiple screens, performance, projections on steam (with Joan Brighem), on swimming pools, etc.
2 ‘Gestus’, means both gestic and gesture; an attitude or a single aspect of an attitude, expressible in words or actions.’ Note by John Willett in Brecht/Willett 1996, p.42. ‘The social gest is the gestic relevant to society, the gest that allows conclusions to be drawn about the social circumstances.’ Brecht, ibid., p.104.
3 The term ‘intermedia’ was coined by Dick Higgins in 1966 to describe the works of Fluxus. ‘This is the intermedial approach, to emphasize the dialectic between the media.’ See Dick Higgins, ‘Statement on Intermedia’, in Stiles and Selz 1995.
7 Vanderbeek 1996.
11 ‘The new artist/citizen has a unique role to explore and research the new media to utilize the image associations talents of mind, via new media systems on hand.’ AF Report, vol.4, no.2, May 1973.
12 Ibid.
13 ‘The image revolution that movies represented has now been overwhelmed by the television evolution, and is approaching the next visual stage – to computer graphics, to computer controls of the environment to a new cybernetic “movie art”.’ Stan Vanderbeek, ‘New Talent – the Computer’, in Art in America, vol.8, Jan.–June 1970.
The 1980s were a difficult time for expanded cinema. Curator and writer Chrissie Iles remarked in her catalogue for her show, *The Signs of the Times* 1990, ‘there has been relatively little recent expanded film installation in Britain since its prolific output in the Seventies’.¹ It was video installation that predominated in this decade, but I am not going to discuss this field of activity, because it involved very different issues, strategies and aesthetics.² In what follows I will use ‘expanded’ to include any film which utilises some other element besides a single screen; thus it will include the traditional sense of expanded cinema as any form of multi-screen-projection work, and films in which a person or object interacts in some non-trivial way with the film(s), thus covering performance-related film as well as installation work.³

Sometimes history throws up interesting conjunctions. For a few days in London in 1983 there were two quite radically different shows, one representing the past, the other a change in direction and the future. In 1983, I curated the *Landscape in Film and Video* show with a month of screenings at the LFMC, a video show curated by Jez Welsh at Air Gallery and one at David Dawson’s B2 Gallery in Wapping of three ‘expanded’ pieces by Chris Welsby, William Raban and the late Tamara Krikorian (fig.16).⁴ It coincided with the special ‘Landscape’ issue of the magazine *Undercut*. This poorly attended show was, to my knowledge, and rather unbelievably, the largest exhibition of classic expanded film in the UK in the 1980s, with all the pieces having been made in the 1970s.⁵ As the show came to an end, the young filmmaker Steve Chivers, who was acting as technician for the show, asked me to see a piece by his friend Holly Warburton at the Royal College of Art MA Degree Show.

In my own words from a review at the time (for my memory, over twenty-five years on, is not to be trusted):
Ushered into a darkened room the viewer was then seated in the small arc of a rough circle comprising two hung screens, two tall narrow ones, a lit candelabra and large marble bust. On the floor, there was a projected image which changed and elongated during the twenty minutes. Using back projection, slides and opera there ensued shifting images ... Skulls, pouting madonnas, shroud-like veils, rosary beads, decomposed faces, a foetus in a bottle, appeared and vanished on the screens and floor.6

Warburton’s installation The Reflections of a Portrait: The Petrification of Transience was the most ambitious to date in the British avant-garde, and not simply for its scale, which was large, but also for its inclusion of Super-8, slide-tape, objects, vitrines, music and theatrical curtains and props. Its nearest relation was probably the theatre sets of opera. The atmosphere on entering a large dark studio space was like an Italian Catholic church, or a tableau-vivant with a rather stiffer and foreboding ambience. Maria Callas singing an aria from Italian opera enveloped the spectator and recalled Billy Name’s use of the same kind of music for Andy Warhol’s Factory in the 1960s. It immediately seemed to reference ‘High’ art of the traditional kind, and seemed to be light years away from the expanded work of Welsby and Raban that was happening on the other side of London at the B2 Gallery.

Warburton, tellingly, also used church incense and allowed no more than six viewers at a time. The piece was constructed with a beginning and an end. In this respect it differed crucially from the 1970s expanded work installed in a gallery, where viewers dropped in and out, so to speak. Of course, this did not constitute a narrative in any meaningful sense. It was much closer to a ritual, like the Catholic Mass, where one was expected to be present for its entirety. Warburton was intentionally evoking a ‘sacred space’ in marked contrast to the ‘profane’ or secular down-to-earth space of structural film. Equally, her piece
reminds us of the construction of such a space with its strong connotations of ritual, something akin to the Surrealist view of cinema as the new religion, the site of literally projected dreams, utopias and visions in the modern age. The interior was almost fully draped so that no sense of an isolated piece was ever given, adding to its all-encompassing nature. In many ways it marked a return to the ‘overall’ environmental aesthetic of the early US expanded cinema.

As I remarked at the time, ‘for those nurtured on the bare minimalism of the 1970s, Warburton’s work was an aggressive onslaught’. It was interesting that the battleground elected for this ‘onslaught’ was installation art. Though Cerith Wyn Evans and John Maybury had been the first to herald the new aesthetic in their ICA show A Certain Sensibility in 1981 (fig.17), it was only about the time of Warburton’s show that its impact was truly felt. This was partly due to the appearance of young filmmakers, associated largely with the RCA, who included Sophie Muller and, importantly, Judith Goddard, who was primarily working with video but also used a multi-layered, often medieval-based, imagery. Her work conveyed a sense of ennui coupled with a rather dark vision of the modern. Goddard showed an eight-monitor piece, Celestial Light and Monstrous Races, at the expanded installation show Sound/Vision in Exeter in 1985 alongside Warburton’s tape-slice Roses of Dead Essences. Indeed, Warburton, Wyn Evans and Maybury were to become key figures of what was called New Romantic film from that show on. More generally the ‘New Romantics’, as dubbed by Cordelia Swann, were part of an important Super-8 film scene that developed in the mid- to late 1980s in a reaction against the formalist, and largely 16mm, work of the first and second generations of the film avant-garde that had been based at the LFM. It is this work I wish to discuss in what follows. But it may be useful to step back and briefly discuss the demise of ‘structural’ or formal expanded filmmaking if we are to attempt to relocate the generational and cultural shift that characterised British expanded works of the 1980s.

Before the Break

Two broad models which characterise cinema in the postwar period are directly relevant to Super-8. One owed much to conceptual and structural ideas, while the other was based on a more theatrical and performative model. In the UK, the structural model gained ascendancy, shaping the Filmaktion expanded work of Malcolm Le Grice, William Raban, Gill Eatherley, Lis Rhodes and Annabel Nicolson. Much of this work addressed the material
base of film and especially the potential of the forms of projection in relation to the spectator. In Matthias Michalka’s words, this form is ‘an interrogation of the screen in terms of media analysis, anti-illusionism, or institutional critique in the context of Structural Film and Concept Art’. However, this structural work contrasted in many ways with the theatrical and performative model classically embodied in Andy Warhol’s Exploding Plastic Inevitable 1966.

It is this example of expanded film with its central inclusion of The Velvet Underground that is perhaps a more pertinent precursor of Warburton’s mixed-media installations in the early 1980s.

Also informing Warburton’s brand of expanded cinema were the happenings related to Fluxus and the ‘intermedia’ (or all-encompassing environments) created during the late 1950s and early 1960s by artists such as Stan Vanderbeek. Expanded cinema here means ‘the expansion of the field of perception’ where there was ‘a scarcely manageable abundance of information and sensory impressions’. Such an ‘overload’ never quite went away, especially in the Dadaist mixed-media shows of the British filmmaker Jeff Keen, who had regularly combined film, painting and performance in his work since the 1960s and who had a direct influence on 1980s artists such as Anna Thew. Although not included in the Hayward Gallery’s Film as Film exhibition of 1979 (in the good company of Kenneth Anger, Jonas Mekas and Gregory Markopoulos), DIAS (Destruction in Art Symposium, 1966) was, and Keen had shown work in that context. This was a good example of some of the internal contradictions of the Film as Film selection, and in a sense marked the end of an era. The exhibition tried to stay on one side of the faultline of modernism and the historical film avant-garde. Its own formalist commitments kept it apart from anti-art tendencies and the ‘other’ imagistic/narrative tradition of, say, Markopoulos and Anger. Yet if Keen could be corralled as a latter-day Dadaist, the New Romantics could not. On the contrary, they seemed to embrace a pictorialist film tradition that certainly included Anger; on the other hand, they more problematically united not just a mixed bag of ‘avant-garde’ and art-film directors (including Andy Warhol, Werner Schroeter, Rosa von Praunheim and Jean-Luc Godard), but also the Sanku Juku dance-theatre troupe and the dancer Michael Clark. There was also a distinctively literary feel to the New Romantic project, drawing on William S. Burroughs, Roland Barthes (especially A Lover’s Discourse and The Pleasure of the Text), and Gilles Deleuze and Félix Guattari.

This was indeed a moment of change. By the 1980s, the type of work that characterised the expanded cinema of the previous generation had virtually dried up, I think, for two reasons. First, and put simply, most of its practitioners had moved on. Le Grice and Raban marked a watershed of sorts when they made feature-length films for the British Film Institute in the early 1980s—Finnegan's Chin 1981 by Le Grice and Black and Silver 1981 by Raban, co-directed with Marilyn Halford. Neither Le Grice nor Raban made an expanded piece throughout the 1980s, though Le Grice broke his fast by making improvised and computer-synthesised music with Keith Rowe at the end of the decade in 1989, shown at the LFMIC (and both filmmakers

Expanded Cinema and the New Romantic Film Movement of the 1980s
have returned more recently, like Guy Sherwin, to re-exploring their original expanded techniques). The only major film artist to maintain expanded work was Chris Welsby, with two pieces: Rainfall 1983, shown only once at Slow Dancer Studios, Liverpool, and Sky Light 1986, also with only one show, at the Serpentine Gallery, London.13 The difficulties of screening large-scale or relatively complex expanded film works in galleries were acute. Hiring a full-time technician plus film projectors was too costly for many galleries, who were much more willing to show video installations when the technology made it possible to do so. A combination of costs and technical requirements and a lack of interest in such work meant a real dearth of traditional expanded film. Those who did persist – Steve Farrer, Rob Gawthrop, Michael Mazière, George Saxon and Guy Sherwin – were reduced to showing one or a few pieces. The reasons for this undoubtedly include the collapse of the structural film project that had expanded work at its core. Secondly, venues were reluctant to show such work for economic reasons, and felt that it was out of step with the aesthetic trends of the 1980s, dominated as they were by video art and its installation wing. Saxon and Gawthrop, for example, did however remain committed to some related form of expanded cinema by pursuing live performance and sound work, but this seems far removed from the classic expanded work of the 1970s.

The other – perhaps debatable – reason for the demise of expanded work (that is, structural/formal filmmaking) was the cultural shift in the arts towards a socially embedded avant-gardism that took a variety of forms. The BFI was announcing the New Social Function of Cinema as part of its Leftist stance. Interestingly in this climate, the documentary found its place again in the 1980s in the work of William Raban (as he shifted direction towards political cinema and away from his 'structural' period), Mary Pat Leece (and other women filmmakers such as Joanna Davis), David Finch and, most importantly, Patrick Keiller. This rebirth was to be consolidated in the Black film movement largely centred on the groups Sankofa (Passion of Remembrance 1986) and the Black Audio Film Collective (Handsworth Songs 1986).14 On the other hand, a more 'poetic-symbolic' and personal cinema developed in the films of Derek Jarman, Jayne Parker, Sandra Lahire and others, and of course the New Romantics themselves. These demarcations are rough and ready. For example, the 'documentary' work of Sankofa and BAFC was intensely imagistic at times, using superimposition, colour and slowed-down effects, and similarly the New Romantics sometimes incorporated imagery of contemporary life. In many ways, Jarman had always, notwithstanding the 'constructed' cinema of In the Shadow of the Sun 1972–81, been a documentarist, filming his friends, social events and his milieu. In the 1980s this surfaced even more strongly in the powerful Imagining October 1984, which in style and spirit was close to the poetic documentary work of Sankofa and Isaac Julien.15 Kobena Mercer had linked the British Black film movement in the 1980s with the New Romantics when he reflected on the latter's 'reaction against asceticism' in their aesthetic of 'opulent excess'.16
In the Wake

If the 1980s saw the demise of the classic expanded film, it was also the setting for a renewed energy in which expanded work played a key if rather transient part. A remarkable explosion of Super-8 work in the 1980s denoted a need to find a cheaper film format than 16mm, and a desire to recover a form of ‘amateurism’ or naïveté (albeit usually faux) in the face of the more polished and expensive productions by, for instance, Le Grice and Raban. It was also part of a generational reaction by students taught by Le Grice at Central Saint Martins and by Gidal at the RCA and others. It was a complex cultural period in the UK, as the new Tory government began its onslaught on working-class and Leftist values in its response to the miners’ strike of 1984–5. The rise of the VCR and computers in the early years of the decade, and a burgeoning pop culture, created a growing appetite for moving-image product. It also witnessed, most influentially, a more articulate and visible gay movement and the rise of a group of young Black filmmakers. The coherence of the postwar Left began to crumble and fragment into ‘issue-led’ politics. The shared project of the early 1960s and 1970s avant-garde, organised around notions of collectivity with its implied critique of social and economic as well as cultural capitalist hegemony, gave way to a predominantly cultural critique, one that came to be understood as postmodernism, with its obsession with popular imagery, cross-fertilisation, ahistoricism and an ironic embracing of aspects of ‘decadence’.

While distinctively anti-modernist, the New Romantic movement as such was thoroughly ‘modern’ in its expression of contemporary life. In some ways this was its downfall in terms of being taken seriously. Unlike the structural film tradition, its roots were firmly based in popular culture and a kind of nostalgia, served with some irony, for a more Romantic tradition, one that is traced in Michael Bracewell’s book on Englishness. The New Romantics represented what Clement Greenberg had called ‘kitsch’, celebrating the decadent and the decorative, challenging the superficial conditions of taste as equally pre-packaged and artificially constructed. Installation became less an exploration of the conceptual and the material conditions of exhibition and spectatorship and more a form of theatre where performance often played a key role.

Donald Kuspit has argued that so-called decadent art is often characterised by disintegration and the return of desire and, as such, remains the repressed ‘other’ of the avant-garde. Interestingly, Peter Wollen argues that there was a schism in modernism in which the rationalist abstract tendency won out against one that celebrated the decorative, the body and an inter-media outlook stemming from the enormous impact of Diaghilev’s Ballets Russes and Leon Bakst, and which flowed through the fashion designer Paul Poiret and, in painting, Matisse. Wollen cites Greenberg’s view that ‘decoration can be said to be the spectre that haunts modernist painting’. Kuspit takes as his starting point an attack by Donald Judd in 1984 on the representational and classically influenced paintings of Sandro Chia (Hellenistic figures sieved through early Picasso, Judd claims). Obviously

Expanded Cinema and the New Romantic Film Movement of the 1980s
the ‘New Spirit’ in painting that came to the fore in the early 1980s could be seen in this light. There is no doubt that desire or sexuality featured very little in the structural movement (though some moments occurred in William Raban’s long suppressed Soft Edge 1973 and in a quirky way in Marilyn Raban’s (Halford) performance films, such as Nine Green Bottles 1975). Instead, the issue of sexuality would come to the fore in Jarman’s work, especially The Angelic Conversation 1984, and in the films of Maybury and Wyn Evans. Isaac Julien gave it full attention in 1989 in Looking for Langston, made in black and white as a study not only of the Harlem Renaissance but also of Langston Hughes’s sexuality. Questions surrounding sexuality, identity and gender were also a key aspect in the work of artists such as Stuart Marshall, Tina Keane and Kate Meynell at this time. It needs mentioning that this was taking place against the backdrop of the rising awareness of AIDS in the West, which informed Marshall’s work in particular. Chivers and Warburton, meanwhile, were more interested in an eroticism derived from literary and painterly models.

**Super-8**

Within the ferment of the period, Warburton, Cerith Wyn Evans, John Maybury, Anna Thew, Cordelia Swann, Steve Farrer and Jo Comino emerged as some of the main figures, and though the work was often sporadic, it formed a kind of sensibility that marked it off from the expanded films of the 1970s. Some of these filmmakers worked together, albeit often very loosely, but enough to warrant them as constituting some kind of grouping for whom the image came to take precedence over process and materiality and film-specificity. While they may have been dubbed the New Romantics, there was no formal grouping and many of the filmmakers resisted the description. The key and the most ambitious figure, as I have noted, was Warburton. Singlehandedly, she seemed to draw the strands seen in Maybury and Wyn Evans’s Super-8 films since their breakthrough show A Certain Sensibility into some kind of resolution. Yet her work was crucially different in terms of how it expressed the body, and its concerns were more about the theatrics of space. Unlike Wyn Evans, Maybury had made three multi-screen films in the early 1980s: A Fall of Angels 1981 (three screens), Exiled from the Image Repertoire and Shallow Terrorists (both two-screen and made in 1981). All three films were made and shown in Super-8 but also existed as single-screen pieces. A Fall of Angels was in six parts and comprised, in Maybury’s words, ‘Two reconstructed suicides, a tableau on living death plus various angles on the “Me Generation”. Tributes to Rudolf Schwarzkogler, Yukio Mishima and Kenneth Anger. Featuring several fashionable neuroses. Yet still entertaining.’

One of the defining features that connected these artists of the 1980s avant-garde was the rise and dominance of Super-8 filmmaking as the preferred format. Associated with the New Romantics’ work, but more diverse in their imagery, the Super-8 expanded films of Comino and Swann were included along with other two- and three-screen films by George Saxon,
Anna Thew, Ian Kerr and Steve Farrer in the expanded film programme of the Film and Video Umbrella’s tour of Super-8 work in 1985, which was curated and organised by Jo Comino and myself. Swann used found footage from *Hill Street Blues* for the three-screen film *Passion Tryptich* 1982, which was shown together with Comino’s similarly derived *Spleen 1984*. In both, ‘colours are heightened to achieve a highly processed but luxuriant look by adjusting colour contrast on video and by choice of film stock, by, in effect, deteriorating image definition’.

The Leicester International Super-8 Festival seemed to replace the avant-garde festivals of the 1970s, though its programme included a wider spread of work, including amateur films with no artistic aspirations whatsoever. Jarman showed there, as did other younger film artists. Cordelia Swann, who was programmer at the LFMC during the early 1980s, actively promoted Super-8 and also curated what were called ‘Salons’ at the ICA for some months, which became a focus for new work by Maybury, Wyn Evans and others (fig.18). In all of this work there was a predominance of found footage (Swann), historical painting (Warburton, Swann) and classical music (Warburton, Swann).

For some artists, Super-8 was not only a cheaper format (especially if the films were slowed down for projection to make them longer), but it also had a more textural quality than the 16mm films that were being made.
by Le Grice and Raban, for example, at the turn of the decade. Undoubtedly, Jarman’s Super-8 films of the 1970s paved the way by embracing the medium’s hand-held intimacy and ability to be used on the spot, as work such as Gerald’s Film, the result of Jarman carrying the NIZO Super-8 camera around with him, hoping to seize any visual opportunity offered in a decaying boathouse. Shown at 3fps, its rhythmic, shifting movement and smudged colour lent it a poignant lyricism that had not really existed in Britain for some time (the documentary movement had had such moments, in the work of Humphrey Jennings especially). How far this is related to expanded work is a moot point. Such a lyricism definitely entered the work of Thew, Swann and others, though at the same time their use of two or three screens nodded towards the formal work of the structuralists. Notably, Wyn Evans, in his Salons, sometimes moved the projectors around in a spontaneous and improvised fashion, as if consciously reacting to the precise, rationalist basis of the structural expanded work. Needless to say, such spontaneity suited the expressive subject matter, which was often directly homoerotic.

The other radical but quite different form of Super-8 expanded work in the 1980s was conceived and produced by Housewatch, a group of artists originally comprised of the late Tony Sinden (associated with earlier forms of expanded cinema, video and film installation and who had worked with David Hall), Ian Bourn, Alison Winckle, George Saxon, Lulu Quinn and Chris White. Their first show was in a terraced house in East London in late 1985. The windows were covered in tracing paper and a system of mirrors was used to aid back-projection in the rooms. The audience watched from the street outside as different films appeared, creating what Bourn at the time called a ‘Cinematic Architecture for Pedestrians’. The work was eclectic, reflecting the artists’ different styles, and again was in some sense a response to the cultural and physical landscape of the time. Sinden’s simple cut-out ‘dogs’ appeared in all four windows as a kind of homage to pre-cinema, while Chris White filled the house with water from a tap in the opposite window. Winckle’s haunting images were a rendition of Charlotte Brontë’s Jane Eyre, ending in the house on fire to the accompaniment of Kathleen Ferrier’s voice. Bourn’s approach was to treat the audience as voyeurs of a domestic scene between a young couple. In all of these pieces, so-called expanded work was treated in ways that did not foreground modernist concerns of specificity, process or structure. Rather, there was an interplay with the architectural space and the environmental and social resonance of the house itself and the street from which it was viewed. To this extent, both Housewatch and Warburton shared a notion of ‘expanded space’, so to speak, as central to their efforts to go beyond the autonomy of traditional film-screenings. Interestingly, they also had a common desire to construct some form of theatrical space, within which the audience is kept at some distance.

If both the New Romantics and Housewatch turned their backs on structural expanded work, it was to embrace another spectrum of possibilities that owed much to an awareness of cultural reality (symbols and images from the culture that had emotional and social impact). They also eschewed
a political stance except in its implicit acknowledgement that the 'politics of form' had ceased to be relevant in its earlier guise. Chrissie Iles was right in her view that little expanded cinema was produced in the 1980s. What was telling was that, in order for this process of deconstruction of earlier forms and construction of something new to have its true impact in the post-1990 period, the artist's film had to move, once again, into the gallery.

1. Iles 1990, p.18. Iles also organised, with Catherine Elwes, the Cross Current exhibition at the Royal College of Art in 1984, which included Warburton's installation, and mixed-media work by past RCA students from the important Environmental Media course led by Peter Kardia. The course was closed down shortly afterwards.


3. The exhibition was not held in the 1980s, see Knight 1996; Meigh-Andrews 2003; Curtis 2007, especially chapters 2–5.

4. However, I exclude single-screen film shown in a gallery for the purposes of the argument, and to keep from descending into definitions and hair-splitting.

5. The pieces were Tamara Krikorian's The Heart of the Illusion 1981; Chris Welby's Shore Line One 1977 and Two 1979 (both sixteen-screen), and William Raban's Wave Formations 1977 and Thomas Barner 1977 (three screens).

6. There were other odd forgotten shows. For example, Third Area at Kettle's Yard, Cambridge, February 1985, which comprised three installations by Anthony Wilson (sound-slide), Steve Hawley (two-monitor) and Holly Warburton (tape-slide). See my review in Art Monthly, no.85, April 1985, p.34. Fascinatingly, in March of the same year David Larcher returned from Germany to show the two-screen Monkey's Birthday (plus bed and videos on monitors strewn about the space) at Jackson's Lane Film Club. See my review in the same issue of Art Monthly.


9. I use these two terms as they are both viable. Le Grice, for example, tended to use 'formal' and 'Gidal' structural in the mid-1970s. She has, in her book of 1977 Abstract Film and Beyond, London: Studio Vista, 1977 and the latter's Structural Film Anthology, London: BFI, 1976.


13. Mentioned by Cerith Wyn Evans in a conversation with the author at the time, and also referenced in Bruno de Finet's introduction to a 1998 interview with John Maybury, unpublished.

14. A revised version of Sky Light was shown at Iles's Signs of the Times MOMA Show in Oxford in 1980.


18. At the time the crucial collection was Hal Foster's The Anti-Aesthetic: Essays on Postmodern Culture, Seattle: Bay Press, 1983.


24. It survived, so to speak, in Mulvey and Wollen, Jeff Keen and Steve Dwoskin's work during the 1970s and later.

25. The following expanded works were toured by the Film and Video Umbrella in 1985 as part of the recent British Super-8 Film package: Cordelia Swan, Passion Trilogy, 1989, triple screen; Steve Farrer, Past Possessed, 1984, twin screen; Anna Thew, Stair, Trailer and the Twinkling Laughter of Little Girls, 1984, triple screen; Jim Divers, Monkey Puzzle, 1983, triple screen; Jo Comino, Sphere, 1984, twin-screen; Brian Cleaver, Frames, 1984, triple screen; Ian Kerr, Blind Corner, 1984, twin screen. Many of these artists were associated with this period of the Co-Op, which itself would go through an important period of transition with figures such as Thew, Farrer and Swan assuming an influential role.


27. I cannot remember seeing these films and suspect they may have had only a single screening.


29. The problems of showing Super 8 expanded work were underlined in this tour when Cordelia Swan and George Saxon and I physically took the heavy Elmo projectors to venues across the country by train. The projectors would be set up at the front of the auditorium on a table as the projection box was far too large to be set up. We would manually synch them along with the accompanying music. I distinctly remember Cordelle's lowered voice in the darkness on my left: 'One, two, three...'

30. See Comino, broadcast notes for Recent British Super-8 Film and Film and Video Umbrella touring show, 1985.


33. In this it could be seen as a precursor of Rachel Whiteread's famous House 1993.

LONDON – I’ll be back for the New York Film Festival. But right now (September 3 to 16) I am at the Festival of Independent Avant-Garde Film at the National Film Theatre in London. You are lucky that I am not in New York, because I’d be fuming against the distortion of the idea of cinema, as represented by the films shown at the New York Film Festival.

September 4: Day begins with a series of mixed media and multiple screen shows. I should say at this point that some of the best work done by the London film-makers is in the area of “expanded cinema.” Of course, New York went through it 10 years ago. Because we went through it, our tendency is to dismiss the expanded cinema work done in London. But I saw a lot of it and I came to the conclusion that they are not repeating history: the London group picked up (or overlapped with) what was done in New York and San Francisco, and went further. Most of the work done in America between 1960–70 fell into the areas of environment and psychedelic imagery. Or else, like Vanderbeek, it was a collage imagination. Vanderbeek, he uses three-five screens, but he doesn’t really need them at all. With proper technology, he can collage his images on one single screen, which, as a matter of fact, he’s beginning to do now (“Newsreel of Dreams”). But the London school is deep into structural researches into process art, and formal explorations of space relationships. I’d say that seeing the work done in London, in the expanded cinema area, and meeting the people involved (Malcolm Le Grice, Paul Botham, Gill Eatherley, David Crosswaite, Annabel Nicolson, Carla Liss, William Raban) left a serious impression on me of great seriousness with which they approach their work in this area.

Paul Botham’s “Eiffel Trifle Installation”: a strip of film containing semi-abstract color and line designs and detail of the Eiffel Tower, projected by six projectors (same strip on all) on carefully arranged scraps and strips
and cutouts of white fabric hanging in the room, in space, at various distances. Image movement going in several directions at the same time. With carousel music. (There is always a question of length in pieces like this. If you run it for 10 minutes, it’s a “piece”; if you run it for 10 hours, it’s probably, an environment?)

David Crosswaite: “Installation.” One basic image frozen, covers the entire wall (screen) at all times. Then three other images, flickering loops of some images, are thrown upon that basic image. Five or six projectors. “The Abominable Dr. Phibes”: same idea, except that the smaller images shift around the basic central image and overlap it; in the second part it becomes a six-image projection.

Peter Gidal: “Bedroom”. Some washed-out, vague indoor shapes. Different indoor images on each screen. Now sharp, now soft. Camera roams slowly through the room with no apparent purpose. Two prints of the same film projected side by side, but slightly shifted in time. Its visual appeal needs a long time to build up. Basically it’s a time piece, something that could be called a low-key film, a gallery wall film, really, to be run for hours and hours.

Very appealing because of their directness and un-artiness are the two-screen projectors by Gill Eatherley. “Pan Film,” “two-way simple movement across a window with positive and negative interchange – day and night. Also, “Light Occupations.” “The Activators, (projector and film-maker) and their activity are filmed and screened simultaneously – the right screen being the result of what is actually occurring on the left screen. Causal.” (all quotes in this report are the film-makers’ own descriptions of their works, which are often clearer than anything I could say about them.)

Malcolm Le Grice: “Wide White Space Duration” (20 minutes) is one of the important works I saw in London. I have also to state here clearly that I find Malcolm Le Grice by far the most important film artist working today in England, or maybe even in Europe. His work is serious, inspired and inspiring, original, and very very beautiful. His work is formal and direct and deals with the basic capabilities of cinema. Almost all of it is in the multiple projection area, and I think he’s the most important artist who has worked with multiple projections yet. This particular piece is two-“screen” projection. The first five minutes the screens are practically clear white. During the next five minutes we begin to see tiny, unimposing scratches moving across the screens. The scratches obviously were placed there, but they also could be taken for dust by some. For the next five minutes or so both screens begin to flicker lightly and softly and there are images (“screens”) of different gray (white) intensities within the larger images (or screens). During the last five minutes or so slight traces of representational imagery begin to be barely visible on both screens, and then the screens blank out again. Is is a very pure, a very classical piece.
LONDON – I'm still at the Festival of Independent Avant-Garde Film. The first time a similar festival was held here, in 1970, it was called the Festival of Underground Films. Times have changed, and the term underground has lost its precision. The organizers of this year's festival needed a double-edged term to at least approximately indicate the kind of film they took upon themselves to gather in one place.

I ended my last report with a brief discussion of the work of Malcolm Le Grice. The same day, that is, September 4, I saw a two-screen (two-image) film by Chris Welsby called “Wind Vane.” The best description of the film was provided by the film-maker himself: “the location is at the western end of Hampstead Heath. Two cameras mounted on tripods with wind vane attachments were positioned about 50 ft apart along an axis of 45 degrees to the direction of the wind. Both cameras were free to pan through 360 degrees in their horizontal plane. There are three 100 ft. continuous takes for each screen. The movements of the cameras, both of which were filming simultaneously, were controlled by the wind strength and direction. The sound was recorded synchronously with the picture track and consists mainly of wind noise. Each film has its own separate sound track when projected.”

Annabel Nicolson presented two twin-screen pieces. These two pieces, and the others that I saw on the other days, place Annabel Nicolson, at least in my mind, in the front lines of the London group. Practically all her work uses multiple projections and live participation. All her work is carefully pre-arranged, but it escapes any look of formalism. Same with her content: it escapes any clear grasp. They are elusive, but clearly lyrical in feeling. They are indistinct, fleeting, transparent. Shadows, birds, film strips, room spaces, projector slips. From Nicolson’s notes: “At times flights of the imagination stay fixed in the mind’s eyes, all attempts at elevation slipping sideways. For a long time I found this fugitive aspect disconcerting and only with shift in attitude does this resistance to external form become apparent as a tensile strength. A perspectival glance along the tenuous trail of precarious visions spiraling at large reveals even earliest paint marks floating independently of the canvas, maintaining imminent departure. One spring it was essential to make a kite and be in touch with something flying. With a sheet of instructions I cycled to the kite making shop but as I swiveled a corner the kite making instructions flew away.”

Wilhelm and Birgit Hein projected a twin-screen piece, “Double projection 1-V.” Fifty minutes long. Five-part film. Quote: “In all five films the only movement arises from change of light. This change of light in all five films is produced by the technique of fading in and out which makes it possible to move continuously over the entire surface of the films. Camera and image are static in all films. On occasion the same image can be seen on both sides.”
September 5: Malcolm Le Grice presented “Joseph’s Coat,” a very exceptional piece. Loops projected by three or four or five projectors, pointed at the same spot (one screen). Each loop is of blank or coloured frames. Each projected has a lens of a different length, so that the light (colour) pulsations are produced in “concentric” rectangles of different colours, screen within screen within screen. The general effect achieved is similar to some of Sharits’s early work, except that Sharits, as far as I know, didn’t have the screen-within-screen thing. Since some of the frames of the loops are black, the result is also obtained by changing the size of the image (screen). Images are projected on a wide white wall covered with screen material. Sometimes the inner screen projectors are stopped and only two images (two loops) are projected, about the same size, superimposed, so that the frame edge activity is produced. At the end of the piece the projectors are swung to the sides to produce three side-by-side pulsations. Soundtrack: water-like noise.

I should say, at this point, that one of the differences between the festival of 1970 and this one is that in 1970 four-fifths of all films shown had rock music soundtracks. It was horrible. I wasn’t sure where I was: at a rock music concert or a film festival. This year there were practically no rock music tracks. Probably more than half of the films shown had one or another kind of noise track. Or they were simply silent. A great inventiveness could be noticed in the choice and production of sounds. It looks like film-makers are beginning to discover the soundtrack.

William Raban, another very active member of the London Expanded Cinema group, projected a piece entitled “Diagonal.” Three images are arranged on the wall in the following manner:

Three films (three projectors), probably identical, are projected. Images (abstract) are arranged on film so that they slide out of the frame and into the frame diagonally, which produces interesting combinations of interesting diagonal activities on screens and in-between screens.

Gill Eatherley presented an untitled piece, and another short piece called “Tubes,” a five-screen five-projector piece, in which screens are lined up side by side in such a way that three of them fall on the frontal wall, one overlaps the corner, and the fifth one follows, on the wall on the left. Explores negative and positive, static and movement, with images and photographs of indistinct characters.

William Raban presented a work entitled “2 minutes 45 seconds.” I’ll quote the artist: “...a film event that is refilmed each time that it is projected. On first showing there is only the blank screen. Image complexity develops through the successive stages of refilming.” I saw Raban performing and filming this
piece during the festival on three different occasions, and each time the film was different and gained complexity of image. During the projection and filming of the piece Raban stands out in front of the image with a mike and reads the history of the making of the piece that is being presented.

Malcolm Le Grice presented a piece (six projectors) entitled “After Leonardo.” Six-image (on the wall arrangement, three images on top and three on the bottom, close together. A very low-key piece, with little pushing on any image above any other. At the beginning of the piece, Malcolm tags a photograph of the Mona Lisa in the center of the sixth “screen”, on the bottom right “screen”, and at the end of the piece (30 minutes) he removes it. Images, mostly abstract shapes, coming and going, some light flicker, glimpses of the Mona Lisa, in negative and positive, which is replaced by gray patterns, dot formations, indistinct b&w imagery, dust, leader, water marks, etc. I find a remark I made in my notebook, made during the projection, which says that most of the London multi-projections are formal. American multi-projections of the 1960s were mostly environmental and collages. Memorable exceptions are Rauschenberg’s piece at the Armory, and Paul Sharits’s piece last summer at the Bykert Gallery. However, many of the New York multiple video arrangements of monitors, even if the only element used, most of the time, is repetition.

Gill Eatherley presented a piece called “Shot Spread.” Three-image arrangement, side by side pigeons on the ground, sometimes in positive, sometimes in negative. Sometimes on screen one, sometimes on screen three, sometimes on screens one and two, never on all three simultaneously. (Five minutes.) Stan Vanderbeek showed some old three-screen things and some old computer films. A very disappointing show, for me.

Takahiko Iimura presented an installation dealing with space, film strips, projection light, distance, with three projectors and long film loops hanging in the room, in the beams of the projectors, at various distances from the lens, projected on white screens. I liked its ephemeral qualities. He also showed me his latest work, a one-screen film, which is a series of films grouped together, “To see the Frame, Not to see the Frame.” A very rigid, and cold, very uncompromising, and very mechanical work.

LONDON – This is the third installment of my report on the Independent Avant-Garde Film Festival that took place in London, September 3–16.

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September 6: Malcolm Le Grice shows “Whitechurch Down (Duration)”, a three image (side by side) landscape (land and desert) film; “1919,” variations (three screens) on a newsreel footage (funeral, probably a Soviet); “Berlin Horse,” a four-screen film – three simpler works. Le Grice also shows “matrix”, a six-image, six-projector piece with loops. “Matrix” begins on one screen area, but with two projectors simultaneously, throwing different primary colors on the left side and on the right side of the left screen and on the right side of the screen. Different colors pulsate on each side (part) of the screen. This image gradually gains in complexity when a third-projector is introduced. Now the three images overlap in such a way that the number one projector takes the central screen, number two takes the top part (half) of the central screen and the area further up; the third projector overlaps the bottom half of the central screen and extends to the area below. One of the six projectors join in, creating six images, each divided vertically down the middle, making 12 halves, all pulsating with primary colors and overlapping. A very beautiful piece to which I am not doing any justice in my technical description.

Gill Eatherley presented a six-projector piece “Clod Argument”, three images top, three images bottom, all lined up close together. Some indistinct images on all screens. Images do not pulsate, but different screens zoom in and out, slowly, at different times so that the images are breathing softly, bluishly. Images are identical on all screens, but on some screens upside down. She also presented a live-participation piece called “Aperture,” in which she came with a big broom before the screen and cleaned (swept) (with a vacuum cleaner, really) the screen, which at first is grey, later becomes white (or at least that’s how it seemed to me). Later, a shadow, filmed and projected, appears on the screen, the broom, parallel to the live action.

Malcolm Le Grice presented a piece called “Preproduction” in which four readers read texts on prisms and film emulsions, and their voices overlapped each other, and they splintered the sentences – basically doing with sound what he (Le Grice) does with images.

In general, I should say here, I was struck, in London, by the number of films in which images were quite indistinct. The film-makers are rejecting the temptations of “pictorial” images, or images of greater representational interest, and prefer to work with indistinct images which lead them to greater formal inventiveness.
Jonas Mekas, 'Movie Journal', Village Voice, 18 October 1973

**September 8:** I just saw Annabel Nicolson's film-performance piece. She has these slides and this film, and these projectors, in a room, and a sewing machine in the middle of the room, and she has this long loop film hanging from the ceiling, and she is sewing it, she is punching it nicely with the sewing machine, and at the other side of the room, it's projected upon the wall, and we see the holes, nice and big. Amy Taubin stands there in the corner, reading some of the texts about how to thread the sewing machines and how to thread the projectors. The loop is then projected with the lens gate open, the film slipping, very beautifully.

The Nicolson piece and several other pieces that I have seen in London deal with raping the film of its sanctity. One has to go through this stage and then come back to the film's virgin possibilities, like the American film-makers did (and maybe they have to do it again, by now).

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**September 11:** Morgan Fisher (USA) showed "Screening Room" which he made in London, a day before, and which shows the approach to the National Film Theatre, entering it, walking into the theatre, approaching the screen, all done in one uninterrupted take. The film ends with white screen filling the frame.

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**September 14:** Ken Jacobs presented "Apparition Theatre of New York," a basic demonstration of the stereo possibilities, and some subtle and enlightening "apparitions," in which he used live performers. The London audiences, used to straight movie evenings, were rumbling and it took them some time to begin to get into Ken's world and rhythm. Later Ken told me how he was much happier with the show that he held in the afternoon, for children. He thought that the children understood everything he did immediately and had no problems of getting along with it.

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**September 15:** Michael Snow presented "A Casing Shelved," a slide with a soundtrack, which we are familiar with in New York, and which to me is one of the great moments of cinema.
‘Culture: Intercom’

Originally published in *Film Culture*, vol. 40, 1966
CULTURE: Intercom and Expanded Cinema
A Proposal and Manifesto By Stan VanDerBeek

I should like to share with you a vision I have had concerning motion pictures. This vision concerns the immediate use of motion pictures... or expanded cinema, as a tool for world communication... and opens the future of what I like to call “Ethos-Cinema.”

Motion pictures may be the most important means for world communication. At this moment motion pictures are the art form of our time.

We are on the verge of a new world/new technology/a new art.

When artists shall deal with the world as a work of art.
When we shall make motion pictures into an emotional experience tool that shall move art and life closer together.
All this is about to happen.
And it is not a second too soon.
We are on the verge of a new world new technologies new arts

“CULTURE: INTERCOM” AND EXPANDED CINEMA.
It is imperative that we quickly find some way for the entire level of world human understanding to rise to a new human scale.
This scale is the world...
The technological explosion of this last half century, and the implied future are overwhelming, man is running the machines of his own invention... while the machine that is man... runs the risk of running wild.
Technological research, development and involvement of the world community has almost completely out-distanced the emotional-sociological (socio-“logical”) comprehension of this technology.
It is imperative that each and every member of the world community, regardless of age and cultural background, join the 20th century as quickly as possible.
The “technique-power” and “culture-over-reach”
that man does not have means to talk to other men . . .
the world hangs by a thread of verbs and nouns.
Language and culture-semantics are as explosive
as nuclear energy.

It is imperative that we (the world’s artists) invent
a new world language . . . that we invent a non-verbal
international picture-language . . .

I propose the following:
That immediate research begin on the possibility of
an international picture-language using fundamentally
motion pictures.

That we research immediately existing audio-visual
devices, to combine these devices into an educational
tool, that I shall call an “experience machine” or a
“culture-intercom” . . .

The establishment of audio-visual research centers
preferably on an international scale . . .

These centers to explore the existing audio-visual
hardware . . .

The development of new image-making devices . . .
(the storage and transfer of image materials, motion
pictures, television, computers, video-tape, etc . . .)

In short, a complete examination of all audio-visual
devices and procedures, with the idea in mind to find
the best combination of such machines for non-verbal
inter-change.

The training of artists on an international basis in
the use of these image tools.

The immediate development of prototype theatres,
hereafter called “Movie-Drones” that incorporate the
use of such projection hardware.

The immediate research and development of image-
events and performances in the “Movie-Drome” . . .

I shall call these prototype presentations:
“Movie-Murals”, “Ethos-Cinema”,
“Newsreel of Dreams”, “Feedback”,
“Image libraries” . . .

The “movie-drome” would operate as follows . . .

In a spherical dome, simultaneous images of all sorts
would be projected on the entire dome-screen . . . the
audience lies down at the outer edge of the dome
with their feet towards the center, thus almost the
complete field of view is the dome-screen. Thousands
of images would be projected on this screen . . . this
image-flow could be compared to the “collage” form
of the newspaper, or the three ring circus . . . (both
of which sufcce the audience with an collision of
facts and data) . . . the audience takes what it can or
wants from the presentation . . . and makes its own
conclusions . . . each member of the audience will
build his own references from the image-flow, in the
best sense of the word the visual material is to be
presented and each individual makes his own con-
clusions . . . or realizations.
A particular example . . .

To prepare an hour-long presentation in the “movie-drome” using all sorts of multi-plex images, depicting the course of western civilization since the time of the Egyptians to the present . . . a rapid panoply of graphs and light calling upon thousands of images, both still and in motion (with appropriate “sound-images”). It would be possible to compress the last three thousand years of western life into such an aspect ratio that we, the audience, can grasp the flow of man, time, and forms of life that have lead us up to the very moment . . . details are not important, it is the total scale of life that is . . . in other words . . . using the past and the immediate present to help us understand the likely future . . .

Endless filmic variations of this idea are possible in each field of man’s endeavor . . . science, math, geography . . . art, poetry, dance, biology, etc . . .

Endless interpretations and variations of this idea by each culture group and nationality that take it on as a project . . . to be presented in turn to each other culture group . . . (by telstar, film exchange, “film-mobiles,” traveling shows, etc . . .).

The purpose and effect of such image-flow, and image density, (also to be called “visual-velocity”), is to both deal with logical understanding, and to penetrate to unconscious levels, the use of such “emotion-pictures” would be to reach for the “emotional denominator” of all men . . .

The basis of human life thought and understanding that is non-verbal to provide images that inspire basic intuitive instinct of self-realization to inspire all men to good will and “inter and intro-realization” . . .

When I talk of the movie-dromes as image libraries, it is understood that such “life-theatres” would use some of the coming techniques (video tape and computer inter-play) and thus be real communication and storage centers, that is, by satellite, each dome could receive its images from a world wide library source, store them and program a feedback presentation to the local community that lived near the center, this news-reel feedback, could authentically review the total world image “reality” in an hour long show that gave each member of the audience a sense of the entire world picture . . . the let us say world’s work of the month put into an hour.

“Intra-communitronics,” or dialogues with other centers would be likely, and instant reference material via transmission television and telephone could be called for and received at 186,000 m.p.s . . . from anywhere in the world.

Thus I call this presentation, a “newsreel of ideas, of dreams, a movie-mural.”

An image library, a culture de-compression chamber, a culture-inter-com” . . . my concept is in effect the maximum use of the maximum information devices that we now have at our disposal . . .

Certain things might happen . . . if an individual is exposed to an overwhelming information experience . . .

It might be possible to re-order the levels of aware-
ness of any person...it certainly will re-order the
structure of motion pictures as we know them...
Cinema will become a "performing" art...and
image-library.

I foresee that such centers will have its artist in
residence who will orchestrate the image material he
has at his disposal...

And will lead to a totally new international art
form...

That in probing for the "emotional denominator,"
it would be possible by the visual "power" of such a
presentation to reach any age or culture group irregardless
of culture and background.
The "experience machine" could bring anyone on
earth up to the 20th century.

As the current growth rate risk of explosives to
human flesh continues, the risk of survival increases
accordingly...

It now stands at 200 pound of T.N.T. per human
pound of flesh...per human on earth.

There are an estimated 700 million people who are
unlettered in the world...we have no time to lose.

Or mis-calculate...

The world and self education process must find a
quick solution to re-order itself a revision of itself, an
awareness of itself...

That is each man, must somehow realize the enor-

mous scale of human life and accomplishments on
earth right now...

Man must find a way to measure himself, to simu-
laneously grow and keep in touch with himself...

Man must find a way to leap over his own pre-
judices, and apprehensions...

The means are on hand...here and now...

In technology and the extension of the senses...

To summarize:

My concern is for a way for the over-developing
technology of part of the world to help the under-
developed emotional-sociology of all of the world to
catch up to the 20th century...to counter-balance
technique and logic—and to do it now, quickly...

My concern is for world peace and harmony...

The appreciation of individual minds...

The interlocking of good wills on an internation-
exchange basis...

The interchange of images and ideas...

A realization of the process of "realization" of self-
education.

That now must occur before the "fact" of edu-
cation...

In short: a way for all men to have fore-knowledge
By advantageous use of past and immediate knowl-
edge...

Mankind faces the immediate future with doubt on
one hand and molecular energy on the other...

He must move quickly and surely to preserve his
future...

He must realize the present...

The here and the now...right now.

An international picture-language is a tool to build
that future...
On the Development of Snows and Other Early Expanded Cinema Works

Interview by Duncan White (New York, April 2008)

Carolee Schneemann: [For me, expanded cinema] starts in the mid-1960s with slide projections, where I can compact these small intense images and then reconstruct space with them. A space within, in which I can also activate movement, objects. By 1966, Ghost Rev, I can interfere with these projections, with performative actions, where I layer the projections in space onto various sheets of paper, and then could paint on those and tear them apart so that the image projected could both be absorbed and shifted away. That begins with a collaboration with USCO at the [NY] Cinematheque probably after 1966 – that’s after other initial slide-projection configurations.

Duncan White: So is there a Fluxus connection?

CS: Well we’re all friends, but the distinction between Fluxus and happenings is very precise in its way. Happenings are messy, sensuous, kinetic, an emotive space. Fluxus is initially much more discreet, it focuses on the object; it rejects in principle personality, nudity, self-display, elements that Maciunas called ‘operatic’. So I was placed in that unit. There are lots of layers of battle, possessiveness, for Fluxus to define itself – whereas happenings came through Oldenburg, Dine, Whitman and Kaprow. It was more painterly. It was more expressionistic. My work generally aligned with happenings rather than Fluxus. Also Fluxus was a very tight community – we would go into each other’s work – but Fluxus seemed to have almost a ‘church of Fluxus’ flavour.

DW: So you start with slide projections and mix them with live painting performances.
CS: Yes, but by 1967 with *Snows (Kinetic Theatre)* I had film projections that really drive the structure of the performance. The film *Viet-Flakes* is projected as central to actions; also footage of Bavarian skiers, Bavarian sports – this very sinister reference to the pleasures beyond the mutilating war, which is what *Viet-Flakes* was so concerned with. *Snows* plays on cold, snow, falling through air – the sublime and the horrific. There is a metaphor between the falling random constancy of bombs and snow. (And my own name.)

DW: And whiteness?

CS: Yes, whiteness and bloodiness.

DW: What was the audience reaction to *Snows*?

CS: It was very intense because most of the images in *Viet-Flakes* had been suppressed – they began showing up in newspapers but not as early as I started working with them. A lot of the images came from European newspapers, and were re-shot with these crazy lenses from the five-and-ten [store]. You probably know that story – when I borrowed somebody’s Bolex to finally shoot the atrocity imagery collection, they didn’t have a close-up lens. It was a moment when I had to compose this and shoot it – so I ran off to a five-and-ten which was still here in this city and bought the little magnifying lens used when they need to enlarge the newspaper. I got three of those and taped them in front of my camera lens and moved them – that became part of the dynamic tension of in and out of focus.

DW: So were you interested in the use of news media and the manipulation of information?

CS: Yes. In some way I wanted to get as close as I could, so that you’re into the pixel, and so that the illusion that creates the recognisable image gets broken into, and also to degrade the image. One of my most recent works is a full photographic grid of bodies falling from the World Trade Center. I enlarged the Benday dots to compose images for *Terminal Velocity*.

DW: Where did you take the images from?

CS: They can only come from newspapers because you can continuously enlarge them and the Benday dot won’t break up. You can only degrade the TV pixel to a very limited extent.

DW: You’re happy to work in either medium?

CS: Yes, I’ll work in all sorts of media.

DW: And is that important to your notion of expanded cinema?
CS: Yes, that’s right. For instance *Venus Vectors* 1986–8 is a sculpture which incorporates video within it. *Venus Vectors* absorbs a video component as part of its visual structural morphology.

**DW:** In *Snows*, when you’re attempting to disrupt the very material of the images you’re using – getting into the pixels – how does that relate to the use of live or real bodies in the performance?

**CS:** The films are projected onto the people in the performance. The figures both absorb and fracture the film imagery.

**DW:** What was the genealogy of *Viet-Flakes* and *Snows*?

**CS:** The need to physicalise and concretise energies concerning my sorrow and outrage at the war drove the necessity of making both the film *Viet-Flakes* and the live action, performative work *Snows*. The participants didn’t know my underlying motive until just before we went in front of an audience for the night. I didn’t want them to literalise it: the dragging, falling, carrying, the creation of faces, the suffocating wrapping in the aluminium foil, wasn’t specified as connected to an exact political referent. *Snows* was also a work that was altered by the audience. The audience had SCR electronic switching systems under their seats which fed into the film projectors – there were three 16mm and three Super-8, also fed into a revolving light sculpture – so all our cues were constantly being altered by the audience, which made it very tense.

**DW:** So you had scripts that you were working from?

**CS:** Yes. Yes, I had a sequence – what I call ‘parameters’ – for film, slides, sound, electronic systems where we might be in space, but all is subject to change, to randomising.

**DW:** So the audience didn’t know what they were coming to see.

**CS:** Well, maybe, but they had no idea that they were affecting it – they never knew that. The switching system was under their seats – so when they got very quiet what was disturbing them would slow down the media. If an atrocity was persistent they might get restless – ‘enough of that’. Maybe thirty of two hundred seats had a microphone under them connected to the electronic switching system.

**DW:** So it’s reflex – it’s trying to map or integrate the audience’s response into the fabric of the work.

**CS:** It was an innovative, invisible, interactive process. It’s never been properly acknowledged.
DW: I would be interested to hear how you feel about the cinematic aspect of expanded cinema. Part of the problem in trying to define expanded cinema is this tension between cinema space and other spaces, such as the gallery. Obviously you’re using film as a primary material in your work. How important to you is the idea of the cinema?

CS: You mean the cinematic nature of cinema itself?

DW: Yes, but also the relationship between the audience and the film that the cinematic as a space presumes?

CS: I’m thinking of film as a layer of space, so that it’s transforming and activating the picture plane. And in fact it’s a moving aspect of painting, which is why it’s so exciting and seductive and vitalising, because it also corresponds to my need to activate the body – to bring the kineticism that is implied in Abstract Expressionism – into actual time, lived time. Film as a sculptural space, multi-dimensional space.

DW: So a three-dimensional, material space?

CS: Yes. It’s very different from how expanded cinema might present a multiple projection system in which you are still looking at it as if it is a kind of film. Whereas I was always trying to degrade or reposition the surface of the film itself so that it seemed to be dimensionally leaving its projected surface.

DW: Then becoming a part of the space of the audience.

CS: Yes, but the audience can’t look at it in the same way as they would a movie. And then I try and spread the imagery around the space. I designed these projectors with motors so that the film is moving dimensionally. Then sometimes there are mirrors that cut into the film [projection-beam] and break it into incised layers. A kind of Cubism if you like.

DW: So a huge kind of spectacle.

CS: No, it’s subtle. It’s not like a spectacle. It’s really very optical. It’s not theatre. It’s film in motion, in increased motion.

DW: So how would you distinguish it from theatre?

CS: Theatre is programmatic, it’s rehearsed, it has a score, it has a script, it’s meant to be – usually – polished. All my elements are subject to chance or certain randomising aspects. I don’t want perfectibility or predictability. It’s counter-theatre.
DW: In terms of it being anti-theatre, then, what pre-production would there be, or did you see the production as happening at the moment it took place?

CS: Well, I would have been obsessed with the materials and definitely made a score concerning duration, position, and then the score would also include the uncertain aspects of how images are projected – if they’re motorised – would splinter and overlap. But that’s not an exactitude, there are aspects that roam back and forth into their superimpositions, into their shifting locations. And the performance with the participants; you don’t always know where the participants will be, where the film will find them when it’s projected into their space, to what extent they will stay within the projection frame, or are they really doing something in juxtaposition? So it will be changeable. The score will indicate that. But it leaves it open.

DW: How will they know what to do?

CS: Because they have rehearsed certain units of configuration together and then they rehearsed and rehearsed and then they can break it up and let it go.

DW: Are they professional actors?

CS: No, no, no, no, no. Never, never, never. No, They’re people I find on the street, or friends that I feel have an animal clarity about space, not about themselves. So I couldn’t use even the Judson Dancers. Or regular actors. I didn’t want anyone who’s trained because they are trained to configure the self as the subject of the material they’re going to work with. Whereas with me it is the material, it is not you. You are looking out into the space, into your connection with other participants.

DW: So, they didn’t have characters or roles or anything like that?

CS: No. It’s not narrative. I don’t ‘do’ character or narrative. I’m not about that. I’m a painter working in space. And there are certain things I have to tell which might involve language but that will be language that is somehow keenly associated with the image-base. But it’s not narrative. Sometimes the language will be functional, someone will have a script and give instructions at certain times, whether we follow them or not. Or permission to say things that are really happening at the moment: ‘You’re pulling my hair’, ‘I can’t get out from under here’, ‘Who’s supposed to be over there?’ All of those things.

DW: So they’re not preset?

CS: No. ‘If it’s happening you can say it.’ That’s a category that we had.

DW: So your use of language had to respond to what was happening?
CS: Yes, you could work with your real physical situation.

DW: How important was the documentation? Did you see a tension between the live act and the record ... do you ever feel the record constructs a different meaning from the event itself?

CS: Oh of course. But the essence of any imagery is so elusive anyway. It’s always about failure. It’s like climbing Everest and you get half-way up and have to lie down on the ice. But without it? I’m very pleased with the Snows footage, which I couldn’t tolerate until a couple months ago, but it’s brilliantly shot by Alfons Schilling ... It was documented in 1967 and it’s coming back to life, as a single-channel DVD, incorporating colour slides. I have come into the film material with editing on the computer. I can do freeze frames, detailed scan, shift focus ... it now clarifies the intensity of the original live actions.

DW: So it’s a different work?

CS: Of course, unless you were there saturated in the dimensionality of the movement, the smells, and even looking at it – it’s so complex you can’t get half of what the document might capture visually.
Free Form Recollections of New York

Written as a note to David Curtis, co-organiser with Simon Field of the 1970 International Underground Film Festival at the National Film Theatre, London, and included among the Festival programme notes. From the British Artists' Film and Video Study Collection.
Dear Dave: PUBLIC NOTICE -- Yugoslavian films lost to total black out on communications; at this late date it must mean "not possible". For the late evening program, 17th, where we hoped to have the Yugoslavian films, I'll present an expanded cinema piece (Kinetic Theater my name for it) juxtaposing "Roses" and "Viet-Flakes" on buttresses outside, under the NFT Theater; a performance in a foam rubber environment which might engulf performers and spectators - an activation exchange. Call it for now, "Thames Crawling". Realization with John Lifton.

We had to break it up, break it up, break it up, rattle toll movement went to emotion for me physically "sensory bombardment" came out of university country girl in big city painter going berserk in space to approach new forms by "blind necessity" primitive freedom put your hands in put your body in we had all turned up from anywhere else fulcrum moment momentum in time 1962 dancers invited me to workshop (evolved from Bob & Judith Dunn experimental classes) - became The Judson Dance Theater (I was first painter to choreograph for dancers/ begin sensitization exercises/collage environments - my form of Happening which in New York developed as painters visual/tactile theater - originally very structured, molded and in which the audience did not actively participate with the exception of Raprow mythic journey events, and later Vostell's "You" burst in from Germany.)

1963 "Eye Body" for camera; body collage in/as environment of fur, light boxes, constructions, grease, paint......


VanderBeek builds first total astral film dome Stony Point/filming "Site" (by Bob Morris, with c.s.) for 360 degree projection overlaps sweeps.

Bob Whitman Happenings: concentrated use of film image as object; image duplication, re-enforcement ambiguities displacement figure/ground motion/stop motion

USCO media span/open range ranging electronics (what! wires us
IN metaphor linked banalities streaming transformed context repeating being atmosphere of visibility electric and curious nerve to POP

we wanted to make visible I wanted viscera we were ourselves visible carriers we did everything lights sound leaps borrow a camera what if I solder these two things together? what if I break this taboo about not touching stroking carrying farting laughing licking pinching grappling saw rig hammer saw chop paste paper pile tapes what happens if I superimpose two tracks what happens if we throw sixty banana peels over the audience when John gets to the top of the ladder

dancers Elaine Summers, then Beverly Schmidt early use of film as doubling to their dance movements as radical juxtaposition lyrical wacky

meanwhile even before: Red Grooms probably expanded cinema when he was seventeen years old and maybe Al Hansen did too (Al did it even if he didn't actually do it) (how did any of us do anything? nobody had any money Oldenburgs Magical Store Days in the tenement store front and after performances if he had sixty dollars from "the house" we would all have beer 2nd salami sandwiches thinking we were really eating & drinking substances Claes had found left in his plaster & paint pots)

we were we were an uncircumscribed community cooperative competitive audacious; unconscious of how deeply we moved within one another's dreams and efforts to dramatize to concretize visual imagery as sensation all extremes in touch with our deepest impulses our natures streaming contrast of one another's expression definition of personal vision provoked, fired each to indulge go forward an un-conscious re-enforcement all madness hard work celebrated individuated aiding

Charlotte Moorman's Avant Garde Festival each September expanded robots, apes, cellos on ceilings, deranged dogs (sublime chaos -- who could bear it! on and on

Meanwhile downtown in a seedy loft on Canal St. the International clearing sorting shifting FLUXUS - now called "concept art". And before Paik and his exploded televisions and broken pretzels Yoko Ono's loft events (we were still in Vermont) - the first La Monte Young concerts...perhaps the first "bag" engagements. (And Mary Bauermeister didn't you tell me about your open-loft events in Cologne? then...1960?)
who knows who know who put the first film projection on naked breasts and bellies?

Judon Dance Theater spinal column to which we all related and all to each other (‘cept Ken Dewey who had gone to Europe-in Finland! Copenhagen 1963-4, Italy, doing what related)

Musicians: James Tenney, Malcolm Goldstein, Philip Corner all involved in performance/electronics/audience involvement. I know Philip was the first to cast bread (whole grain) upon an audience....Dione Oldenburg Whitman - Bob, Samone, Yvonne Rainer Red Grooms & Mini Gross Hansen Hendricks (Eic John Goff) Higgins & Knowles Joe Jones Kamoun Segal's farm dancing in bright sun roof of the chicken coops and Mwasue Freeing silk kites Lelbon (in from Paris reading poetry) Ayes Faucinas Maclow (Jackson bridge conscious issue sorrow - we followed) Bob Morris Paik Patterson Bob Watts..............

1961 Hansen living in the subway; sleeping between the D train to Brooklyn and the P to Flushing...collecting every scrap Hersey Bar wrapper for the infinite Hersey collage series (who WHO could have imagined in seven years they'd be in the jittering gloss of Castelli Gallery...sic transit......)

meanwhile off in Woodstock (yeh!) rickety cottage Gerd Stern & Judy in the "first commune" (we didn't call it that we said its crazy how they all of 'em live together in those two rooms which smell of socks) -electronics wizard kids gathered to electrify his poetry of highway signs (YIELD ENTER AT OWN RISK) (Fuck high way americana lava flow continent trip) turning us on to DMF night crickets gasping Gerd & Tenney rapping perched on a log top of mountain where I went flying thru trees to be caught spread eagled by the moon..............


or, Ken Jacobs (1966?) phoneing: could you come over & stand behind a screen while I try some shadow mime & projection ideas? and....back in in rambling lofts ***1962-65 *** we celebrated anything/everything......loft dancing parties two or three times a week; if we had a performance, a concert, a birthday, sold some workthen galleria dealer, patron, friend would lay on beer, whisky, chopper liver, black bread, a rock band, a juke box or tapes......energy the more we used the more we generated......

TimeLifeLooktadpole began crawling up the fire escapes; fat white cadillaces, bla ck limousines pulling into our littered dank streets
music streaming the night corridors running in the empty streets follow the sounds! ("I wanna hold yr handdide"...."Sally go round the roses.... ") up endless flights of oily stairs SPLAT! 100 sweating rocking streaming rapturous stamping flying artists....(and the collapsed bodies in the mountains of coats making it....and who looked themselves into the only loco for the last hour! And Chamberlain still got in fights & broke liquor bottles over whatshisnames head and girls in love leapt out of loft windows and landed in the trash bins and Freddie Herko danced off the roof top of his bliss and died in the street below.....

we moved we never stopped being about moving working we were "discovered" we were split apart we became "figures" "images" mediated by the media we had "liberated" we were interviewed filmed flayed celebrated hosted hoisted invited this way that way less wild dancing more roast beef splayed over "auschengers paint table Warhols "actory silver flames forget journalists socialites collectors new galleries directors (who had been the enemy? where ever could he have got to now?) They let us all into their museums, their cocktails, openings, receptions, dinners, swimming parties photographed each entrance & exit...enough champagne to slide up and down the Jewish Museum bannisters, sit necking in huge glass ashtrays, smoke, Med A enough popst potatoe chips to cover the parquet floor and dance barefoot crunching them to "salty dust

nature of material expanded into what seemed possible --- or impossible from paint & canvas to collage to light boxes sculpture to the studio as an environment in itself to incorporating the body...that meant putting my body where the eye had governed the paint on the brush on the arm on the body in the eye vision....

film mirroring duplicating re-enforcing greater information simultaneities and juxtapositions

OR we were expanded cinema cinem mythology living act living out art act synapse turned fragile flash frame motion out of our spines --- out of our heads!-- where we were became the reel unraveling yup yup we were moving pictures so deeply documentation of "expanded "cinema" incredible mirror of mirrowings (and the photographers going nuts in the darkness -- how to get the media to hold the media as media???) ("can't you do it with more light?" "It IS ALL Light!")
A film was made of a performance of "Snows" (N.Y. Martinique Theater, Angry Arts Week, January 1967). Central to this kinetic theater performance was film animated from stills of Viet-nam atrocities - "Viet-Flakes". Dualities: Sensation, insight, emotion from speckles printed on paper? The images. Out of focus - whirling, lyrical darts. In focus - bombs falling. Out of focus - detail of a Rembrandt drawing? In focus - village on fire. Detail of a button filling the screen/the frame. Zoom back from photo -- button on the body of a young man hung upside down. Information: Photo of women and young children swimming in terror, village in flames behind them. The photographer as witness. After he "shot" them, what did he do?

"Viet-Flakes" film juxtaposed with "Snow Speed" and "Winter Sports" circa 1939 silent reels of ruddy Bavarians at play.

All performance movement evolved from the Viet-nam images. All performance elements: film, slides, lights, tapes, sequences, durations, scuttural light machine, determined by audience response. Contact mixes under their seats relay their motions and sounds; SCR switching system feed into color organ, amplification from which we (performers) took cues. Experiments in Art & Technology lent materials and technicians to realize my system.

Before "Snows" Gerd Stern asked me to collaborate with USCO -- "in a world of simultaneous operations you don't have to be first to be on top"...still, "US Company" were the first in New York: multi-media/mixed-media. We created an Usco/Kinetic Theater combine for the Film-makers Cinematheque Expanded Cinema program. (November 1966).

My first impulse: to attack media celluloid hallucination flat linear dimension stream light beam: flesh it paint it draw dimensions from projected imagery into image in concrete motion. Actual. That audience is going to FEEL us and we're going to feel them. Phoebe Neville and I in wacky overall crawling on the audience; spilling candies, bubbles, ropes, balloons. Contact with every person there. Gently. The need. Cathode ray films three screens wrap around us all there.

It is all in our bodies stretching into materials! How you gonna be another set-to of rectangles! Technicolor, black & white plug in - brain radiation (not rectangular!) Those are our nerve endings (beginnings) pulsing 24 frames a second! In a black cave! Whose arm meat is aside your arm mean? "hose eyes
parallel yours beamed straight ahead to 'gobble image after image -- straight ahead to screen rectangle. That is insane when we turn, twist, curve are made for re-volution!.........

revolving. With Usco I splattered action all over that cave cinema, to break light beam with other light, to pull screen over screen in multi-layers/levels marking the images in flight with paint; mixing ourselves into flesh puddles to encapsulate, discharge fixity of projection. (And simply ironed a shirt vertically using the board as a screen.)

Random Shutters: Vision is not a fact, but an aggregate of sensations.

I am after the interpenetrations and displacements which occur between various sense stimuli; interaction & exchange between the body & the environment........total fabric shape image, taste touch, contact impulse aligned, luminated by various chemical changes & exchanges with the organism and their effect on immediate present, on the passage of memory into the present.

Perception should lead to action. Perception as eye journey. My theater has simply carried visual/tactile experience into the body; the body become active unit (where it was the hand previously) in its environment.

But: concentrated act of perception of cinema assumes physical reality of film image motion -- we learn to go over to eye response, take it into blood body muscle.

Audience participation in a visual environment changes perceptual levels to expressive, functional (self-timing); the visual environment scanned rather than focused on; reaction replaces attention.

attend, v.t. & i. Turn the mind to; apply oneself; be present

I want both visual attention (consideration/care) and physical involvement (wrap, entangle, implicate, include) as possibilities for the audience....let sensitization be flow, sensory input lead to activations.......The All Stars.*************

9 Sept 70
Using my work as a reference, I shall describe the origins of expanded cinema in the UK, particularly in relation to its emergence from structural film at the London Filmmakers Co-operative (LFMC). I hope that I shall be able to show that through its reflexive forms, it becomes a cinema of transgression.

Whilst a student at Saint Martin’s (1967–71) some of my paintings involved lifting traces from a range of natural phenomena. The Wave Prints 1969–70 (fig.20) were made by spilling thinly mixed oil paint onto the sea and taking the trace of breaking waves onto large sheets of paper. The Tree Print series 1969–73 (fig.19) worked like photographic time exposures. Tree trunks were wrapped in canvas soaked in organic dyes. After six months of weathering and exposure to sunlight, the canvas was removed to reveal a permanent coloured texture of the tree imprinted on its surface. Both the wave and tree prints were concerned with using elemental forces as a means for making images. My thinking was inspired by the dictum from Thomas Aquinas that ‘art imitates nature not through mere appearance but in her manner of operation’. I explored similar thoughts expressed by Ananda K. Coomaraswamy in his 1934 book The Transformation of Nature in Art. Taken together, these ideas seemed to suggest that naturalism in art need not be confined to mimetic representations of nature, so much as by attention to modus operandi and the intrinsic properties or materiality of the artistic medium.

The Wave Prints could be seen as instant exposures recording the moment of a breaking wave, whereas the Tree Prints were time exposures –
of up to six months – in their recording of duration in a landscape. This preoccupation with time led me to make a series of time-lapse films of different landscapes, such as View 1970 and the double-screen River Yar 1972, the latter film made jointly with Chris Welsby.

River Yar followed the tradition of Claude Monet’s serial paintings, such as the Rouen Cathedral series 1892–3, and applied those principles of French naturalism to film. I was aware that John Cage had been influenced by Coomaraswamy’s ideas on nature’s transformation in art. Cage’s performance piece 4′33″ 1952 seemed to exemplify a distinctly modernist take on naturalism. In this work, the solo player(s) or orchestra sit silently by their instruments and the 4′33″ of silence and chance sound interruptions constitute the work. This can be seen as a logical extension of the same movement that drew the Barbizon School of French landscape painters out of their studios to paint ‘en plein air’ in the 1840s, followed through by painters such as Monet. By their capture of the temporal and seasonal shifts of daylight, these paintings have as much to do with duration as with landscape representation – hence the link with Cage. When Peter Gidal describes a film shot as ‘a material piece of time’, I see this as relating back to the materiality of time, as in Monet’s serial paintings and, more obviously, to Cage’s 4′33″. From an early interest in landscape evident in the wave and tree print series, to the first time-lapse films such as View, River Yar and Broadwalk 1972, I became more directly interested in the pursuit of a modernist approach to naturalism. In moving from painting into making films, I was seeking ways in which the evidentiary trace of an
artistic intervention (the paint-scattering effect produced by a breaking
wave or the effects of light and weather on the tree prints) could be carried
across into film. The LFMC provided an ideal platform to help me make
these transitions.

In 1971, I first became involved with the LFMC, which was part of
a wider movement concerned with radically reinventing film as an artistic
medium. What was particularly striking at that time were the broad
similarities of a modernist approach to the film medium being explored by
artists working in Europe and America. A community of practice was
established by means of major exhibitions such as the Festival of Independent
Avant-Garde Film at the National Film Theatre and ICA in London 1973.
Festivals like this served as a meeting ground for exchanging ideas with
filmmakers working abroad. Artists at the LFMC found a strong affinity with
the Workshop of the Film Form in Łódź, Poland; with Wilhelm and Birgit
Hein in Cologne; and with Kurt Kren, Peter Kubelka, VALIE EXPORT and
Peter Weibel in Austria, to name just a few examples.

In 1969, P. Adams Sitney published his seminal article on structural
film in Film Culture, igniting interminable heated debates. Up to that point,
filmmakers on both sides of the Atlantic had been producing significant bodies
of work broadly aligned in terms of a formalist or modernist approach to the
film medium without worrying too much about attaching to it a particular
label (like structural film). Sitney identified the following four characteristics
of the structural film: ‘fixed camera position, the flicker effect, loop printing
and rephotography off the screen’. Many of the films that have been referred to
as structural in their approach share an interest in revealing the processes by
which they were made, rather than keeping them hidden from the audience.
Here, in the UK, structural film was more concerned with what Malcolm Le
Grice describes as ‘eliciting a conscious, structuring mode in the audience’.²
Structural film renegotiates the relationship between filmmaker and spectator,
seeking ways in which the audience can become active participants in the
production of meaning – not mere passive spectators. Active participation
from the audience is a radical if not subversive strategy in a commodity culture
where passive consumption is the norm. Expanded cinema develops these two
defining aspects of structural film.

Given that film is a hybrid of other art forms, it can be seen how the
landscape-format film screen has largely evolved from classical painting,
where the picture frame presents a window onto a world. We have inherited
a cinema of transparency where the means used to create this picture of the
world are deliberately concealed from the audience to heighten the illusion.
In film, a ‘special effect’ that draws attention to itself is traditionally regarded
as breaking the ‘suspension of disbelief’. I am interested in a ‘reflexive cinema’
in which the screen as a window onto a world has been replaced by a semi-
silvered mirror.³ This creates a kind of double effect in which the audience is
engaged in the film experience whilst at the same time being able to critically
reflect upon the cinematic construction. First, there is the self-referential
aspect of showing rather than concealing the processes of production so
that the work reveals the evidentiary traces of the artistic interventions having been made. Secondly, the audience is engaged not as mere passive spectators but as active participants in the production of meaning. At the same time, within the terms of anthropology, ‘reflexivity’ acknowledges the subjectivity of the researcher as a valuable if not essential part of the process. As J. Ruby wrote in 1980: ‘being reflexive is virtually synonymous with being scientific.’ Applied to filmmaking, this anthropological understanding of reflexivity becomes liberating because it can be interpreted as freeing the camera from its locked-off position on a tripod, hitherto seen as the most objective means for recording.

Various generic labels have been attached to my work such as ‘landscape film’, ‘Expanded Cinema’ and, since making *Thames Film* in 1986, ‘documentary’. However, these terms are too limiting, and imply a disconnection between the different phases in the development of my practice. For these reasons I prefer the term ‘reflexive cinema’. So far as I am concerned, that covers my entire body of practice in film, painting and photography since I was a student in the late 1960s.

Expanded cinema is very much linked to reflexive cinema, especially in terms of the intention to engage the spectator as active participant in the construction of meaning. One of the most important aspects of expanded cinema has been the closure of the gap between the time of the film’s production and the time of its exhibition, thus turning the projection of the work into a live event.

**Expanded Cinemas**

Gene Youngblood’s book *Expanded Cinema* was published in 1970, though his definition is clearly very broad and makes reference to films that ‘expand consciousness’. In Europe, expanded cinema became defined by reference to work that expanded outside the normal constraints of cinema projection – either by use of two or more screens, or by some element of live performance during projection. In *Castle 1 1966* by Malcolm Le Grice, the seemingly random flashes of a domestic light bulb hanging in front of the screen have the effect of turning the projection into a live event. *Castle 1* followed a series of painting experiments that culminated in a large-scale black canvas with a flashing light bulb hung in front of the frame. A microphone alongside the light bulb relayed time-delayed sound of the audience’s encounter with the painting. The film *Castle 1* and these related paintings were shown at the Arts Lab in London in 1968. It is worth noting that this work by Le Grice preceded Turner Prize-winning Martin Creed’s *Work No.227: The Lights Going On and Off 2000* by almost thirty-five years.

Live events and happenings were a feature of the Arts Lab, and when the LEMC cinema emerged from that milieu, artists continued to explore new performative models of making and viewing films. The cinema provided a flexible space where it was relatively easy to do improvised projections: there was no fixed seating, only mattresses on the floor. This made it ideal for enabling the same level of experimentation that was going on in the film
workshop to spill over into the cinema, and this certainly helped to encourage the development of expanded cinema works in London. Improvisation was an important part of this process and it would often be the case that the work changed from one performance to the next. Some pieces were shown only once or twice – then never shown again. This degree of openness and reflexivity, of publicly showing works in progress, changed the way in which the audience was involved in the work. No longer passive consumers, audiences became actively engaged in the process of production. The co-op felt like a ‘creative laboratory’ where experiments were conducted in the scientific sense and a negative outcome was equally as valid as a positive result in showing the way forward.

As part of this exciting moment of experiment and reflexivity, I began my film performance 2'45" 1972 which, as the title suggests, owes a debt to John Cage’s piece 4’33". Although it has no connection with landscape, I thought of 2'45" as an experiment in naturalism in much the same spirit as the pioneering work of Cage in the 1950s. I used an old newsreel camera that recorded the sound straight onto a magnetic stripe on the picture negative. Television news was still being shot on 16mm film using the same single-system sound. It could not be done this way now, since the magnetic-striped film stock is no longer available. 2'45" is the standard running time of a single hundred-foot reel of black-and-white film. A camera positioned at the back of the auditorium records the blank screen: over a series of screenings, the recording of the blank screen is projected and re-filmed along with the responses of the audience. In pre-production notes written in August 1972, I referred to 2'45" as ‘a film that begins and ends with the period of its making ... a film which IS its showing’. It was always my intention that the film could only be shown if it was being re-filmed.

In 2008, Duncan White encouraged me to do a remake of 2'45" for Expanded Cinema: The Live Record at BFI Southbank. The new version of 2'45" was shot onto 35mm colour negative rather than 16mm black-and-white negative and given the title 4'22" because of the longer running time of a four-hundred-foot roll of 35mm film (fig.21). As with 2'45", the performance was shot over a series of days. By the final day, all the preceding iterations of 4'22"
were seen as successive negative and positive images receding into the depths of the film screen as a form of *mise en abyme*. Both 245" and 422" use the internal mirroring effect of the *mise en abyme* to build a picture comprised solely of the layers of space and time of the film’s coming into being. The screens-within-screens of its current and past performances are the sole picture and sound content and in this respect it exemplifies reflexive filmmaking.

The new work 422" collapses together the time of production and the time of exhibition. In expanded cinema the audience become a central focus and feature within the sound and image construction. In Europe, there was increasing interest in the role of the audience. Multimedia lightshows such as Mark Boyle’s light projections with bands like Soft Machine – as well as his performances and happenings with artist Joan Hills – were a big influence in London at the end of the 1960s. But what is often overlooked is the subtle repositioning of the audience that was informing this kind of work. This is Mark Boyle’s description of *Street 1964*:

> In 1964 Joan Hills and Mark Boyle took a party of people down Pottery Lane, London, W1, one Sunday afternoon. The party arrived at a dirty back entrance marked ‘Theatre’. They made their way along a dark corridor to a room where a row of kitchen chairs faced some blue plush curtains. Eventually the curtains opened and the audience found themselves looking through a shop window into the street.

This kind of role reversal between performer and spectator was a key element of much of the expanded cinema performances that developed in London through the 1970s and is evident in works by Malcolm Le Grice, Annabel Nicolson, myself and others.

Michael Chanan develops the idea that the ‘spectator always experiences the film in the present tense’ from Mary Anne Doane’s seminal work on cinematic time. Chanan states that ‘the temporality of the screen is a puzzle precisely because the form of projection abolishes the past of the photographic image and uses its own properties to create its own image of time’, and concludes that the tense in which the audience experience film is the historic present. Taking this further, it seems obvious that expanded cinema is, of course, cinema in the present tense where film production and film exhibition become conjoined within the same time frame. This is what happens during performances of 245" and 422".

The blank screen or empty film frame was the starting point for 245". It was this attention to the basic unit of cinema that led to the making of the three-screen *Diagonal 1973*. This statement from the 1976 LFMC distribution catalogue makes the intention clear:

> I was looking for a pure image, an image which was intrinsic to the medium of film. This film is not an abstract film; the subject is the projector gate, the frame where the film frame is arrested in the
projected light beam, and the frame whose edges contain
and divide the projected illusion, from the blacked-out present
of the movie theatre.

What had started as a search for a modernist take on naturalism, seemed to
be leading towards a minimalist approach where all content not related to the
material properties of film was stripped away.

*Take Measure* was first performed in 1973 – the same year that *245"* and
*Diagonal* were performed at Gallery House in London. Going to the pictures
as a child, I was amazed by the interior space of the cinema. It always seemed
so much bigger on the inside than the outside of the building. Even before the
film got started, the disorientation in spatial dimensions of this temple of
illusionism hit me the moment I entered. I remember being struck that it was
hard to think of the dimensions of the cinema interior in measurable terms at
all. This was the starting point for making *Take Measure*. The image is of clear
film running through a film synchroniser with a footage counter that starts at
zero and counts forward. After lacing the film on the projector, it is stretched
out over the heads of the audience and taken up to the screen where as soon as
the projector starts, the film is cut and
snakes back through the audience
with the screen image counting in
feet, the length of the projector beam.

Because this piece is making that
unfathomable space between the
screen and the projector measurable –
and therefore tangible – I think that
*Take Measure*, as with most of my
expanded pieces, works best when it
is performed in a cinema. The reason
is simple. Expanded cinema is
transgressive precisely because of the
way in which the audience become
reflexively engaged in the production
of meaning and it offers a direct
challenge to conventional film
theatres – the house of dreams where
an audience become entranced in the
plot of a fictional story. However, that
transgressive aspect gets lost when
the work is shown in a gallery. Gallery
audiences are accustomed to being
made aware of the space of seeing in
a way that cinema audiences are not.
Examples of reflexive cinema are
sporadic, with a few canonical works
like Vertov’s *Man With a Movie*
Camera 1929 being exceptions in a history that is dominated by film as an entertainment medium intended for passive consumption rather than one of active spectatorship and critical reflection. Reflexive cinema implies a self-awareness, an interrogation of the faculties of perception and thought. This offers perhaps the most exciting and as yet underexplored aspect of reflexive cinema that relates to film’s unique capacity to replicate the language of thought.

Although the history of artists’ film and expanded cinema goes back to the origins of cinema, films from the early period were mostly screened in film theatres rather than galleries – although to begin with, cinema spaces were far more makeshift. The screening of artists’ film in galleries seems to have come into its own only since the 1960s. I would draw a distinction here, however, between expanded cinema pieces, which work best in cinemas, and the film installations that require the more flexible environment of an art gallery.

Fig.23 William Ruban, Pink Trousers 1976; Installation at Acme Gallery, London, 1977

I have always been interested in how the early pioneers of cinematography often used the same piece of equipment to both shoot the film and project it to an audience. Pink Trousers 1976 (fig.23) is an installation that involved filming the interior space of a gallery and projecting the film from exactly the same position and through the same lens by which the image had been recorded. I wanted to create an absolute registration between filmed
image and projected image with no distortion. So I had the idea of using a projector to shoot the film. The only significant difference between the camera and projector is that the shutter is behind the film plane on a projector and therefore I had to find an alternative way to make instantaneous exposures. I used a strobe as a light source and this served as a replacement for the absent camera shutter. I had to build a lightproof box for the projector so that the film would not be exposed other than through the lens. I made one film recording for each day of the exhibition and used a total of four projectors by the time it was completed. By the fourth day of the exhibition, four film loops are strung out to the end gallery wall. They are all projecting onto the same surface, except there isn’t a simple superimposed image as such, because every single-frame exposure (produced by the strobe light during filming) is interspersed with short passages of black (unexposed) film. So the effect is of a rapid intercut between the four views of the simple performance enacted within the same space over each of the four days. As with 245", there was no extraneous imagery other than the record of its own making within the exact spatial confines in which it was being shown. The fact that the audience experiences the screen images projected through the same instruments through which the film was exposed, coupled with the space of projection being identical to that which was filmed, collapses the normal differentiation between production and exhibition. Thus film production and film exhibition become conjoined within the same time frame. These ideas were developed a stage further in After Duchamp, a film installation performed at the 291 Gallery in London in 2003.

While artists at the LFMC showed some of their work in galleries and museums, we never sought any engagement with the commercial gallery scene. What seems to have been special at that time in the early 1970s was the way in which the LFMC worked as a creative laboratory, similar to the early Soviet Avant-Garde where artists like Vertov, Mayakovsky and Rodchenko worked in close association, and similar again to the founding principles of the Black Mountain College in Colorado. At the LFMC, artists worked together, often getting inspiration from films produced by our peers. It was a time of rapid production and this collaboration extended into the way in which the work was presented to the public such as the various Filmaktion shows in 1973. Who got the credit for doing what and when mattered less than the collective advancement of knowledge and understanding.

In conclusion, I prefer to show all of my expanded pieces (except for the installations) on a cinema screen when this is possible, because I think this reinforces the transgressive aspect of the films – making a more direct comment on cinema as an institution and its inherent conservatism. That conservatism is rooted in the expectation of audience passivity, and it is by replacing passive consumption with active spectatorship that expanded cinema becomes subversive.

Several large-scale exhibitions that have featured structural film and expanded cinema in recent years point to a resurgence of interest in both expanded cinema and reflexive filmmaking. I think this may be connected to
the massive technological change that has taken place over the last twenty
years. The digital revolution means that the subtle distinctions that used to
exist between film and video have disappeared. At first, in the 1980s, digital
effects were the preserve of commercials and large-budget features, but now
they have become ubiquitous and readily available to artists. New software
applications such as Shake and Motion make it easy and inexpensive to
perform complex post-production image effects without any trace of those
interventions having been made. Or to put it another way: the image on
celluloid is still perceived as a more trustworthy witness than its digital
counterpart. I think the current revived interest in the expanded cinema
works of the 1960s and 1970s, may, in part, be explained by a nostalgic
desire to recover the veridicality of film that has been lost as a consequence
of computerised filmmaking.

Expanded cinema has a special place within film history for the way
in which it dissolves clear distinctions between time of production and time of
exhibition. The audience experiences the work reflexively – as active spectators
– in the present tense so that the old hierarchies between artist as producer and
audience as consumer are broken. Ultimately, it is these two interlinked and
defining characteristics, active spectatorship and the dissolution of a hierarchical
separation between artist and audience, that constitute the subversive qualities
of expanded cinema.

1 Gidal 1989.
2 Le Grice 1977.
3 Some commentators use the term ‘self-reflexive’, which I would
argue is a tautology since ‘self’ is already implicit in the meaning
of the term ‘reflexive’, such as, for example, in the act of self
perception, or of an act performed back upon itself, or the image
of the self reflected in a mirror.
4 J. Ruby, ‘Exposing yourself: reflexivity, anthropology and film’,
Semiotica, no. 30 1/2, 1980.
5 Mark Boyle, Journey to the Surface of the Earth: Mark Boyle’s Atlas
6 Doane 2002.
7 Chanam 2007.
8 Curtis 2007. Curtis traces the lineage of artists’ film back
to Alexandre Promio in the 1890s.
9 The show at Gallery House in March 1973 is sometimes credited
as the first Filmaktion show, but it was the Filmaktion show at
the Walker Art Gallery in Liverpool in June 1973 that first went
by that name.
Cinema Expanded
Degree Zero:
Narrative and the Contextual Image

It is not uncommon in film studies to come across descriptions of an active spectator mobilised by the motion pictures, moving between screen-associations, openly participating in the construction of meaning:

It is now widely accepted that the cultural production of meaning involves active spectatorship, rather than the passive consumption of textually determined meanings. Sub-cultural groups often produce alternative sets of meanings, based on a different set of shared codes, conventions and experiences.

Miriam Hansen rejects the overdetermined nature of film consumption, suggesting that ‘films may try to direct our attention more forcefully than a play or a novel, but they may also afford us an opportunity to meander across the screen and away from it, into the labyrinths of our own imagination, memories, and dreams’. Sylvia Bruno’s celebration of a mobile and distinctly feminist spectator identifies ‘film’s spatio-corporeal kinetics’, where ‘the spectator is a voyageur rather than a voyeur ... the film is a modern cartography. It is a mobile map’. Anne Friedberg insists this is nothing new and accounts for the early modern ‘mobile spectator’ actively moving through time and space, taking advantage of late-nineteenth-century machines of mobility and vision – trains, bicycles, moving sidewalks, projectors and movie cameras. Friedberg suggests a physical dynamism echoing, in turn, Erwin Panofsky’s earlier analysis of an aesthetic mobilisation of the senses in cinema that separates eye from body: ‘The spectator occupies a fixed seat, but only physically, not as the subject of an aesthetic experience. Aesthetically he is in permanent motion as his eye identifies with the lens of the camera, which permanently shifts in distance and direction.’

It is disconcerting, then, that expanded cinema is overlooked in this context. Practices associated with expanded cinema take enquiries into the physical and aesthetic mobility of spectatorship and the localised construction of meaning far beyond mainstream cinema and its boundaries of cultural expectation (the frame). It may well be that expanded cinema does not fit within the usual remit of film studies. As we will see in this section of the book, expanded cinema includes work that reverses the position of spectator and filmmaker, explodes the frame by incorporating live performance,
deconstructs the cinematic apparatus, unfixes the image and initiates new screening situations that establish a radical interrogation of the physical as well as aesthetic mobilisation of cinematic perception.

Yet the oversight may also have something to do with the way expanded cinema has been conceptualised in the past. The fluid mobile spaces of cinema described above reimagine cinema as a ‘narrative space’; contexts of seeing traversed as well as constructed by the operations of the viewer. Too often, practices associated with expanded cinema have been reductively identified as ‘anti-narrative’, when many works draw on different forms of association and narrative construction. In contrast, this chapter will focus on works that have explicitly reframed the narrative spaces of cinema and radically reimagined the social and cultural narratives that define the relationship between the audience and the screen. From ‘locational’ works, to double-screen and multi-screen works, to projection performances that produce a carnivalesque reversal of maker and viewer, I will consider a range of related practices that operate at the ‘degree zero’ of narrative – any point at which ‘the perceiver, rather than the artist, is made responsible for the production of meaning’; works that act as ‘an action at the limits of narrative ... at the limits of its fictions of unity’.7

The Locational Cinema

Paul Sharits’s Epileptic Seizure Comparison 1976 resituates the viewer in terms of narrative, mobility and models of spectatorship. The piece dates from a later stage in Sharits’s career in which he explores what he calls ‘locational film’, creating film installations that include Shutter Interface 1975 and Dream Displacement 1975–6 as well as Epileptic Seizure Comparison.6 Combining film loops, multiple screens and indefinite duration with disorientating devices such as reflective walls and sound sources positioned behind the viewer, Sharits moved towards creating an ‘inverse projection’ that expanded earlier single-screen works such as Ray Gun Virus 1966 into the space of reception, interrogating just what it means to be a mobile and active spectator.

This relocation is part of a critical turn in art and film practices that re-evaluated cinema as a narrative space of cultural consumption through the lens of film and its environment. For David Lamelas it was crucial that ‘the viewer should be able to link the film to his own activity of watching it’.8 Marcel Broodthaers turned the museum space into a cinematic storeroom of meaning. Michael Snow’s use of installation in works such as Two Sides to Every Story 1974 ‘redefined filmic space as that of action’, relocating ‘the tension of narrative’ in ‘the tracing of spatio-temporal données’.9 This type of work prioritised the role of the viewer and undermined the conditions of observation that positioned him/her in relation to the image. The screen was only one aspect of cinema’s architecture of illusion. By emphasising the way in which seeing is contextually conditioned, artists were able to critique narratives of power, possession and control by reoccupying the spaces of cultural consumption. The motif of seizure in Sharits’s work is in this sense a play on the question of viewer mobility, activation and control.
Space as Seizure in Expanded Cinema

Rather than the neutral and reference-less unreality of the auditorium, Sharits designed an ‘observation space’ for the viewing of *Epileptic Seizure Comparison* (fig. 24) in which the ‘viewer … becomes part of the projected image … “seized” as it were in a convulsive space, becoming one with the 2 images of paroxysm’.’ Yet this sense of oneness with the image is somewhat disingenuous. There is in fact a dual form of observation – of observing and being observed – which acts as an important part of the work’s representational form.

Fig. 24 Paul Sharits, *Epileptic Seizure Comparison* 1976; installation at Dundee Contemporary Arts, 2008

Peter Gidal describes *Epileptic Seizure Comparison*, somewhat scornfully, as ‘crypto-melodrama’ and there is indeed a sense in which the representational imagery is being used as affect, displacing the purely sensorial aspect of the work. The images of men in a state of seizure make this difficult to avoid. The lower screen shows a seizure induced by photic stimulation, the upper is a grand mal seizure. The soundtrack is made from the voices of the patients and the frequencies of EEG scans. The condition of seizure is clinically ‘observed’ somewhat in advance of how the viewer may or may not ‘experience’ the satori conditions of ‘ecstasy-catharsis-insight’ induced ‘directly’ by the film’s stroboscopic pulse. It appears to be a means of locating the condition of film simultaneously away from itself (within the social condition of seeing) and within itself (the technology of film optics). There is a critical distance: the audience observes itself in the act of observation.

In this way, *Epileptic Seizure Comparison* sets up a potentially doubled captivity in which seizure is observed and experienced. This doubled captivity defines the ‘narrative space of the image’. 'One of the narrative acts
of a film is the creation of space." In this case, the film, found footage of clinical trials, is without the more familiar narrative space of classical cinema. There is no 'backstory'; all background is flattened out so that only the observational footage fills the screen space. Instead of an off-screen and illusory or fictional universe that provides total motivation for the on-screen action, the narrative space of film is collapsed into an encounter with the lived space of watching. What is interesting here is that Sharits’s work combines the locatedness or context of the image with violent narratives of possession and control already, as it were, embedded in the image. The audience is made captive and shown its captivity, creating the potential for a narrative space that disrupts the architecture of the image in cinema.

The Architecture of the Image
Arguably, narratives of possession and control were built into the motion pictures as soon as they were born. As Catherine Russell notes, film involved the construction of physical as well as theoretical 'architectures of reception' reinforced by the popularisation of the movie theatre and the era of so-called Classical Cinema.14 It is not surprising, then, that in scale and design, Sharits's locational work echoes the unique architectural design of Edison and Dickson's Black Maria: a 'laboratory' (as Dickson himself describes it) that 'obey no architectural rules ... embraces no conventional materials and follows no accepted scheme of color'.15 This is where some of the earliest films were made, capturing transcendent and resistant acts such as the Sioux Indian Ghost Dance within the 'reference-less shadows' of the studio. One of the first films made in the Black Maria is, ironically, a film of seizure and ecstatic convulsion. Record of a Sneeze 1894 (fig.25) shows Fred Ott (or at least, his likeness) literally seized or captured in the recording device via the process of 'taking', 'performed' with the 'radiance of concentrated light and celluloid'.16 'The point, this time, was to demonstrate that life in fact had been captured in the images, that vital energy was being unleashed through the body and beyond it.'17

This form of seizing, then, is built into the cinema's architecture of production. The setting, form and above all point of view established within the Black Maria's design crudely anticipates the architecture of projection spaces that would become universally popular. Dickson's official name for his invention was, rather tellingly, 'The Kinetographic Theater'. The space of seizure not only came to define how films were made but how a film was designed to be seen. Image production acted as a model for image reception as it created a space of captivity not just in terms of the spectral ghosts held hostage on the celluloid but also in terms of an audience captivated by, and within, the architecture of the image. Just as the image is manufactured according to the context of the Black Maria's architecture, so too is its relationship to the viewer.

Yet how captive was the audience? It is perhaps not unintentional that the doubling of captivity is immediately present in the movies and may express an ambivalence of both maker and viewer faced with the captivating condition of the revolutionary medium. By 1903, in the wake of touring
entertainments such as Buffalo Bill’s Road Show, Native American War Dances had assumed an altered position in the historical consciousness of the time. The doubled captivity of Fred Ott could also point to a hidden history of mobile spectatorship. Indeed, the audience may well have enjoyed a kind of reflexive fascination, recognising itself in the distorted features of what Walter Benjamin called the ‘behaviour item’, the acute detail of lived existence isolated and made available to the camera as ‘an immense and unexpected field of action’. There appears to be a more complex representational movement (in tension with the fixed camera position of the Black Maria) in the entertainments of early cinema that artists may be attempting to access here.

Tom Gunning has famously made this point concerning postwar avant-garde film and what he calls the ‘Cinema of Attractions’. Prior to the storytelling impulse of Classical Cinema, the Cinema of Attractions was a cinema of pure display exploring what Léger described as film’s unique power of ‘making images seen’. In films made before 1907, ‘theatrical display dominates over narrative absorption’; the viewer is often directly addressed by the protagonist (or by the promoter accompanying the silent reel); and the film’s ‘energy moves out towards an acknowledged spectator rather than in towards the character-based situations essential to classical narrative’. The Cinema of Attractions is a question of consciousness. ‘Rather than being an involvement with narrative action or empathy with character psychology, the Cinema of Attractions solicits a highly conscious awareness of the film image engaging the viewer’s curiosity. The spectator does not get lost in a fictional world and its drama, but remains aware of the act of looking, the excitement of curiosity and its fulfilment.’ The double condition of seeing and being seen, and the ambivalent attitude toward film’s ‘captivation’, prioritises the viewer in such a way that it creates a particular kind of visual awareness. This seems to be at the heart of the sensorial and representational tension in expanded cinema and at odds with the notion of cinema as captivity.
Expanded cinema, as we have seen elsewhere in this volume, is very much concerned with restructuring the relationships of production and consumption in film and seeks to challenge this ‘theatre of production’ that positions the spectator as fixed and subordinate to the controlling effects of the image. Yet it does so not just in terms of establishing the mobile spectator celebrated by theorists of postmodern (and ‘pre-modern’) film, but in order to create conditions in which the living and very physical (even bodily) force of this image-architecture can be fully interrogated – not by creating a ‘self-sufficient narrative world upon the screen’ but by exploring the narrative space of cinema itself. It is here that expanded cinema is situated.

Narrative and Narrativity: The Raw and the Cooked

Yet it is the nature of expanded cinema’s visual activity in relation to the space of the image that needs to be more fully addressed. The kind of expanded techniques identified here are closely related to what Robert Scholes calls narrativity in film. Narrativity, as opposed to narration, hinges on the relocation of meaning as an action or activity of the viewer. As the film’s meaning is broken down and restituted with the viewer, the condition of narrative in film as a form of control is displaced. This is, as it were, the ‘zero degree’ of film perhaps best expressed in expanded works such as Nam June Paik’s Zen for Film 1962 or William Raban’s 2’15” 1973. In these works, the film exists only in the activity of viewing. Indeed, it’s in this sense of film-action that Scholes positions his concept of narrativity distinct from the traditional form of ‘narration’ in film. The first prioritises production, the second prioritises reception: ‘Narration is a process of enactment or recounting [a form of storytelling] which is a common feature of our cultural experience. “Narrativity” … refer[s] to the process by which a perceiver actively constructs [meaning] from the … data provided by any narrative medium.’

Scholes’s essay ‘Narration and Narrativity in Film’ was published in 1976 in two volumes of the Quarterly Review of Film Studies, which also included essays by Sharits and Tony Conrad. The proximity is telling. Both artists remain ambivalent in terms of narrative. In 1973 Sharits told Hollis Frampton: ‘Anything that has development in time tends, as far as I can see, to have a narrative sense about it because it has the form or, at least, it has the movement of narrative, if not the content.’ Form and movement rather than content suggests that narrative is an activity, something the audience participates in constructing, rather than something that is simply consumed.

Tony Conrad, like Sharits, often foregrounds Scholes’s sense of ‘narrativity’ in his work not least through what he calls ‘narrative performances’ such as 7360 Sukiyaki 1973 (fig. 26). Although tongue-in-cheek, Conrad’s performance highlights the ‘cultural’ mechanics of filmmaking as the screening becomes a kind of ritual enactment foregrounding ‘the process by which a perceiver actively constructs [meaning] from the … data provided’. 7360 Sukiyaki takes the second part of its title from a Japanese stir-fry recipe, while the first comes from the film stock Kodak 7360 – a now obsolescent stock employed by the US military information service during the Korean
War, and used by Conrad instead of beefsteak in his modified version of the recipe. A ‘narrative performance’, the film is made (cooked in front of the audience), then projected (thrown onto the blank screen), before being forgotten (the screen is painted black – the ‘movie’ s’ final fade out). Conrad mixes cuisine and cinema to create, quite literally, an alternative form of film consumption. Punning on Lévi-Strauss’s distinction between the ‘raw and the cooked’ where cooking, like filmmaking, appears to be the means by which nature is transformed into culture, 7360 Sukiyaki is a demonstration of the way in which technologies of vision act not only upon the material of cinema but also on the viewer as part of a ‘transformative and cultural process’. In terms of narrative, nothing is shown other than the problematic process of showing. 7360 Sukiyaki, in its displaced form of address and meaning, denies narration and encourages narrativity.

These ideas have been echoed by other practitioners of expanded cinema. German artist Birgit Hein has suggested that expanded cinema led directly to a level of structural abstraction in the mid- to late 1970s that made inroads into a new form of narrative similar to Scholes’s conception of narrativity:

Besides reflecting on perception and engaging with the illusionary character of film, artists associated with structural film were also interested in expanding the visual possibilities, not least in creating a new kind of narrative with multiple projections, where the individual images appear simultaneously on a surface. 26

Hein’s key example is Malcolm Le Grice’s After Leonardo 1973, a six-screen projection ‘showing the face of the Mona Lisa in different stages’ of reproduction. ‘In this way’, Hein observes, ‘a story is told. The story of the transformation of the image.’ The multi-screen performance is part of Le Grice’s series of ‘After’ works (originally conceived between 1972 and 1975) that includes After Leonardo, After Lumière 1974 and After Manet 1975, and stems from a period that might be described as ‘late structural narrative’. During this period the formal processes of structural filmmaking are made subject to a multiplicity of readings that prioritise the activity of the viewer. Arguably, the multi-screen and performance-based experiments of expanded cinema helped clear the ground for this type of work. Indeed, what is important to note here in terms of a work like After Leonardo is the way in which, as with the use of raw and cooked material in Conrad’s performance,
Le Grice foregrounds 'the raw material of the film for the audience to work on'. As Hein suggests, rather than a predetermined structure, narrative is resituated as an activity of transformation and process that the audience participates in completing.

The Elliptical Screen

In Le Grice’s After Lumière – L’Arroseur arrosé and After Manet, this zero degree of narrativity is taken a stage further. After Lumière (fig.27), a play on the Lumière brother’s 1895 entertainment Le Jardinier et le petit espiègle, the first fully fictional film presented in public and the first film comedy, directly references the distant shadows of Gunning’s Cinema of Attractions in which the subject of the film is often the viewer. In the Lumières’ well-known work, for instance, the visual joke depends on the viewer being able to see or observe more than the protagonists. In the practical joke staged as actuality, a mischievous boy creeps up on a gardener watering the garden and stands on the hose. When the gardener looks into the end of the hose, the boy releases his foot and the gardener gets a faceful of water. He then chases the boy out of shot, drags him back within view of the audience and beats him. Suggestively, in Le Grice’s version of the joke, this final act is absent and so the climax of narrative expectation is denied, or at least, the key narrative action is situated elsewhere, not just out of shot, but with the audience.

After Lumière has been shown as a four-screen piece emphasising an interesting and more pronounced slip in the relationship between time and narrative (between the time of viewing and the time of the film). Typically in cinema ‘real time’ (the time of viewing) and ‘representational time’ (the time of the film) are seemingly synchronised in narrative editing. In response Le Grice has developed important ideas about real/time space crucial to understanding the motivation behind UK expanded cinema of this era. According to Le Grice, narrative cinema does everything it can to deny the ontological presence of the audience. He advocates in opposition a form of filmmaking that prioritises the projection event, focusing on the time and space of watching (‘the only reality of cinema’). In After Lumière, by repeating the act from alternative viewpoints (and using alternative stocks) time and narrative are thrown out of sync. (Indeed, the archaism of the dress in Le Grice’s version emphasises that this is a film made of alternative times.) Rather than continuous and coherent, the time of film is repeated and made uncanny. Like the four different film stocks (colour positive, colour negative,
black and white positive, and black and white negative), the relationship between time and narrative (the question of synchronicity) becomes a kind of material in the film – something plastic and malleable.

This remodelling of synchronisation is key, I think, to the condition of expanded cinema's narrativity. Instead of being used to synchronise time and space, to make it unified, linear and continuous, the time of viewing intervenes; it breaks up the film time. The inconsistencies of repetition in After Lumière mean that, 'the viewer viewing is a continuous intervention'. Indeed, After Lumière's structure of intervention lets the viewer into the film as the viewer takes an active part in how the film is seen. In this sense, the film is made as it is seen and then reseen, as the viewer compares what they are seeing with what they have already seen (and the film, more to the point, is probably made from what is, in the end, unseen). Again, in terms of what is in frame and out of frame, the most important action is situated elsewhere – with the viewer.

The other film in this 'After' series is After Manet (fig.28), a more serious and in some ways superior attempt at establishing the multiplicity of possible constructions and reconstructions of viewing as action. After Manet was made specifically to be seen as a four-screen piece. The use of multiple and interrelated screens has clear implications for narrative. As Peter Weibel notes:
Multiple projections of different films alongside one another, one on top of the other, and in all spatial directions represented more than merely an invasion of space by the visual image. They were also an expression of multiple narrative perspectives.\(^{30}\)

Crucially, in both *After Lumière* and *After Manet*, the multiple points of view are combined with the use of role-play. *After Manet* is a play on Manet’s painting *Le Déjeuner sur l’herbe*. The four players set up a picnic in a nondescript field as the four screens frame the tableau. Each player takes charge of a camera, creating four independent and mobile points of view. The film’s makers are simultaneously its protagonists. This creates a very specific set of questions. Firstly, the continuous exchanging of positions denies a singular or fixed point of view. Secondly, the activity of viewing and being viewed is interchangeable so that the typical hierarchy of director and actor is broken down. (Instead of a dominant authorial presence, each protagonist is directed by the rules of production agreed on beforehand.)\(^{31}\) In this way the role of viewer and maker are intertwined, almost dramatising within the very structure of the four-screen work the question of narrativity in expanded cinema. Manet’s picnic, like Tony Conrad’s *Sukiyaki* performance, plays on the motif of consumption. Narrative is not just a way of consuming a predetermined product; in this case ‘film’s narrative discourse does not overpower a passive spectator but provides patterns within films that provoke active mental responses and set in motion [a] range of cognitive processes’.\(^{32}\)

Yet the layers of role-playing are multiple. Appearing in these films we have the ‘stars’, as it were, of Filmaktion: Annabel Nicolson, Gill Eatherley, William Raban, Malcolm Le Grice and Marilyn Halford. In *After Manet* they appear as themselves.\(^{33}\) In *After Lumière* those filmmakers who do so appear in the costumes of their historical predecessors. These are quite different strategies of dressing up. Taken together they suggest that the material, cultural and historical conditions of filmmaking are a lived activity ‘played out’ at every level of film production from conception through to screening and back again. Expanded cinema’s sense of performance or theatricality is underlined in this kind of role-playing and again relates to the question of narrative space. Indeed, it is perhaps in this notion of lived enactment that expanded cinema’s narrativity becomes most apparent.

‘Die Monster’
I have already noted Birgit Hein’s interest in narrative. Between 1979 and 1984 she and Wilhelm Hein developed what she calls a form of non-linear ‘movie’ presentation that expanded their previous structural experiments. Together they created a live expanded programme called *Movie Show* which combined new forms of performance and film projection, and toured Europe and the US in the early 1980s. As with Sharits’s use of installations, *Movie Show* was a search for new contexts (performing in pubs and bars rather than galleries and other ‘artist spaces’), and an attempt in many ways to escape the confines of art-world expectations. The *Movie Show* programme also characterises the
altered conditions of the late 1970s and 1980s in which artists move away from purely formal preoccupations and begin to re-explore what Patrice Petro calls ‘narrative and the metapsychology of viewing’.

Prior to the 1970s, theorists and artists were preoccupied with formal and ontological questions regarding the relationship between film and photography and the distinct temporalities and identificatory processes involved in static and moving images. By the mid-1970s and early 1980s, however, these issues were displaced in favour of a concern with narrative and the metapsychology of viewing – no doubt as a result of feminist and psychoanalytic re-readings of culturally coded and gender-specific ways of seeing.

In the UK in this period, younger groups of filmmakers such as Anna Tew, Jo Comino, Cordelia Swann and George Saxon combined performance with multi-screen Super-8 projections that dealt explicitly with subversive identity issues. This direct and visceral approach was reflected in the US by performers such as Laurie Anderson, Tony Oursler and Mike Kelley, while in Australia and Europe similar trends were preoccupying younger filmmakers and independent media art makers. In their Movie Show (fig. 29), the Heins employed a technique of mixed media collage. Hollywood trailers, abstract materialist film and crude animations, as well as home-movie footage, newsreel footage, slides, commercial advertising images and neo-Dada slapstick performance were all combined as part of the programme. As with the new generation of work, the performance was as provocative in content as it was in form. At its fullest, Movie Show, was made up of twenty-four seemingly unrelated ‘acts’.

Not simply iconoclastic, the Heins’s performance contained aspects of earlier forms of expanded cinema. By combining multiple projection and live performance, Wilhelm and Birgit were active both behind and in front of the projectors. As with z45” or After Leonardo, the artists are as much a part of the audience as they are a part of the show. But with this live carnivalesque movement back and forth they attempt to play out more fully (in a rather grotesque fashion) the activity of audience address and audience identification in cinema. Creating odd patterns of interaction and imitation similar to Gill Eatherley’s work from her ‘light occupations’ series or Marilyn Halford’s Hands Knees and Boomsa-Daisy 1973, the Heins interact with the film image, generating a tension between the supposedly real self and the self in film representation. But perhaps most explicitly for the Heins, a crucial condition of this activity was their engagement with narrative space.

As the various acts of Movie Show unfold, the popular space of cinema becomes a way of confronting the self as a cultural construct. The live interaction with the image combines narrativity with a powerful form of cultural appropriation. In one part of the performance a dubbed German trailer for Fred Zinnemann’s popular film From Here to Eternity is screened. Soon afterward Birgit and Wilhelm take part in a seemingly endless kiss made
visible only by the bulb of an 8mm projector. This real-life ‘appearance’ in front of the screen is coupled later with the use of home-movie footage that allows the protagonists to enter the ‘movie space’ of representation, as ‘themselves’. As David James observes, the Heins use ‘film as a vehicle for – not just the representation of – personal confrontation’. The private is made available for public consumption in order to blur the boundaries between life as it is lived and life as it is lived through, not just represented by, the movie camera. This is an important aspect of the turn in the late 1970s away from the purely formal towards a type of ‘presentation’ that allows the ‘personal’ to enter the work. As with The Kiss episode staged in correspondence with From Here to Eternity, the performers appear to be a copy of themselves in the act of copying the movies. Not only is this a critique of the way in which personal relationships are influenced by the cultural invention of romance, but it reintegrates the narrative space of the movies with the ordinary and the everyday in order to create surreal juxtapositions. It is what David Dye calls ‘something in real life getting in the way of cinema’.

Yet, entering the work as ‘themselves’ remains a difficult and ambivalent task. In a section of the show called Die Monster, Birgit and Wilhelm take to the stage dressed as Frankenstein monsters. The two now unidentifiable performers stand motionless in the projection beam before jumping down to where the audience is and dancing maniacally to kitsch rock and roll music. Here, the ‘showing’ of the self is achieved through a kind of masking. The self as an impersonation suggests that personal identity is part of a much broader narrative space. This is not only a play on the ‘monster-machine’ turning on its ‘inventors’ but also suggests something about the physical condition of projection. This physical display suggests that seeing film is a physical act with physical consequences. ‘To display or show, what André Gaudreault calls “monstration”, takes precedence over the desire to “tell” or narrate that he associates with editing.’ It is the editorial impulse to join the associations in order to tell us what we are seeing that fixes the identity of the viewer. Here, in contrast, it is the unfixed identity of the viewer that determines who and what body we are looking at. Neither body is confirmed except in its interchangeability.

It suggests a shift from earlier happenings associated with Filmaktion that parody the physical embodiment of vision, such as performances in which Mike Dunford ‘removed all his clothes and put them back on again repeatedly, thus emulating the complete repetition of a filmed loop’, or Le Grice’s Horror
Film 1 that combines the physical presence of the body with the 'absence' of projected light, or a naked Carolee Schneemann swinging on a trapeze in the light of a projector beam. In the Heins's later work, rather than a naked figure literally stripped of cultural associations, the use of costume appropriates popular narratives of 'transformation' in order to open up the narrative space of cinema in which the correspondence between representation and the self is endlessly constructed. This is most notably achieved in terms of gender.

With both artists dressed as Frankenstein monsters, it is difficult to tell who is who. As one observer noted at the time, only 'the ritualised dance gestures denote male and female'. The two figures are de-differentiated as the differences between male and female are momentarily replaced with myths of gothic or comic-book folklore. Identity becomes a question of play-acting and identification becomes a process of recognition and response set within a field of cinematic representation and identification. This deconstruction of difference is played out further in an act entitled Superman and Wonderwoman (fig.30), in which the Heins turn life-size cardboard cut-outs of Superman and Wonderwoman into crude automaton-like puppets which are made to masturbate and gesture wildly in the empty projection beam. Nietzschean or 'super' heroic forms of gender (in particular a potent brand of 'super' heterosexuality) are reduced to mechanical animations and artificial or illusionary light. Yet the projection beam remains important. The mechanics of cinematic vision bring the automatons to 'life', as if rather than simply showing bodies in space the cinema produces bodies in space. More specifically it produces the body of the viewer as 'he or she' recognises 'him or herself' in the movements, form and shape of the actor in the light. Both are made to 'live' or become 'live' as much through the technologies of representation as through the activity of watching. When the light comes on the figures move.

‘In the cinema I dissolve into all things and beings’

Like Epileptic Seizure Comparison and Le Grice’s multi-screen works, Movie Show turns on the spatial question of possession and control. There is something of an attempt to dissolve the relationships that define identification within the narrative space of cinema. As with all of the work I have discussed, Movie Show displaces authorial control. The Heins become part of the audience – they observe and participate in the projection. The production of meaning is located with the audience, presenting viewers with a collage of acts that may or may not be related: acts that are unpredictable, even self-destructive. Loose and undisciplined, ‘it did not retextualise or synthesise its various components as much as allowed the separate items in the collage to retain their own autonomy so as to emphasise the film’s fragmentation, its systematic fracture and effrontery, even its own sloppiness’.40

Yet to some extent Movie Show goes further than its predecessors. It is not just a question of radicalising an audience but of dissolving the boundaries of identification and representation. In this degree-zero narrativity, live performance and the cinematic are combined in order to entangle cinema’s
screen space with the malleability and mobility of cinema spectatorship. Perhaps this has always been a condition of the narrative space in front of the screen. In the 1930s, Kracauer recorded the suggestive response of one female cinema-goer: ‘In the theatre I am always I. But in the cinema I dissolve into all things and beings.” Rather than simply anti-narrative, *Movie Show* creates the condition of narrativity identified by Scholes in which meaning is situated with the audience. Only here, the very notion of an ‘audience’ as an opposite to the ‘film’ is itself made problematic as what we are being shown is explicitly mediated through the cultural acts of showing.

*Movie Show* addresses the audience as a co-conspirator in making ‘filmic’ connections and reorganising the various systems of meaning or narratives that usually employ a quite different form of ‘audience address’. Masking, ritual and impersonation echo non-Western uses of masks and rituals where authority becomes something transferable and collective rather than singular and possessive. “Costumed figures act as intermediaries between men and the powers of nature, seeking to conjure or tame the forces at work in the world through mimetic representation.” Expanded cinema here becomes a field of interchange, a way of developing a context of the image that is its narrativity even to the extent that it challenges the notion and the existence of an ‘audience’ as an ‘identifying body’ constructed in the process of seeing itself. Through its narrativity, or its prioritising of the action of the viewer, expanded cinema has become a means of grappling with broader notions of identity and interactivity in film, video and other media technologies – something I hope the variety of perspectives represented in the following chapters will begin to demonstrate.

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3 Bruno 1997, p.10.
6 A.L. Rees, ‘Conditions of Illusionism’, *Screen*, vol.18, no.3, p.49. Rees’s observation echoes Roland Barthes’s conception of the ‘Degree Zero’ in literature where meaning is made the activity of the reader rather than the author.
8 Federico Windhausen asserts that few critics have looked beyond Shanti’s canonical single-screen films in order to consider his installation. The neglect of Shanti’s “locational” pieces has been motivated in part by aesthetic judgments ... and facilitated by institutional obstacles, namely reluctance to re-install work ... but a renewed study of expanded cinema has helped redress this. Federico Windhausen, ‘Paul Shanti and the Active Spectator’, in Leighton 2009, pp.122–40.
16. Ibid., p.20.
20. Ibid., p.59.
22. Ibid., p.58.
25. ‘My way into this direct audience address had been paved by the narrative performances that had by then long accompanied my presentations, particularly in connection with the “cooked” films.’ Tony Conrad, Retrospective, Vasulka and Weibel, 2008, p.548.
33. Filmaktion was a series of events as much as a defined group of filmmakers making expanded cinema in the UK in the early 1970s: David Curtis 2007.
37. Judith Mayne cites André Gaudreault’s distinction between ‘monstration’ (showing/demonstrating) and ‘narration’ (telling) in order to distinguish narrativity in film from its function in literature. See Judith Mayne, The Woman at the Keyhole: Feminism and Women’s Cinema, Bloomington: Indiana University Press, 1990, p.164.
Video Installation in Europe and North America: The Expansion and Exploration of Electronic and Televisual Language 1969–89

A conventional interpretation of ‘cinema’ suggests a medium with a number of particular and specific properties relating to the experience. For some, the term still conjures up a single, large-scale projected image viewed from a fixed position in a darkened, purpose-built space; spectators, arranged in orderly rows, are immersed and passively engaged in a narrative spectacle of sound and picture. However, the term has more recently come to have a wider and less medium-specific connotation, and this shift has come about partly because of the phenomenon of media convergence, but also because of the pioneering work of artists who explored the potential crossovers, interrelationships and interdependencies between film and video.

Some innovative artists – particularly those exploring the formal and aesthetic boundaries and conventions of the moving image during the 1970s and 1980s – sought to challenge and expand on the rigid definitions and demarcations between these two closely related media. Artists in this period experimented with a diverse range of forms and configurations, seeking a wider and more radical potential for cinema, and this approach included an
exploration of the possibilities of the electronic moving image. This essay will focus on some key works by artists in the United States and continental Europe who sought to investigate the capabilities and potential of video as an art form during the early formative period that began in the late 1960s, in light of a renewed interest in the work of the period and in particular an expansion of notions of the cinematic and the convergence of the filmic and the electronic.

Although many artists working in the modernist tradition tended to concentrate on the specific formal properties of their chosen medium, the similarities and relationships between film and video were often of considerable fascination, particularly to artists interested in the potential for a wider and more radical redefinition of the cinematic and the televisual. By the mid-1960s, moving-image artists working with video were drawing on concepts from a diverse range of art movements and approaches, political ideologies, theoretical and conceptual ideas and technological developments. In this period of social upheaval and economic and cultural change, much so-called ‘new art’ was aesthetically, formally and politically radical. Artists interested in exploring the potential as a medium of video in its early stages were highly influenced by procedures and ideas from art movements including Fluxus, Performance and body art, Arte Povera, Pop art, Minimalist and Conceptual art, avant-garde music, contemporary dance and theatre, as well as other cross-disciplinary cultural activities and theoretical discourses. Video art was a distinctly international phenomenon and artists working with the medium not only drew from these diverse cultural and political influences, but also imported and transported ideas and attitudes across national boundaries, enriching and nourishing the wider fine art practice, reappropriating concepts, discourses and approaches from many other disciplines and media. Although this essay concentrates on work made by artists in North America and mainland Europe, the works discussed should be considered in relationship to video installations and expanded electronic image works produced by artists based or working elsewhere, particularly in the UK, Japan and Australia.

In the late 1960s and throughout the 1970s, experimentation with mixed media and multi-screen was widespread. Artists sought to develop strategies to challenge more traditional viewing conventions, particularly with respect to the role and position of the spectator, as well as to open up the art gallery and museum to the potential of time-based and expanded moving images. Although the term ‘video installation’ is a later addition to the lexicon, a number of artists on both sides of the Atlantic were experimenting with the sculptural and spatial potential of video. Artists working with video were also naturally interested in opening up new territories for the electronic medium, and this included a challenge to the hegemony of broadcast television, with its one-way flow of propaganda, mass entertainment and advertising. They were also seeking ways to expand its boundaries beyond the limits of the TV ‘box’. Video artists working with installation often sought to explore spatial and physical relationships in relation to screen-image content, frequently including interactive elements. This ‘participatory’ dimension – engaging
the audience directly with the work at a physical, intellectual and emotional level – was of paramount importance in video installation. In many video installations this physical engagement produced an awareness of a radical new space for art spectatorship beyond the confines of the gallery, conventional cinema or the narrative linearity of television broadcasting.

In the early days of video art, video projection was a rare occurrence. This was not simply because the equipment was notoriously unreliable, scarce and expensive, but also because the projected image was of such poor quality, especially when compared with film projection. Video projection in the 1970s and even in the early 1980s provided a low contrast and a comparatively dim image, and due to the relatively poor resolution of the television image it was also of limited use. In this period artists who sought to explore notions of scale and/or the spatial characteristics of the medium invariably resorted to the use of multi-monitor, or, as they were more often called at the time, ‘multi-channel’ works. Viewers confronted with a bank or array of monitors in a gallery or exhibition space were immediately required to assess the implied relationship between the images on display. A multi-channel work challenged the viewer to engage with the work on a spatial level; she/he was deliberately left free to make decisions about the order of priority of the images and the relationship between the multiple screens and the viewing position, and to consider the space between the monitors, their relative size, and even the method in which they were mounted or displayed. A further potential level of signification could be articulated by the artist who had control of the images across the multiple screens as well as within the electronic space of the single screen, and this was of course in addition to any manipulations of the soundtrack, including the possibilities of sound projection.

In the United States and Europe, a number of artists explored the potential of a mix of closed-circuit, live and prerecorded video images. For example, Frank Gillette and Ira Schneider developed the multi-screen video work Wipe Cycle for Howard Wise’s seminal New York gallery show TV as a ‘Creative Medium’ in 1969. Wipe Cycle consisted of a bank of nine monitors, with four screens displaying prerecorded ‘off-air’ material and the other five showing ‘live’ and delayed video sequences of gallery viewers. Gillette and Schneider sought to present an experience that would break the conventional single-screen TV perspective by providing a complex mix of live images and multiple viewpoints.

Around the same period, the Austrian artist Peter Weibel produced a number of significant sculptural installations exploring the potential of closed-circuit video systems to allow the viewer to reflect on and interact within the electronic and signifying spaces that were produced. In Audience Exhibited 1969, video recordings of gallery spectators were simultaneously presented in adjacent rooms of the gallery, turning the spectators themselves into the subject of the exhibition. In Beobachtung der Beobachtung: Unbestimmtheit (Observation of the Observation) 1973, cameras and monitors in a three-channel CCTV system were arranged to prevent viewers from seeing their own faces from any position they occupied, highlighting the ability of the
video surveillance system to mediate and control self-perception. In *Epistemische Videologie (Epistemic Videology)* 1974, Weibel set up a live electronic mix of texts from two opposing cameras shot through a sheet of glass. The work sought to make apparent the transformation of meaning that occurs no matter how ‘transparent’ the medium. *Der Traum vom gleichen Bewußt-Sein alle (The Dream of Everyone Having the Same Consciousness)* 1979 highlighted the differences between objects displayed in the physical space of the gallery and on display in the electronic space produced by the video image.

There is a sense in which all video installations can be seen as ultimately ‘interactive’, in that the viewer is presented with a kind of variable narrative of spatial and representational possibilities that she/he must negotiate. Many video installations can also be perceived as ‘site-specific’, insofar as works installed in a gallery must be placed and tuned to the particularities of the site. This notion of the site-specific installation is an important issue, particularly in terms of the relationship of the work to the exhibition space in which it is installed. Characteristics of ‘site’ include factors such as the entrance and exit positions, the scale and layout of the space, the acoustics, light levels, and the type of space (particularly its ‘normal’ or intended architectural purpose or function). The most important issue in question is often the extent to which a work is site-specific. Often, video installations, whether projection or multi-monitor, sought to counter the notion that television was a psychological space, without existence in the physical world. It could be argued that single-screen video works that do not seek in some way to address the relationship to the space and time they occupy provide a direct, almost traditional, ‘cinematic’ experience, transmitting information and ideas via light and sound to the viewer without any critical engagement with the temporal, spatial or the physical.

At the beginning of the 1970s, media centres and galleries often displayed video work on multiple screens to counter the diminutive size of the television screen. Video pioneers Steina and Woody Vasulka displayed their early *Matrix* series of 1970–2 on banks of video monitors or ‘video arrays’ at The Kitchen in New York. These works multiplied and drifted a single video image sequence across a bank of multiple television screens in an early manifestation of subsequent developments in their multi-channel video works such as *Continuous Video Environment 1971* and *Electronic Environment 1974*, both of which sought to explore a sense of the potential (and at that time still relatively latent) immersive power of the electronic moving image.

The Vasulkas’s fascination with the fluidity of the electronic image and the desire to move beyond the limits of the single frame helped to pave the way for later multi-channel works such as Beryl Korot’s *Dachau* 1974. This early four-screen installation was built around a structure attempting to literally ‘weave’ strands of meaning via a multi-layered image construction. Less concerned to establish a relationship with the gallery space, *Dachau* in some ways replicated the full-frontal viewing experience of a multi-screen film, the main difference relating to the intimate scale of the video images and
their contrast with the image content. The viewer was encouraged to watch the piece for its full twenty-four minutes and to face the screens seated on a bench placed at specific distance from the row of screens. Four identical monochrome television screens were presented in a horizontal line, their familiar boxes masked behind a panel so that only the shape of the screens was visible.

Steina’s *Allvision 1976* (fig. 31) was a closed-circuit sculptural video installation in which two video cameras mounted on a rotating turntable facing a mirrored sphere were employed to transform and disrupt the viewer’s perception of the surrounding gallery. This work sought to provide a ‘machine vision’ of its environment – an electronic reconfiguring of the entire viewing space that prefigured later digital concepts such as virtual and immersive environments.

A similar relationship between the spectator and the surrounding architectural space was demonstrated in the Canadian artist Michael Snow’s installation *De La 1971*, a kinetic video sculpture derived from a modified version of the camera machine used in his long film *La Région centrale 1971*. The original machine was adapted to support two video cameras to provide a ‘live’ image to four television monitors. The installation presented a complex view of its own location and surroundings, including any observers, the ambient light and the video monitors themselves. The ‘live’ video cameras provided monochrome images to the four monitors simultaneously, the sound provided by the rotating mechanism of the machine. For Snow, the relationship between the machine as sculpture, its presence in the ‘real’
world, and its role in producing the images on the screen was the central concern of the work.

In the twenty-five-screen video installation *Il nuotatore (va troppo spesso ad Heidelberg)*/ *The Swimmer (goes to Heidelberg too often)* 1984 (fig.32), the Italian group Studio Azzurro (Fabio Cirifino, Paolo Rosa and Leonardo Sangiorgi) presented a continuous sequence of a lone swimmer repeatedly traversing a line of twelve video monitors. A second set of twelve television screens, placed back-to-back with the first, display numerous 'micro-events': an emerging human figure, a floating lifebuoy, a diver, a sinking anchor, and a ball falling, all referenced to an additional plinth-mounted monitor displaying the elapsed time. In *Il nuotatore (The Swimmer)*, as with other Studio Azzurro video environments of this period such as *Storie per corse (Stories for Racing)* 1985 and *Vedute (quella tale non sta mai fermo) (Views [That Man Never Stands Still])* 1985, there was a deliberate blurring of the boundaries between the natural and the artificial, the ephemeral video image and the physical television object. All, crucially, involve a significant element of audience interaction, the level of meaning communicated via an active participation rather than the passive viewing of an audio-visual spectacle. For Studio Azzurro the video installation provided an opportunity to place the spectator’s role centrally within the work, exploring multiple possibilities for human interaction.

During the 1970s an innovative group of Polish artists including Andrzej Różyczki, Paweł Kwick, Wojciech Bruszewski, Józef Robakowski, Antoni Mikołajczyk, Zbigniew Rybczyński, Ryszard Wałko, and Janusz Szczerek, collectively known as the Workshop of the Film Form (WFF), produced a number of video installations exploring the unique and specific properties of the medium. Committed to an open and multi-disciplinary approach to working with video, film and photographic processes, they explored the potential of electronic imaging alongside cinema and photography. In 1973 the WFF presented *Operation Workshop (Akcja Warszat)*, a series of video installations at the Muzeum Sztuki in Łódź. This group show included video installations by Różyczki and Kwick exploring the role of TV broadcasting and the television set as a sculptural and cultural object.

Although many early works of the group were concerned with the phenomena of broadcast television, from the mid- to late 1970s the WFF artists increasingly distanced themselves from television. Writing in 1976, Robakowski defined the group’s oppositional and critical
approach to the broadcast medium: ‘Video art is a form of opposition that discounts the use value of this institution; it is a creative movement that uses its inherent independence to expose this mechanism as something that is used to control people.’

Wasiko produced a number of significant video installations exploring physical and electronic representations of space. His 1976 closed-circuit installation A Corner (Rog) contrasted the relative relationship between the corner of a room and its televisural representation, highlighting the relative and illusory nature of the electronic image. A similar exploration of the contrasting relationship between the image and the actual is evident in Robakovski’s video installation A-B, made in the same year.

Kwik’s 1978 installation Przy Pomoc Przy Oddachu Kieruje Jasnosci Obrazu – Instalacja Do Medytacji (I Control Image Brightness by Breathing – A Meditative Installation) combined film and video media to explore and interrogate aspects of media communication and artistic modalities. In 1975–6, Mikolajczyk produced several video installations including Obraz Barwny, Obraz Czarno-Bialy (Colour Picture/Black and White Picture) and Rzeczywistosc-Obraz Rzeczywistosc (Apparent Image) which incorporated recording and rerecording processes to present multiple images highlighting and critiquing the potential of television to manipulate meaning and transform media imagery.

Wojciech Bruszewski, also a founder member of the WFF group, produced a number of closed-circuit installations that explored the potential anomalies between the appearance of objects in the gallery space and their representation within the video screen, for example From X to X 1976 (fig.33), in which a line drawn onto the gallery wall was traced around the space but completed within the virtual space of the television screen. In Outside 1975, Bruszewski presented a rotating text of the word ‘outside’ as both an image within the screen and as a sculptural object adjacent to it.

As with many of the Polish WFF works cited above, video installations often sought to engage the viewer in a direct physical interaction with the apparatus, but the resultant images and this participatory aspect were not always directly related to the actions of the spectator. Nor were they necessarily confined to the immediate present. For example, Madelon Hooykaas and Elsa Stansfield’s installation Compass 1984 (fig.34) featured a closed-circuit video camera mounted onto a weathervane on the roof of the gallery. This mechanism influenced the images displayed on four monitors
arranged in the gallery on the four cardinal points of the compass. The images were directly affected by the wind direction, providing an experience of the relationship between past and present, with natural forces an active participant in the creation of the work.

In Bruce Nauman's *Live Video Taped Corridor 1969–70*, a single video camera was mounted overhead at the open end of a narrow corridor, while at the opposite end two large monochrome monitors were stacked one on top of the other. The viewer was confronted simultaneously with a prerecorded image of the empty corridor and a live image of themselves in the space. Thus the viewer was presented with a dislocation of the temporal and the spatial—a simultaneous experience of presence and absence, and of the present and the past.

Bill Viola's installation *Il Vapore 1975* also blended the past and present, making use of a simultaneous electronic blend of live and pre-recorded video images of the same tableau. A video recording of the installation within the gallery space was made in which the artist slowly filled a basin with water and this recorded ritualistic performance was later electronically mixed with a live video image of the same configuration. Because of the perfect alignment of the 'real' objects arranged in the gallery space with the prerecorded images of them, visitors to the gallery experienced an image of themselves in real time within the same video space as Viola performing his solitary ritual.

In *Dawn Burn 1975* (fig. 35), a seven-monitor installation displaying cumulative images made over seven summer days of the sun rising over the East River in New York City, Mary Lucier 'burned' the video camera pick-up tube by pointing it directly at the sun, thus permanently marking the light-sensitive component of the camera and leaving a visible trace of the intense light within the video imaging system. Lucier retained the same viewpoint and the same lens focal length throughout the seven-day period during the summer; in the exhibition of the installation, all seven days were presented...
simultaneously in sequence, each tape displaying an accumulation of image burn from the previous days.

The flow and flux of natural phenomena and the way in which these could be juxtaposed using the ambiguities of electronic space and time were also a feature in VALIE EXPORT's early video work. In Zeit und Gegenzeit (Time and Counter-time) 1973 she contrasted the temporal reality of external phenomena relative to images contained within the televisual space. In this work, slowly melting ice and freezing water were transposed, in an early example of the use of reverse playback of a video recording.5

Although as stated previously, the image quality of early video projection was disappointing – especially when compared with film – some artists experimented with it very successfully. During the 1970s, Peter Campus produced an extended series of projected video installation works that sought to deliberately confront the viewer with a self-image that defined or challenged normal expectations. In an important sense these works were participatory and sculptural, in that they invited and perhaps more significantly required audience participation. In Shadow Projection 1974, the viewer's projected image was made to coincide with his/her own shadow, one shrinking as the other increased in size. In this and other works in the series, such as Interface 1972, mem 1975 and aen 1977, Campus used disconcertingly simple arrangements of the 'live' video image and projection technology, in conjunction with mirrors, inverted cameras or distorted projections, to create and explore the new sensory conundrums of televisual space. All of these works confront the viewer with examples of complex coexistent physical and virtual spaces manifested via video technology. In these installations, the viewer was compelled to confront his or her own image, and to recognise and acknowledge the fascination of the live electronic mirror of video feedback.

As with other aspects of video technology during the period under discussion, video projectors increased dramatically in quality and reliability, decreasing in size and bulk as well as cost. With this rapid change, a growing number of artists began to explore the potential of this new mode of presentation. One significant feature of projection is the potential to project images onto surfaces (and objects) other than a conventional screen. Not only did this have an effect on the size of the image that an artist might consider, but it also presented the possibility of abandoning the traditional TV rectangle altogether. The standard broadcast TV ratio (3:4) that had confined and constrained video artists in the 1960s was no longer necessary or desirable, and this technological change helped to transform video art, liberating it from the inevitable reference to the television box.

The work of Tony Oursler provides an example of the potential of video projection to transcend the conventions of the rectangular television frame while simultaneously extending and broadening concepts of the cinematic. Oursler began working with video in the mid-1970s, often making props and characters for his tapes, which he saw as an integral part of his working process. Oursler sought to create a dynamic tension between the interior space of the video presentation and the gallery space, developing
a series of installations involving the human figure. For example, in *Crying Doll* 1993, images of the continuously weeping face of performer Tracy Leipold were projected onto the head of a diminutive doll.

During this early period, artists working with video sought strategies to explore the dynamic potential of the medium beyond the confines of the single television screen. As has been seen, this was achieved in a variety of methods and approaches including the use of multi-monitor displays, closed-circuit camera systems, mixed-media environments and video projection. These pioneering artists helped to define a new and challenging art form that sought to expand and extend the scope and power of the moving image and open up new territories for future generations to build on and develop. The increasing effectiveness of video projection and the development of methods of multi-screen video presentation such as video walls and arrays, as well as computerised systems for multi-image synchronisation, all contributed to the blurring of the distinctive qualities that identified and distinguished video from film. Many artists worked in both media, moving freely between the two and naturally seeking out the similarities and relationships between them. The rapid improvement in image resolution closed the gap further, but by far the most important single factor in the redefinition of the cinematic as a concept was the development of computer editing and image control and manipulation. Artists experimenting with the electronic moving image during the 1970s and 1980s were becoming less interested in the distinctive and unique properties of their medium as way of exploring and investigating their relationships to the surrounding culture, and more aware of the emergence of a new and more pervasive phenomenon: the development of a powerful and immersive digital environment that embraced and subsumed both the filmic and the electronic.

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A Kick in the Eye: Video and Expanded Cinema in Britain

It may be of some surprise to be confronted with a chapter representing video as expanded cinema. The two media, film and video – for so long poles apart as art practice and theory, particularly in Britain – have been re-evaluated. The digital domain and convergence has made media specificity within what we now understand as cinema largely irrelevant. As Jackie Hatfield wrote, ‘The cinematic is not based on the material conditions of a medium and the cinematic experience can cross media boundaries or be achieved through a range of media combinations. Furthermore, post digital, I take a position that there should be no material distinctions between film and video.’

This chapter will offer some thumbnail impressions of a few video works worthy of study within the context of expanded cinema in Britain. No attempt will be made at a history or even a logical survey: rather a passaggio of works will be paraded before our attention, brought into focus for a brief moment before receding again from view. The first thread that connects some of the works is that they utilise some very specific phenomena or property of the video or television apparatus.

Much debate and theory in both film and video concentrates on the materiality or otherwise of the two media, but in early cinema and the later ‘expanded cinema’ the apparatus itself was (and remains) an important focus for artistic experimentation and mechanistic invention. The importance of this is often under-emphasised in the literature. A notable exception is David Curtis’s chapter on ‘Film and Fine Art’ in his book A History of Artists’ Film and Video in Britain, which describes in some detail the re-engaged and experimental approaches and apparatus of Steve Farrer, Tony Hill and Tim Macmillan. Of course, Gene Youngblood’s famous book Expanded Cinema devotes much of its attention to explaining the then new (and old) technologies (and the uses to which artists put them), despite his now rather outmoded claims for concentrating on process and expanding ‘human consciousness’.

Early television works in the 1960s in Britain (television, that is, as opposed to video) were grounded in the apparatus and explorations of
its use. The various Arts Lab experiments and events by John Hopkins, Malcolm Le Grice and Mike Leggett were more or less semi-private affairs for the cognoscenti. It was not until 1972, when David Hall and Tony Sinden collaborated on a work for A Survey of the Avant-Garde in Britain at Gallery House, that British artists would fully engage with the concerns of such continental artists as Wolf Vostell, Nam June Paik, Peter Weibel, and VALIE EXPORT, the first two of whom had been appropriating and incorporating TV sets into their mixed-media works (installation as a term had not then been coined) a decade earlier. Hall and Sinden’s work 60 TV Sets went beyond these antecedents, however, even though the piece was simplicity itself, as Hall recalls:

In the next room, was this absolute racket going on with 60 television sets blazing away at high volume ...?
The television sets were racked around the room, tuned to different stations with inadequate antennas. Although there were only two UK broadcast television channels at the time, the result was still one of raucous variety—a cacophony of light and sound. The work clearly foregrounds the display device of television/video and suggests questions about the nature of broadcast television and also the gallery space and context.

A *Kick in the Eye* (fig.37) is an important and overlooked video installation, made and shown only three times during 1979 by John Adams. Adams was a member of the Basement Group, a Newcastle-based exhibition and production venue for performance, video and film, from 1979 to 1984. He produced this work as a final-year student at the art college in Newcastle where it was first shown in the college’s ‘White Room’; it was subsequently re-exhibited at Events Week 3, at another art school in Coventry, and later that year at the Video Festival at Bracknell’s South Hill Park Arts Centre. The idea for the installation came about by chance, as the artist recalls:

We used to have an old TV which took several minutes to warm up. When the picture first appeared, it was a single bright horizontal line across the middle of the screen. After a while the picture would suddenly expand to its correct size and fill the screen. One day whilst I was waiting for this to happen, I glanced away from the TV and was astonished to see an image floating above the screen for a split second. Having just read *Satori in Paris*, it gave me the idea for *Kick in The Eye*.
According to Adams the Japanese word ‘satori’ means ‘sudden awakening’, ‘enlightenment’ or ‘kick in the eye’. The work is a three-monitor installation, with two of the monitors arranged on plinths approximately 6.5 metres apart. These are fed with a video signal that switches between the first two monitors at two-second intervals. The third monitor is mounted centrally between the two, at the same height, but this one is rotated by ninety degrees to display in portrait rather than landscape format. The monitor is configured, by collapsing the video raster horizontally, to display a single vertical image, which appears as a bright white line.

Adams describes the content and viewers’ experience thus:

The original installation displayed Hokusai prints alternately on Monitor 1 and 2. Monitor 3 displayed Japanese erotic art, which could not be perceived (initially) by the viewer. Japanese music played through speakers. Typically, a viewer enters the space and sits on the floor in the viewing area. The viewer watches the images on monitor 1 and 2 much as one would watch a tennis match, turning the head one way and another. At some point, the viewer would however, flick their eyes instead of turning the head. This rapid eye movement would make an image appear in space between monitor 3 and monitor 1 or 2 (depending on the direction of eye movement). This virtual image appears very briefly and produces a discernible physical reaction in most people. Usually the viewer is (then) able to replicate the experience at will.

This ghostly ‘virtual image’ disappears if looked for, as one has stopped flicking one’s eyes or moving the head. As such, the work has the quality of those early proto-cinema set-ups that featured phantasmagorical imagery, illusions and sleights of hand and tricks to the eye created and performed by the gentleman scientists, showmen, and tricksters of the eighteenth and nineteenth centuries. Although the video raster is apparently collapsed to a single line, in fact the whole 625 lines are still there, and the head or eye movement induced by the switching rhythm of the other monitors reproduces the scanning effect necessary to ‘display’ or reveal the image, this time apparently in space. This illusion and projection of the image in space characterises the work as definitively expanded.

David Hall’s Vidicon Inscriptions 1974–6 took advantage of another ‘fault’ or property of the technology at the time of its making. In the early 1970s the cameras most available to artists were industrial quality with light-detecting pick-up plates of a type known as vidicon (black and white). These camera tubes were very susceptible to brightly lit areas. Bright light could produce a flaring and an after-image in negative which would usually fade after a few seconds (or minutes in extreme situations). Hall made two works that exploited this unwanted phenomenon: first a series of sketches as a videotape piece, and later an interactive installation, both entitled Vidicon
Inscriptions. The installation version was exhibited at Glasgow’s Third Eye Centre in March 1976 as part of Video: Towards Defining an Aesthetic, curated by Tamara Krikorian. Upon approaching the video monitor, the viewer would trigger a lens attachment and be briefly ‘exposed’ under very bright film lights positioned to either side of him/her. The subject’s head and shoulders would first appear on the monitor normally, but would slowly disappear to be replaced by a negative ghostly version. Denizens of Glasgow’s Sauchiehall Street were highly amused and taken with this strange apparatus which revealed the clear materiality of this electronic form and, like Adams’s work, is reminiscent of early kinematic inventions and their fixation with illusion and play. This work is by its nature virtually impossible to re-present as the vidicon tubes are no longer manufactured, and those that still exist have lost their latency.

My own installation, 8 x 8 x 8 for the Tate Gallery’s education department in 1976 resonates with this theme of apparatus. It also dealt with a primary property of the video signal: its ability to be switched in real time from one place to another. The audience was surrounded by eight monitors, atop each of which was a camera. To deliver the switching sequence, I commissioned the development and construction of a programmable video switcher (dubbed the AVS), combining slide-tape pulse technology with video electronics. From the audience’s perspective, there was an obvious expectation that the monitors would display their image, and indeed they did, but as they watched themselves the image would switch to a different viewpoint, encouraging them to look at the next monitor switch then the next switch, and so on. In the London Evening Standard Richard Cork described the experience:

Partridge assailed us with a multi-angled analysis of our own positions in the room. The effect was at once hypnotic and unnerving.

For his apparatus-based work, Behold Vertical Devices 1974/6 (fig 38), Tony Sinden chose to exploit one of the control buttons standard on every TV set and monitor of the time. The nine small monitors were laid on their side and the ‘vertical hold’ was offset to produce a gentle roll that appeared to move from one monitor to another along with the image of a running woman. The American artist Joan Jonas had also exploited this error in stability some years before, but Sinden’s exploitation was highly sculptural and the whole work, with its domestic wooden chair and plank supporting the monitors, was beautifully self-contained. The visual reference to Muybridge was clear, deliberate and appropriate, and the whole work was later available for exhibition crated in three or four travel cases, again an echo of the early travelling cinema events. Sinden worked in film and video from the mid-1960s onwards, and would always reference his works with precise visual citations of the canon, whether in his solo works or his collaborations with David Hall and the Housewatch crew.
Projectors/Performance

Of course not all artists or their works (even those discussed so far) were concerned primarily with foregrounding the apparatus or technology in each piece of work. To my mind Tamara Krikorian’s most expanded work remains one of the first she produced. Breeze 1975 was shown first in Edinburgh as a four-monitor work, and then later at The Video Show at the Serpentine Gallery in 1975. It has the distinction of being the first piece by a British artist to involve video projection, although this was an experimental and even opportunist or casual decision on the part of the artist. The projector was an incredibly bulky and expensive back projection system called an Eidophor (of the type used by NASA for the control room of the Apollo moon landings). It produced a rather grey-upon-grey fuzzy image quality. It had been loaned to the exhibition with no one quite knowing what to do with this behemoth. Krikorian was able to exploit what turned out to be a mechanism highly sympathetic to her own image construction. The Eidophor’s projection repeated, at large scale, the same video signal that was fed to four monitors positioned on the floor. All screens displayed an image of water, which appeared to flow from one screen to another. The work was highly evocative of the British landscape tradition, with the monochrome aspect providing ambiguities of form and the technology a modernist slant.

Many artists chose to expand the form by performing alongside or with the video image, either as a closed-circuit relay or by interacting with some prerecorded sequence. This was directly analogous to works involving
live performance by filmmakers such as Malcolm Le Grice (Horror Film 1971), Marilyn Halford (Hands Knees and Booms-Daisy 1973) and William Raban (245° 1973). Kevin Atherton's interrogations of himself or his alter ego in the two-monitor video installation In Two Minds 1978 (fig. 39) is an exemplary work, particularly as it was not until 2006 that the artist added a live performance element at the soft launch of the REWIND research project in Dundee. Atherton describes the work and its development:

In Two Minds is a two-monitor video installation first exhibited in the Serpentine Gallery London in 1978. This work consisted of myself on one video monitor asking questions of myself on the other monitor. The questions, typically of that time, largely address the nature of the piece itself. At the time of making the piece I had no intention of using it beyond the Serpentine show, the rough and ready state of the black and white tapes attest to this. However, the 'open' or 'incomplete' nature of the work allows me to 're-enter' it and create a new version, where as a fifty-five-year-old man I can answer the questions put to me by my twenty-seven year-old former self. As a complement to the first work the 'future' version of In Two Minds consists of me as a fifty-five-year-old man – asking questions of my eighty-one-year-old self. This is done through the use of make-up and by acting myself as an old man. The basic principle of real time, so enshrined in the work from the
Goddard, Simon Robertshaw, Katherine Meynell, Stephen Littman and myself) and the German artist Maria Vedder. The *National Videowall Project*, as Littman conceived it, was another example of the foregrounding of the apparatus of display:

The videowall or matrix, in which a number of monitors can be programmed by a computer to run from a single source, or multiple sources, seemed to me to provide a powerful new tool … I could see the development of a whole new ‘videowall aesthetic’.  

As it turned out, the ambition for ubiquitous video walls around the country, echoing the grand cinematic screen, proved to be elusive, and the project was repeated only once, rather appropriately at the Diorama in London. The computer control at the heart of this analogue/digital hybrid apparatus, however, was a very significant harbinger of things to come. The technological imperatives also inspired Merseyside Movieola, which had organised *Video Positive*, to develop a technical resource of equipment, staff training and associated services, named MITES (Moving Image Training and Exhibition Service), for the nationwide support of artists’ video and installation projects. This continues under the new organisation that succeeded Movieola, FACT (Foundation for Art and Creative Technology), which remains the UK’s only dedicated media-art museum and artspace.

**Video Post-Expanded**
For me, as a practitioner from the 1970s, it is difficult to perceive most video art as ‘expanded cinema’ – constrained as it was by resolution, contrast ratio, and particularly the box of the television set. But, as we reconsider the related histories, it now also seems undeniable that video (if we define it as a data-stream) is indistinguishable from film. It often is one and the same: in fact, celluloid accounts for a tiny percentage of both image capture and distribution or display. Film as well as video is a relative term, in the sense that it references an older medium that is specialised and rare in the case of film; in the case of video it has been morphed, incorporated into digital capture, storage, manipulation and display. The television monitor largely defined and constrained early video art, and mostly imposed upon the medium specificities that can no longer be claimed.

The specificities (and autonomous form) that were investigated by the early international proponents of video in the 1960s and 1970s were *a propos* a medium that was transient and subject to constant technological change. It is arguable whether it was ever a medium as such – it seems more properly an engineering system, television, which was designed in the early twentieth century as, primarily, a system for transmission and reception. For the first thirty years it could be said that the language of television was illiterate, as there was no way of writing it down (recording it). The broadcast video recorder came along in the third decade of television, but artists were not to gain access to relatively low-quality, smaller-gauge formats until the middle
seventies, is now broken. This and other transgressions then span a period of fifty-four years, twenty-six of which are yet to occur, is the subject of the work. The virtual nature of predicting the future also allows me to create fictional art works, make public my career aspirations, and to imagine how my personal life might pan out.  

In particular many women artists in the 1970s were attracted to either video’s immediacy or film’s material qualities and created mixed-media performative works which, although cognisant of media properties, had little relationship to the dry formalist film and video debates of the time. They tended towards the lyrical, narrative, the personal and were multi-layered and durational: that is, they had a beginning, middle and end. This reached a high point of activity in 1977 with two exhibitions at the Hayward Gallery (Perspectives on British Avant-Garde Film and the Hayward Annual) and solo exhibitions at the new artist-led galleries or spaces like 2B Butler’s Wharf, Acme and the AIR gallery. A roster of names can be recalled: the film-based including Marilyn Halford, Tina Keane, Lis Rhodes and Alison Winckle and the video-based including Helen Chadwick, Elaine Shemilt, Rose Garrard and Tina Keane (again). These artists regarded the film and especially the video elements as transient, ephemeral and supportive props to the whole work, and therefore were possessing no intrinsic value; as a result most of these pieces are lost to the archive.

With the exception of Krikorian’s, none of the works described so far used the now ubiquitous video projector, the obvious link or analogue to the idea of cinema, particularly expanded cinema. However, just before the demise of the monitor, a very significant event took place for the first time in Liverpool: Video Positive. This biennial event, which ran from 1989 until the late 1990s, became the largest and most important showcase for video art in the UK. The first iteration was distinguished by the commissioning and display of a number of works for a thirty-two-screen video wall that had been secured by the artist Steve Littman, along with significant sponsorship from the commercial audio-visual suppliers Samcom (fig.40). Littman had been developing work in split screens since the late 1970s, and had devised a proco-video wall for Events Space 1 at Glasgow’s Transmission Gallery in 1986. The video wall for Video Positive was a fully programmable set-up with up to thirty-four channels of video that could be digitised and sent to any number of monitors. The arrangement for this exhibition was a four-by-four block of monitors, with two three-by-three blocks facing it. Littman and the festival’s director Eddie Berg commissioned works for this wall from five British artists (Judith
of the fourth decade. Thereafter the VCR replaced the VTR, and was replaced in turn by DVD, which will shortly be superseded by solid-state memory. The video monitor has mutated to the VDU display or LCD/LED panel, and hardware cards are now needed to display or simulate the TV raster upon them, or on other devices such as games-stations or mobile phones.

Most of the video specificity therefore being articulated in the late 1960s and 1970s was tied to the particular component parts of low-quality television of those years, components now long obsolete. The virtual impossibility of editing videotape drove artistic interest and experiment away from filmic conventions such as montage, towards the performative and the use of instant playback and closed-circuit systems (as installations). Central to this approach was the notion of intervention into a process, the manipulation of the video plane in time or space. The intrinsic properties were emphasised: immediacy; transmission; the 'live'; the closed circuit; record-replay with time delay; feedback oddities; synthesiser manipulations; and synchronicity with sound. In this sense there was an affinity with the spirit of expanded cinema. Some of the properties, if not strictly the specificities, have transferred to or been emulated in the new digital domain, but many have (and could) not. This includes video switching and synchronicity with sound. Sound is now recorded as a datastream separate from the image stream, and in digital post-production and broadcasting, synchronicity (especially the crucial lip-sync of speech and dialogue) can easily be lost or compromised. Convergence within the digital has meant that video has been both incorporated and subsumed, in line with Marshall McLuhan’s assertion that new media do not replace old, but almost always contain them. This convergence has taken longer than one might expect – and longer than is normally recognised. It seems now rather ironic that the computer revolution of the 1990s initially created a reduction of scale of image, audience, and space/venue. The moving image frame in the early 1990s on the computer’s CRT (Cathode Ray Tube) was
measured in pixels of at first 180 × 120 then 360 × 40, rather than physical inches or feet across and fifteen or sixteen frames per second. This ‘new media’ or multimedia, distributed on CD-ROM, was in these terms a curious step backwards to the low resolution and frame-rate, and small size, of early kinetographs and John Logie Baird’s first thirty-line, one-inch sized, 12½ frames-per-second television broadcasts of his puppet Stooky Bill. When we worked with David Hall in 1989 to simulate Baird’s original broadcasts, we had to reconstruct the scanning equipment with the help of Baird’s last surviving engineer. The small image was reshot from the device using a contemporary tube camera onto one-inch videotape.\textsuperscript{15} The work gives us a glimpse into the very early days of television and resonates with the strange apparatus of early film. In a relatively short time, digital moving image has moved from low-resolution, small-scale Quicktime or other computer files (to support multimedia applications) to full-frame High Definition Video, the consequences of which are yet to be fully appreciated.

While writing this essay alongside the research project on expanded cinema, I started to look again at the monitor from my eponymous work\textsuperscript{16} and wondered if it could be revisited and maybe expanded with live performance. I had been showing the work for a while on an iPod Touch and started to twist around the device, following the original manipulations of the monitor(s) in the frame. What would it add, if anything, to the original piece if I ‘performed’ it in public? When I finally picked up courage to do, so a number of things resonated with the thoughts already expressed in this essay: the apparatus both within and part of the expanded work; the relationship and tension between the live element and the recorded event; the contrast between the thirty-five-year-old technology (both apparatus and videotape); and the new recording displayed by projector on screen. The revisited work, Monitor Live! (fig.41), can be simultaneously categorised as both video art and expanded cinema.\textsuperscript{17}
2 Jackie Hatfield, Interview with David Hall for REWIND. 9 Dec. 2005. See http://rewind.ac.uk
3 The work was restaged at The Video Show, Serpentine Gallery in 1975, but enlarged in scale as 101 TV Sets.
4 At the time of writing, Malcolm Dickson is curating an exhibition in 2010 for Street Level in Glasgow, which hopes to restage this ‘lost’ work.
5 Artist’s notes. See http://www.rewind.ac.uk.
6 Ibid.
7 The Video Show, Tate Gallery, Millbank, 18 May – 6 June 1978. Other artists featured included David Hall, Tamara Krikorian, Stuart Marshall, Roger Barnard and Brian Hoen.
8 The AVS was designed and built by Howard Vie, a technician at the Royal College of Art’s Department of Environment Media from 1975 to 1976.
10 Joan Jonas, Vertical Roll, black and white videotape, twenty minutes, 1972.
11 Housewatch was a group of artists that included Ian Bourn, Lulu Quinn, Chris White, Alison Winkle, Stan Steele and John Smith.
12 In Two Minds – Past and Future Versions were presented at REWIND – The Formative Years, Dundee Contemporary Arts Centre, 2005. The text is from the brochure accompanying the exhibition.
14 McLuhan 1964.
15 Fields & Frames Productions Ltd (Producer Anna Ridley, Series Producers Jane Rigby and Stephen Partridge) produced Stooky Bill TV by David Hall as part of the TV Interventions series for Channel 4.
17 Monitor Level was first performed at the Expanded Cinema Conference: Activating the Space of Reception Documentation, Tate Modern, 17-19 April 2009.
In 1972 a group of British experimental filmmakers performed a 'shadow action' film performance by Malcolm Le Grice, *Horror Film 2* (fig. 42) at the London Filmmakers Co-operative cinema. Holding poses behind a screen, the striking tableau they presented incorporated the simple theatrics of shadowplay with playful improvisations, as coloured light beams were cast across objects including a vase of flowers, a table, chairs and even a plastic skeleton. Viewed from the other side of the screen with the aid of 3D glasses by the audience, the shadowy projections of the performers (LFMC filmmakers Gill Eatherley, Annabel Nicolson and Roger Hammond) created shifting discrepancies of scale and perceptual ambiguity as they moved between the objects behind the screen, alternatively illuminated and then cast into shadow by Le Grice, who orchestrated the array of light sources.

Viewed in retrospect, however, *Horror Film 2*’s tableau of performance and coloured shadow should be read as more than a footnote in the history of British expanded cinema. Indeed, I would argue that the rich web of connotation and contradictions evoked by *Horror Film 2*’s use of shadowplay do much to challenge the familiar chronologies and interpretations of British avant-garde film and expanded cinema, and present new ways of understanding the fundamental questions of illusion and spectatorship which concerned
British structural filmmakers in the development of an expanded film practice distinct from its American forebears.

As part of his argument for expanded cinema’s potential to offer a more participatory, experiential form of cinematic spectatorship,² Le Grice’s interest in the shadow was for its ‘basis in concrete reality’³ – where it functioned as a denotation of bodily presence, signifying the actual, physical solidity of the performer and thus rooting the viewer in an experience of cinema as an event in the ‘here and now’. This was in contrast to what Le Grice described as the ‘retrospective reality’ of the on-screen narrative offered by the ‘dominant’ forms of commercial cinema.² Horror Film 2 was one of four ‘shadow pieces’ that Le Grice completed in 1972–3. The others were the well-known film performance Horror Film 1 1971; Love Story 1 1973, in which Le Grice’s shadowplay also included the audio feedback of a swinging microphone with the magnified shadows of small objects; and Love Story 3 1973, a double-screen film performance in which Paul Sharits performed a live shadowplay in interaction with a prefilmed shadow double.⁵

Studying the stills which are the remaining document of Horror Film 2, one is struck by the suggestive nature of the tableau, alluded to not only in its light-hearted title and use of the skeleton, but also in the ambiguous play between the real and imagined presence of the performers suggested by the magnified cast and interplay of its coloured shadows. Rather than a structuralist stripping away of the illusory tactics of ‘dominant’ cinema, the performance could be seen as a theatrical evocation of the uncanny and the spectral. Le Grice’s explanation of his shadow pieces does nothing to dispel these contradictions. Whilst conceding that ‘the inclusion of people performing some action introduces a theatrical and imagist aspect’, he asserted that ‘my main concern is still formal’, before comparing his ‘shadow piece’ to the illusions of a magician, referring to it as ‘an illusionistic piece in much the same way that the tricks of a magician are illusionistic’.⁶

An explanation for Le Grice’s contradictory statements may lie in the dual significations attached to cultural readings of the shadow and shadowplay, where the shadow is perceived as an affirmation of bodily presence, yet also connotes what Victor Stoichita has referred to as ‘the status of otherness’.⁷ In his book A Short History of the Shadow, Stoichita highlights this paradoxical position, describing the shadow’s shift from a denotation of presence at the time of the Renaissance to ‘one of many figurative and symbolic instruments ... capable of illustrating ... the negative moment and the otherness of this moment’.⁸

Stoichita connects the changing status of shadows to a ‘demonization of the shadow’, which he suggests is reinforced by spectacular optical entertainments such as the magic lantern displays of Athanasius Kircher, where images of ghosts and demons materialised and dissolved through a sophisticated array of projection techniques.⁹ Significantly, a descendant of these uncanny entertainments provided the inspiration for Horror Film 2, which was taken directly from a 3D shadowplay that Le Grice remembers from his childhood in postwar Plymouth. Would You Believe It!, a vaudeville
attraction that would visit the town, featured an act that made an impression on the young Le Grice. 'A big shadow curtain filled the front of the stage and at the back was a red and green light – we all had 3D specs – the effect was extraordinary – swinging rats and swords – all the audience ducked.'

There is no doubt that the complex optics responsible for the shadowplay illusion in Plymouth remained fascinating to a filmmaker intent upon exploring the mechanisms and apparatus that control the perceptual effects of cinema. With its call to incredulity – would you believe it? – it could be argued that the optical tricks of the Plymouth shadowplay exploited the same mixture of suspension of belief and rational explanation as the pre-cinematic spectacles that Stoichita notes, most particularly the complex system of optics, including smoke, mirrors and magic-lantern projections, used by the seventeenth-century phantasmagoria showman Etienne-Gaspard Robert (known as Robertson), and Kircher’s spectacular magic lantern displays.

Indeed, it is telling that Le Grice qualifies his comparison between his shadow pieces and the illusions of the magician with the remark that ‘all the components for the illusion are concretely available’. For it could be argued that the spectacles of Kircher and Robertson depended upon a dialectic of science and the spectral which resonated with Le Grice’s claims for the ‘concretely available’ components of technology and performance at the heart of Horror Film 2’s theatrical shadowplay. Coming from a background in the sciences and the study of optics – rather than entertainment – Laurent Mannoni argues that Kircher was at pains to stress the scientific credentials of his presentations to audiences: ‘He did not want to pass himself off as a sorcerer, and denounced the quacks who used optics to take advantage of the credulous.’ The success of his spectacular entertainments thus depended upon the intertwining of the ghostly with a revelation of the scientific rationale behind it. Made aware of the trick’s material basis, the viewer marvelled at the dexterity of the optical sleight-of-hand, rather than at the veracity of its visions.

However, where Le Grice’s spectacle differs from his predecessors is that the multiplied and magnified shadow forms of Horror Film 2 encompass not only the illusory trickery of shadowplay apparitions, but also the wider spectatorial experience of the uncanny entertainments that had once sustained them. Therefore, the ghosts evoked by Horror Film 2 were the 3D rats and swords of Le Grice’s childhood remembrance: a spectre of past illusions, rather than the illusion of the spectre.

Le Grice’s evocation of the 3D spectacular of his childhood finds an earlier precedent in the interest in the ‘outmoded’ that Hal Foster perceives at the beginning of the twentieth century in the attraction of Surrealists such as Max Ernst and André Breton, and writers such as Walter Benjamin, to the defunct and discarded objects of a pre-technological period and the obsolete artefacts of nineteenth-century industry. Foster stresses that the Surrealist interest in the outmoded was not nostalgic or melancholic; rather, it signified an active resistance to the political and economic conditions of the time. ‘Thus if Surrealism repeats images of the nineteenth century, it is to work through them precisely so that they can be broken with, so that the twentieth century
can be awoken from the dream of the nineteenth century (or, as Benjamin says, its spell cast by the commodity) into a transformed twentieth century." Similar motives can be read in the return of Le Grice and other structural filmmakers to spectacles that predate narrative cinema. Politically opposed to Hollywood for its ‘reactionary place in the dream-culture’, and marginal to the technological advancements of postwar industrialised cinema, shadowplay – along with the dissolving slides of the magic lantern, the smoke and mirrors of the phantasmagoria, and the early or ‘primitive’ cinema of pioneers such as R.W. Paul and Cecil Hepworth – represented a period of pre-cinematic optical invention, a cinema of potential and experimentation from a time before the codes, language and technologies of industrial cinema had established themselves.  

**Horror Film** 2’s return to the outmoded, pre-cinematic spectacles of the 3D show, the magic lantern and the phantasmagoria might thus be read as Le Grice’s search for an alternative to the ‘manipulation tricks’ of Hollywood, and a fruitful model for his enquiries into the perceptual processes of cinematic spectatorship. As he recalls, ‘We were in a sense re-inventing or re-working cinema as an invention. We were, however, not fully conscious of that … but we were trying to see what the fundamentals of the cinema were.’  

Le Grice was not alone in his explorations into the spectacle of shadowplay. Other British contemporaries such as Gill Eatherley and Annabel Nicolson explored the potential of the shadow, and were also interested in how it might denote the ‘concrete reality’ of the performer within the viewer’s experience of the unfolding event of the film projection. But just as **Horror Film** 2 also evoked the uncanny gestures of the ‘outmoded’ spectacles of the 3D show or the phantasmagoria, the demonic associations of the shadow noted by Stoichita reassert themselves amongst the certainties of the shadow’s indexical function in works such as Gill Eatherley’s **Aperture Sweep** 1973 (fig. 43), a double-screen film performance in which she sweeps the screen alongside her onscreen shadow double, with a broom acoustically enhanced by a microphone.
Eatherley’s playful duel with her shadow self was part of a series of works entitled *Light Occupations*, where simple objects and actions from outside the realms of technology, such as sweeping with a broom, could become instruments for an analysis of that technology, taking on new functions and significance. The performance begins with the projection of two darkened screens, which gradually lighten as Eatherley performs a sweeping motion across the right-hand screen with a broom, followed shortly afterwards by the appearance of an on-screen shadow of herself performing the same action on the left-hand screen. Eatherley continues to sweep the right-hand screen in unison with her shadow self as the screen gets lighter and lighter.  

Returning the spectator to a space where science has the power of magic, Eatherley’s performance exerts cinematic technology as black-art trickery, breaking the familiar bond between the actions of the shadow and those of its bearer, so that her on-screen shadow possesses independent motion and an uncanny autonomous power. This powerful act of severance between artist and shadow introduces an unease that is further enhanced by the shadow’s divergent shifts of shape and scale in relation to Eatherley’s own performing body, introducing a ‘verticalised and hyperbolised’ version of the shadow which, according to Stoichita, was often read as ‘a metaphor for occult powers’. Evoked in the uneasy threshold between the living and the mechanical, the animate and the inanimate, the compelling sense of the uncanny in *Aperture Sweep* also emanates from the performance between the artist and the filmic double which takes on a life of its own, in a mechanical evocation of movement recalling the automata referred to in Freud’s essay ‘The Uncanny’. Interestingly, Stoichita advances a comparison of the performance actions of the 1960s with the performance of magic rites. He suggests that ‘the rhetoric of the happening, as it evolved in the Sixties in the Fluxus milieu, saw the “action” as a ritualized form of expression … which verges on magic ceremonies’. Eatherley herself might therefore be seen to perform the role of magician, where, like a spell, her sweeping motion across the screens invokes the appearance of her shadow double. Mimicking the movement and pace of her on-screen double, it is as if she wishes to reconcile the rift between herself and her technologically generated double. The shadow that Annabel Nicolson casts in her 1973 film performance *Reel Time* (fig. 4.4), on the other hand, asserted an unwavering presence in contrast to the slow disintegration of her adjacent projected self, a result of the systematic destruction of the celluloid film image beneath the needle.
of her sewing machine over the course of the performance. Like *Aperture Sweep*, Nicolson’s shadow in *Reel Time* could be seen as another instance of the uncanny interplay between a mechanical, on-screen double and the performing artist, here joined in a shared task of destruction rather than reparation. However, in other film performances such as *Jaded Vision* 1973 and *Matches* 1975, Nicolson’s use of shadow is differently nuanced from the uncanny shadowplay of *Aperture Sweep*, evoking the shadow’s fugitive presence rather than its diabolical associations.

*Jaded Vision* (fig. 45), for example, was developed from an earlier work, *Sky for the Bird on the Roof of My Mind*, a film performance based on her attempt to catch on film the semblance of a bird in flight evoked by a tarred-over crack in her studio skylight, suggestively bringing it to life by projecting it back into the sky. Through a fluid and intuitive creative process, Nicolson gathered the elements of this earlier work together into a new configuration for *Jaded Vision*, introducing a paper bird, which literally shadowed its fugitive celluloid other, suspended in the projector beam and animated into a fluttering dance by the hand of the artist.

The rhythmic dialogue between the different elements of Nicolson’s performance found a harmonious point of convergence in the illuminations of the projector beam. Here, all the elements of Nicolson’s improvised *mise en scène* surface and dematerialise: film bird, paper bird, shadow bird, as well as a keening evocation of bird-like sound created by swirling microphone feedback. This disorientating enchantment is central to Nicolson’s work. Indeed the recollections of a fellow LFMC filmmaker some years later even suggest the mechanisms of a magic show: ‘you always had loops going in the most extraordinary places, round and round and round. Projectors everywhere. Things flying round and glass and windows ... pieces of paper ... There were reflections and lights darting about, on the floor and on the ceiling.’

But whilst *Jaded Vision* may return the viewer to the pre-cinematic suspension of belief called for by the magician, I would argue that Nicolson’s sleight of hand suspended belief in order to bring it into question, to re-engage her
audience in a heightened awareness of the unfolding experience of the film event, eliciting the participatory and activated form of cinema spectatorship which she and her fellow expanded filmmakers saw as a crucial aspect of their project. Jaded Vision might thus be read as an instance of the ‘natural magic’ as crucial to the effects of Kircher and Robertson’s spectacles as it was when later echoed in Le Grice’s shadow pieces. In these works, an experience of magic is perceived in the explicable wonders of science and the real, balanced on the threshold between bodily engagement in an unfolding film event, and transportation to spaces of the imagination.

In a later film performance, Matches 1975 (fig.46), Nicolson dispenses with the technological apparatus of film projection altogether in order to examine the cinematic resonances of shadowplay through an exploration of ‘precarious light sources’, equating film projection to ‘the strike of a single match’, as Felicity Sparrow recalls, ‘its flame briefly flickering, throwing ghostly shadows on the wall’. Dependent on the match’s short bursts of illumination, two members of the audience are invited to read from a text on ‘Candlepower and the Fading of Light’. Standing slightly apart, with a box of matches each, they read until each light flare burns out and another match is lit.

By choosing the flame of a match rather than the steady beam of the projector, Nicolson produced what Roberto Casati has referred to as an ‘ancient shadow’: the ‘shaky agitated’ shadow of ‘candles and hearths’, in contrast to the ‘modern’ shadow created with the invention of electricity; ‘frozen’, ‘static shadows’, which ‘had never existed in nature, nor were they ever before produced by man’. In her rejection of the ‘modern’ shadows of projector light for the older light of the flame, Nicolson played out her frustrations with the technological imperatives of the film apparatus, a source of creative tension that can be identified throughout the artist’s work.
By returning to the unpredictable, unstable flame of the match, she presented the most direct evocation of her notion of a fugitive vision, found in the elusive dematerialisations of her film performances, whose strength, as Nicolson says, ‘is in their lack of substance, that they are not fixed, that they cannot be secured into something finite’.

In Matches’s paracinematic expression of cinema through shadowplay, the theatrical spectacle of the shifting match light and the pools of darkness and flares of illumination return us to the contradictions first apparent in Le Grice’s ‘theatrical and imagistic’ shadow pieces. Cast against the wall behind the readers, the shifting size and shape of their shadows further recalls the shadow’s diabolical status, described by Stoichita as a ‘verticalised and hyperbolized’ form. Furthermore, the ‘precarious light’ of Matches also evokes another uncanny return to the outmoded, reaching back beyond the spectacle of the magic lantern towards older evocations of light itself, away from the ‘modern’ shadows of cinema projection, to Casati’s notion of the hearth, and the oral tradition of storytelling associated with the fireside tale.

The shadowplay performances of Matches, Aperture Sweep or Horror Film 2 could be seen as the unfolding processes by which their practitioners sought to understand the fundamental contradictions of cinematic spectatorship embodied in the shadow’s paradoxical nature: where the shadow’s denotation of ‘concrete actuality’ takes on connotations of the demonic double, and the certainties of technology of science are invested with an experience of magic. However, in the course of their experimental shadowplays, the converging elements of performance and projection become a form of enactment that released their own ‘natural magic’, where the broom, the skeleton and the paper bird function like the props and tools of a magic show repertoire, but are used to dispel rather than weave an illusion. Indeed, it could be argued that through the theatrical shadow performances of Le Grice, Eatherley and Nicolson were seeking a definition of the very notion of illusion so critical to the structuralist project, and called into question by the paradox of shadowplay’s dual significations.

Like that of the conjurer or the phantasmagoria showman, the shadowplay of these artists also invokes a spectral past. But their revisitations of the ghost of an earlier pre-cinematic history were intended to investigate the ways in which the projection apparatus and performance might become revelatory tools for a renewed and radicalised form of perception and spectatorship, and reveal the forms of illusory device they identified in mainstream narrative cinema. In the process, I would argue, their intriguing shadowplay reveals the rich and fruitful seam of contradiction inherent in the condition of cinematic spectatorship: poised between the rationalities of science and technology embodied by the film equipment and the irrational leaps of imagination called for by its dematerialised shadows and on-screen apparitions.
Horror Film 2 was shown in 1972 at the London Filmmakers' Cooperative and also at Plymouth College of Art, where Le Grice had studied. Dates for both events are unspecified.

Le Grice's article 'Real time/space', in the issue of Art and Artists dedicated to artists' film, Dec. 1972, could be seen as the most cogent manifesto for his views on the possibilities of expanded cinema at this time.

Le Grice 1972, p.43.

As Le Grice defines it, 'the Real TIME/SPACE event at projection, which is the current tangible point of access for the audience, is to be considered as the experiential base through which any retrospective record, reference or process is to be dealt with by the audience. This reverses the situation common to the cinematic language where experience of the real TIME/SPACE at projection is subsumed by various aspects of manipulated retrospective "reality"'.

Ibid., p.39.

Love Story 3 was performed once at the London Filmmakers' Cooperative, during Sherritt's visit to London in 1973.

Le Grice 1972, p.43.

Slochita 1997, p.102.

Ibid. See also pp.130–1 for a fuller discussion of the role of Kircher's spectacular lantern shows in developing the demonstration of the shadow.

Malcolm Le Grice, correspondence with the author, March 2009.

Mannini 2000, p.xv.

Ibid., p.168.

For a full account of American experimental filmmakers' interest in primitive cinema, see Soller 2005.


Zoller 2000, p.141.

The original idea was that – I'm cleaning the screen – and the screen gets cleaner and cleaner so therefore it gets brighter and brighter. Which is what it does – because it starts off dark and ends up completely bright so therefore it was getting cleaned.'


Slochita 1997, p.239.

Ibid., p.134.


For a full description and interpretation of Real Time, see Lucy Reynolds, 'Reinterpreting Real Time', Art In-sight, no.11 (Film Waves, no.24).

As Nicolson has recently explained, 'By this time there was a paper bird which created a shadow. It was made of paper and suspended on thread so it could move in the light beam. The other screen had a diagram of the original idea of "Sky for the bird" and the glass roof. I filmed the diagram and sometimes filmed through it to look up at the creek in the roof, changing focus as I did this' (artist's emphasis). From correspondence with the author, Sept. 2009.

In the notes to accompany Jaded Vision, for example, Nicolson's reference is to the dance of the elements as an indissociable, 'freewheeling' movement of expression, and to the shadow birds which escape the confines of the projection apparatus. 'Freewheeling in projection radiance jaded swerves. Searchlight where all the parts will have ready ability to dance on the brink of some other determinism, maintaining imminent departure.'

Annabel Nicolson, Annabel Nicolson at the Co-op' (recordings of individual filmmakers talking about the first ten years of the London Filmmakers' Co-operative [1978]), Light Years: A Twenty Year Celebration of the LPMC, LPMC, Oct. – Nov. 1988, p.43.


'I was sitting with my back to them, sewing, a beam of light coming at me from the projector'
I was sitting with my back to them sewing a beam of light coming at me from the projector the film trying to hold the film in the sewing machine trying to sew fast enough to keep up with the projector the tension on the film releasing the thing that holds it down so it wouldn't break trying again the holes in the film getting very torn another beam of light from the side casting my shadow onto a wall shadow of what I'm doing the murky image of me sewing in the film loop getting more light as the holes as the holes get more tears or tears such a loud sound as it snaps aware of people trying to mend it I can sit for a moment hear the voices of the two readers words about threading the sewing machine threading the projector so similar the tone the pace so slow just to read narrated again don't have to allow spaces where nothing is happening the light catches the film loop so shiny because it is new light reflecting onto walls film very slack trickling through the room along the floor between people they help it along pass it back to the projectionist or to me I can't see any of them only the murky image of me sewing new very ripped and hard to get through
the sawing machine let alone the projector how long will it last
I keep going just keep doing it until they can't get it
through the projector and it breaks more and more often
and it really can't go on and this jagged broken film
its task done he's still people start to move tread carefully
over the film I pick it up not sure what to do with it
a tangled heap all broken spilling everywhere

Amniel / Nice / 1994
1. exhibited as handwritten film loop (white filmstrip)
   Minories Gallery, Chichester 1994
2. exhibited as 2 x handwritten pages Museum of Modern Art Vienna 2004

'I was sitting with my back to them...'
Introduction
The issues of narrative and anti-narrative have been a consistent theme in the history of experimental or avant-garde cinema. Clearly not all experimental cinema is opposed to narrative, but the search for new and alternative forms of temporal structure has been fundamental and, for me, crucial. Like Peter Gidal, my initial stance as a film artist was strongly anti-narrative. When I made Castle 1 1966 (fig.47) – the lightbulb film – I was consciously attacking the predominant mode of narrative cinema. I saw narrative as oppressive.

Resistance to narrative involved strategies like looping and repetition. ‘Expanded’ cinema opened up other strategies working against traditional forms of narrative by engaging the audience in choices between simultaneous multi-projection and other aspects stressing physicality and presence. But the desire for narrative ‘identification’, causal coherence and closure is so deeply embedded in our culture that artists and theorists like Jackie Hatfield have sought to argue its condition as unavoidable. She says, ‘when we see a performance as part of a screening, or when we experience expanded cinema, in which the bodies of the performer or audience are physically present as living embodiments of their narrative histories, we come from a narrative place’.

If we are to see the issue here as more than a terminological dispute about the definition of narrative we must ask if there are ways of understanding our experience that are not confined to the processes and forms of narrative. Can we define time-structures for cinema and particularly expanded cinema that go beyond narrative?

During some forty years of making film, video and digital work I have refined my understanding of the different options for time-structure, and have reviewed the processes of narrative construction and spectator identification in both conventional and experimental film.

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Though opposing narrative, I came to realise through films like Table 1967 and Berlin Horse 1970 that everything I did had a dramaturgy.
The works had a symbolic development in time and it mattered for the spectator's experience that the work 'unfolded' in the chosen sequence. But unlike Hatfield, I do not see structures of dramaturgy as synonymous with narrative, and to untangle this I want to clarify my understanding of some basic concepts.

**Narrative**

Narrative represents real or imaginary events in time. As with a landscape painting, a narrative film seems to offer an experience that *stands in for*—*pretends to be*—*creates an illusion of*—something taking place before us. In order for it to work, we must enter into the illusion, suppress our awareness of presence and treat the illusion as a present reality.

**Narration**

Narration is the act of presenting the narrative. The structure of narration and its relationship to what is represented may be complex. There is no necessity for the order of telling to correspond to the order of the represented events—the end of the story may be told before the beginning. Nonetheless, in the end the narrative must add up to a representation that seems coherent, an *overt* fiction, or if offered as a representation of 'fact'—a *covert* fiction.
Identification
In order to enter the narrative, spectators, readers or listeners must invest psychological energy in the representation. They must engage with the story – they must care what happens to the represented characters. These characters may be people like themselves but they can equally well be Mickey Mouse, gooey monsters or even animated VWs. We ‘identify’ with the represented characters as if what fictively happens to them is also happening to us.
The psychological mechanisms of this identification and their relationship to sympathetic or antagonistic responses to other people in ‘real life’ are little understood.

Even less understood is the hidden identification between spectator and narrator. The narrator provides the sequence, viewpoint and ideology that structures both the story and system of shifting identification with the characters. The spectator identifies with the author’s ‘point of view’ through a desire for (cathartic?) engagement and, ultimately, for moral reinforcement within an ideological structure. Even in a film like The Thomas Crown Affair 1968, where the resolution of the story seems to oppose the traditional success of law enforcement, another comfortable ideological identification survives. The narrator represents the authority by which the story is formed and by which we are permitted access to it – our experiences are ‘authorised’.

Narration in Cinema
The conventional rules for constructing action montage are well understood and work as long as we accept their fictional objectives. However, a critical or oppositional stance opens up a range of issues concerning the narrative illusion and condition of the spectator. In action montage the join between one shot and the next is invisible but awareness of their separation, their differences of time and viewpoint, destroys the illusion of their continuity and undermines the narrative. Together with some other experimental filmmakers, notably Kurt Kren and Peter Gidal, I sought to disrupt the narrative illusion through stressing the independence of each shot. By making the start and end of each component shot evident – revealing it as time-frame – the narrative continuity was broken, allowing other forms of connection to be made between images. Disruption of narrative continuity makes new and latent meanings available to the spectator. The coherence of a work becomes problematic, belonging to the spectator rather than determined by a hidden ideology held in the narrative.

Time Levels in Cinema
Once the shot is dislodged from its position in the narrative flow, other fundamental issues arise that are concerned with the status of the cinematic image as reality, truth and document. Whilst these issues apply to single-screen film, multi-projection and performance, engaging the time and space of projection in my expanded cinema works particularly led me to distinguish different forms of temporality and I identified three ‘levels’ of time experience. Here I will call these Narrative Time, Production Time and Screening or Spectator Time.
Narrative Time

In narrative time, ‘seeming to be there with the depiction’ is an illusion – an apparent unfolding of events ‘as if we were present’. There are two main aspects to this illusion. One is the pictorial and spatial illusion of the photograph (and sound recording), and the other is the constructed coherence of the represented events – their apparent consequence on each other. I have found it useful to draw a parallel between the way perspective fixes the spectator into a single viewpoint on the visual scene and the way a narrative fixes the spectator into a single linear chain of events. In both cases the spectators are unconsciously controlled and their acts of choice are constrained within the authority and habit of the convention. For narrative this is an imposed coherence of cause and effect. However powerful in our culture, neither perspective nor narrative is inevitable.

Production Time

All the action of a narrative film is in an implicit past with the illusion of presence. Even if a film’s represented time is in the future, the present unfolding of a narrative is a telling of how something happened – a ‘once-upon a time’. However, more fundamentally, the building blocks of the cinematic narrative were produced before the experience of its ‘screening’ – the pro- or pre-filmic event. All the component shots (scenes) were recorded in some actual time and place other than the apparent (narrative) presence experienced by the spectator. Apparent continuity in the action montage suppresses the discontinuities of the production time. Nonetheless, this production time is recorded in the shot and it has a direct (evidential) relationship to an event that actually took place.

Screening Time/Spectator Time

In narrative cinema everything possible is done to reduce awareness of the actuality of the screening time and space – this is integral to the whole institution of cinema. The seats are soft, the sound surrounds, the screen fills the visual field, all reducing awareness of our actual physical presence to the minimum. More particularly, in relationship to time, the forms of narrative continuity supported by character identification are designed to remove experience of the passage of actual time in favour of its represented illusion.

Traditional narrative cinema relies on giving complete priority to represented time. In both my practice and theory, together with a number of other experimental film artists, I sought to reverse this order of priority by making spectator time primary and giving it clear priority. We did this though a range of strategies that increased rather than decreased the spectator’s awareness of their own physical presence in the space of projection and the temporal encounter – the duration – of the work. It emphasised the physicality of the screen surface, the space between screen and projectors and between these and the spectator. It also emphasised the materiality of the film’s surface and the image as a material, photochemical trace. It used multi-projection to initiate a form of visual choice and comparison counteracting the singularity

Time and the Spectator in the Experience of Expanded Cinema
of a narrative stream. Through the editing and montage structure, using repetition and partial repetition, it forced an awareness of difference between the passage of actual time and any represented time requiring a 'conscious' structuring through memory. Placed at the centre of this process, it is the spectators who produced the coherence (or incoherence) of the work. I am aware that the coherence they apply may (though does not inevitably) take the form of a 'personal' narrative, but at least they do this in some (dialectical) interchange with the construction made by the filmmaker. I see these strategies as fundamental to much of expanded cinema – particularly as this was understood in Europe – and to 'structural materialism' as defined by Peter Gidal.

Reversing the priority of temporal experience in cinema by making spectator time primary, new issues are again unlocked in practice. Here I identify two broad regions, one related to 'Production Time' – the pre- or pro-filmic – and the other to a replacement of narrative time by other principles of time-structure.

**Problematics of the Pro-filmic**

Though this includes the editing and montage process, my main focus here is on the trace of the pro-filmic in the recorded image and the veracity of its representation in the screened presence. What is evidenced in the record, what is suppressed, what is seen, not seen or almost seen, and what is manipulated in editing or image processing all become intentionally problematic within the content of the work. In practice, the act of filming here is no longer seen as
already subservient to a script or story and the status of the recorded image (as reliable record) becomes an issue of meaning related to the present time of the spectator. William Raban’s 245 1973 is an excellent example of the way the act of filming and the experience of carrying one time to another becomes the problematic content of the work. The issues of ‘indexicality’, photochemical or electronic trace, conditions of medium as well as the ‘language’ conventions of discourse, all become an active (problematic) element in the construction of the work and experience of the spectator.

Non-narrative Time
If spectator time is primary what alternatives are there to narrative construction? My earliest resistance to narrative came from my sense of its oppressiveness. I came to dislike, resent and then resist the way in which I was seduced into a subjectivity that undermined the value of my own life experience. At the same time, other contemporary art forms, particularly jazz and some modern theatre, offered me an experience that was not oppressive and that structured time in a way that was not resolved by narrative. As a developing film-artist in the late 1960s, I also became aware of the then little-known history of early avant-garde film – Léger, Man Ray, etc. – and of other contemporary experimental film from Europe and the USA. From my own experiments with cinematic form and from work by other artists, I can now identify some types of time-structure that are non-narrative or go beyond narrative convention. I have loosely grouped these into four basic approaches, but many actual examples share features.

The groups are:
— Non-representational abstraction
— Structural or structural materialist
— Post-narrative symbolic
— Expanded cinema

Non-representational Abstraction
The main time-structure reference point in this approach draws on musical form and many of its issues and concepts are common with music. In principle this direction is based on the contention that it is possible to use elements like colour, luminosity, line or shape and to modulate these through simultaneous interaction (equivalent to harmony), graded sequence (equivalent to melody), periodicity (equivalent to musical rhythm), repetition and partial repetition (equivalent to composition). In this kind of work the sequential structure relates to a form of musical dramaturgy based on, for instance, changes of tempo, crescendo or ritando. Early examples from Ruttmann or Oskar Fischinger draw on classical music structure, where a work like The Flicker 1966 by Tony Conrad explores a parallel to more modern musical concepts.

Time and the Spectator in the Experience of Expanded Cinema
Structural or Structural Materialist
There are a number of interpretations of structuralism in film (structural materialism is more strictly defined by Peter Gidal in various publications) but I will define two major characteristics. The first, resisting narrative and reducing symbolic interpretation, explored a range of ‘strategies’ for structuring cinema sequence. These included mathematical systems and various forms of repetition, looping and partial looping, and often made direct reference to the material construction of the cinema apparatus: the camera, the projector, photochemistry. The second increasingly shifted attention away from the sequential construction of the work to the sequential perception and conception of the spectator. In this respect the act of structuring by the spectator became central to form and content. This included specific issues of sequential perception – the effect on eye and ear – as in the colour flicker films of Paul Sharits and the more complex forms of relationship between perception and temporal conception found in, for example, the films of Peter Gidal.

Post-narrative Symbolic
A detailed discussion of the symbolic and its implication for cinema is beyond my scope here but symbolic forms of representation are not synonymous with narrative. Prior to psychoanalysis it was broadly assumed that a symbol had a defined area of connotation. However after psychoanalysis a symbol was understood to have a wide range of latency both in its emergence (expression) and interpretation. In both aspects, this latency was fundamental to Surrealism. In Surrealist cinema, symbolic units (shots or clusters of shots), became separated from narrative representation in favour of an atemporal form of connection. This is initially evident in the Buñuel/Dali films L’Age d’or 1930 and Un Chien Andalou 1929. Here the sequence of shots does not represent a developing story, though aspects of narrative continuity do exist in the details. Meshes of the Afternoon 1943 by Maya Deren is not a Surrealist work but takes the non-narrative form of Surrealism further, introducing a comparative ‘spiral repetition’ into the sequential construction. That Deren understood this form and its distinction from narrative is evident in the famous 1958 Cinema 16 Symposium ‘Poetry and the Film’, where she develops a concept of ‘vertical’ rather than ‘horizontal’ time-structures. 8

In order to understand the implication of this form I have proposed the concept of a non-linear matrix of cinema units (shots), where the sequential structure merely defines one of a number of possible passages through the matrix. 8 This matrix concept can apply equally to a thematic rather than symbolic construction, as for example in Man With a Movie Camera 1929 by Dziga Vertov, or Walter Ruttmann’s Berlin: Symphony of a City 1927. In each case, the sequence suggests a series of parallel passages through simultaneous continuities. In the context of the debate about narrative and expanded cinema it is essential to draw distinctions between the temporal structures that are opened up through the concept of a matrix (or data-base) and those produced by the implicit linear causality of narrative form.

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Expanded Cinema
(I note that recent debate by Lev Manovich and others, using a data-base concept, also recognises a distinction between the component units and their insertion into the narrative flow.)

At the core of these distinctions is again the condition and role of the spectator. Even if the various passages 'drawn' through the matrix are not directly interactive (as in a computer-based interactive system), when the matrix of possibilities is 'represented' by multi-screen presentation, the spectator must make connections through choices within the visual and physical space. Again, whilst the elements of the matrix (images, sounds, sequences) may have associative and symbolic qualities, their connection need not conform to any resolution by consequential narrative. Connections made remain speculative, provisional and latent – the spatial and temporal form of (for example) my three-screen work Even a Cyclops Pays the Ferryman 1998 embodies and induces this latency of experience and interpretation. Although the spectator may form some personal narrative from the encounter, narrative becomes a subset within temporal structures rather than the exclusive (quasi-natural) method for structuring experience within or without representation. The resistance to narrative interpretation is a resistance to enculturation. Both structural materialist film and expanded cinema dislodge dramaturgy, symbolic connection and interpretation from authorised cultural interpretation and all become problematic in the presence and encounter of the spectator – spectator time.

Concepts of Spectator Time
From my practical work I have outlined a number of issues and concepts that derive from the general notion of spectator time. These begin with an understanding of how perception works for cinema (film, video or digital) at a basic level, how time is experienced as pattern and then conceptualised.

Perception Time
Basic cinematic perception seems to depend on thresholds of discrimination – the rates at which cinematic units can be perceived as separate – outside their experience as flow. I understand this to belong to autonomic responses of the sensory mechanism of eye and ear. The eye seems unable to separate individual stimuli faster than about 16 frames or images per second (fps). At this point the present stimulus 'blends' with the previous stimulus, which may be perceived as movement – the fundamental basis of apparent motion at the core of cinema. However this 'blending' between moments of rapid change may also apply to features of the image other than motion, like, for example, colour, three-dimensionality or effects of superimposition. This autonomic process of 'blending' is out of our control – it is a function of neurons and the rate at which they receive and recover from a stimulus. A similar process applies in sound where frequencies below about 40 cycles per second (cps) become beats – above this, to about 20,000 cps, they are perceived as pitch. Above 40cps the separate waves or cycles are beyond our separate discrimination and 'combine' to be heard as notes.

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Time Pattern
At a stage of perception beyond the autonomic, I have attempted to apply the concept of gestalt to time pattern — a time gestalt. Here blocks of autonomic perception units combine into recognisable repetitions. If their proximity in time is not too great — these can be experienced as patterns in what we normally understand as rhythms. The nervous system seems able to superimpose a current perceptual configuration onto a recently previous configuration to be experienced directly as a pattern (a gestalt). Our ability to recognise the difference between one rhythm and another is evidence that we have a form of pattern recognition for temporal as well as pictorial phenomena. Though the ear and eye mechanisms for this are different, the neuronal response times are probably of a similar kind. (See some film works by Takahiko Iimura, and my Spot the Microdot 1969). A similar concept of gestalt could possibly be applied to our recognition of melody and rhythm and to harmonic relations of sound as well as colour. However if the time between the individual perceptual units becomes too large (beyond the decay of the neuronal stimulus?) the experience of this rhythmic pattern breaks down.

Conceptual Time
When the time distance between rhythmic experience is too great, other processes take over. Both short- and long-term memory clearly allow us to superimpose (or compare) present onto previous experience. Connections and continuities are formed through this comparison/superimposition — a process which is well understood in experiencing musical composition. These may be more or less conscious or, as with the conventions of narrative, be fitted into an existing cultural template. In cinema this process not only involves memory but also an act of prediction, a preparation for what might occur next in an interplay of expectation and confirmation — a basic apprehension. In narrative cinema, this is exploited in the processes of suspense, but the process is a more fundamental feature of our mechanism of temporal coordination outside cinema as well as within it.

In structural or structural materialist cinema this process itself is rendered problematic. In Kurt Kren’s TV 1967, for example, some intentional recollection of previous repetitions leads to a provisional understanding of the ‘structure’ and prediction of possible development within the work — a visual cinematic discourse — an internal dialogue of the spectator whether ‘spoken’ or not. This process is also evident in the ‘puzzle-game’ structure of Hollis Frampton’s Zorns Lemma 1970.
Time in Expanded Cinema

The term expanded cinema covers a broad field. For the present discussion I shall not take on the way time factors might be applied to the expansion of cinematic technology, for example: internet fictions (multi-user domains), computer games, or tele-presence. I shall confine my discussion to explorations in expanded cinema presentation mainly as they took place in Britain and continental Europe. Here I now see the crucial issues as related to spectator-centred presence or encounter. The spatial aspects of this are relatively well understood. By extending the cinematic presentation through multi-screen forms, the spectator must make choices of attention between one part of a presentation and another. Reconfiguring the cinema space simultaneously breaks the singularity of the experience – but more particularly breaks any assumption that there is a singular (authorised) interpretation based on matching spectator experience to artistic intention. Meaning becomes latent and unfixed. Stressing the spatial configuration of a work means the spectator is made aware of occupying the space of the presentation, and is often mobile in the space, as in Lis Rhodes’s Light Music 1975.

The temporal aspect of expanded cinema has been less fully discussed. Incorporation of bodily performance, as for example in Ping Pong 1968 by VALLÉE EXPORT, my own After Leonardo 1973, or Gill Eatherley’s Aperture Sweep 1973, adds a further layer of uncertainty, stressing the unique aspects of the encounter. In all these cases, this encounter is both spatial and temporal. The spectator (presence) becomes implicated in the unfolding (encounter) and becomes part of the development of the work in a unique time. In my Horror Film 1 1971 (fig. 49), the duration of the work is directly related to the time taken to move between the screen and the projectors during the performance. In William Raban’s Take Measure 1973 the distance between the screen and projector is ‘measured’ by the film strip passing across the audience as it is projected, while in Line Describing a Cone 1973 by Anthony McCall, time is demonstrated as a quasi-sculptural dimension. In expanded cinema that stresses the spatial conditions of screening, the presence of the spectator as part of that space and performance becomes evident and spectator presence in space is also a spectator presence in time. Crucial to the understanding of time in expanded cinema is the notion of ‘duration’, a term that implies a subjective awareness of time’s passage, a continuity of attention that ‘belongs’ to the spectator – the experience of time’s passage within a condition of actual, not illusory presence.

The processes of temporal awareness for the spectator in expanded cinema are complex. Not only is this an awareness of the passage of time in what is presented inside the work or performance; for the spectator it also involves structuring of ‘meaning’ between time and space from the layers of their perception, memory, prediction and conception. As the spectator is seen as independent, there is also an interplay between the spectators’ own motivation – their ‘investment’ of time giving attention to the work – and the temporal experience offered by the work. This may involve an interplay of desire but also of conflict between a work’s duration and the desire of the
spectator to structure and occupy time. Within this process, whatever the temporal structure of a work, the spectator may make use of a range of strategies to 'understand' and 'own' the experience. These may draw on a variety of discourses including music, the visual arts, gaming and symbolic or narrative cinema. But here, other than the power of cultural habit, narrative has no priority over other forms of interpretation. By mixing media, expanded cinema also mixes discourses and consequently opens the range of possible forms of interpretation. In expanded cinema, the temporality of cinema is not constrained by the habits of narrative. By drawing on a history of non-narrative, anti-narrative, symbolic and abstract experiment, narrative becomes no more than one option within a range of temporal conceptions.

1 Jackie Hatfield, 'Expanded Cinema and its Relationship to the Avant-Garde', MFS 39/40 Winter 2003 p.56.
5 See Film Culture, no.29, Summer 1983.
Introduction: Reframing Polish Experimental Film

When investigating the histories of expanded cinema it is vital to differentiate between the specific historical, political and cultural frameworks of expanded cinema production. In light of the recent historicisation and institutionalisation of expanded cinema in Britain through conferences, publications and re-enactments, protecting this history from fossilisation can be achieved by relating expanded cinema to contemporary practice, or by introducing alternative modalities of expanded cinema. This essay focuses on the latter by introducing the expanded cinema of the Polish artists’ duo KwiekKulik.¹

Since the fall of the Berlin Wall the reception of Eastern European Art has been homogenised in Western institutions through museification and academic discourse. As the Polish critic Piotr Piotrowski argues:

[the] so-called Western, liberal, democratic ideology appeared to produce an opportunity for pluralistic, heterogeneous art (and art history), while in the East the stereotypical view of art, based on a more uniform ideological background, seems to suggest a more homogenous image of art and its history.²

The Western readings of the experimental films of the Łódź Film Workshop, also called the Workshop of the Film Form, are an appropriate case study. Founded in 1970 by Kazimierz Bendkowski, Wojciech Bruszewski, Paweł Kwiek, Józef Robakowski, Zbigniew Rybczyński and Ryszard Waśko, the workshop has produced films which have often been closely related to Anglo-Saxon and North American structural films. The Western focus on this body of work, however, not only restricts this practice to the exclusive frame of ‘supermodernity’, it also ignores the many other experimental film practices that developed in Poland at that time.³ Art interpretation is historically and politically conditioned; during the Cold War, for instance, it was vital to create a dialogue with artists on the other side of the Iron Curtain. But in today’s globalised world, the threat of homogeneity calls for attention to local histories, national specificity, and the investigation of multiple modernisms.
Polish experimental film of the 1960s and 1970s was multifaceted and heterogeneous. The relationship between the Łódź workshop and the Polish New Wave (Nowa Fala) was complex and highly innovative. The individual practices by female artists such as Ewa Partum and Natalia LL, and the so-called ‘Soc Art’ of Kwiekulik, were of major significance in the Polish art scene. The relationship between these artistic practices, and the official Socialist Realism and conceptual art, was fundamentally different from the system in the West. Here Łukasz Ronduda’s insightful book Polish Art of the 70s is extremely helpful. Ronduda divides Polish abstract art of the 1970s into three categories. Firstly, he identifies abstract ‘post-essentialist’ art that concerns itself only with form and hence is isolated from life. According to Ronduda, the Warsaw Foksal PSP Gallery, which has taken its place in art history as the birthplace of Polish conceptual art, was in fact a golden cage (a ‘velvet prison’ as one Hungarian critic put it) promoting a merely formal, neutral and safe discourse. The second group of ‘post-essentialist’ artists – consisting of Ewa and Andrzej Partum, Natalia LL and Krzysztof Zaborski, among others – criticised the intellectualisation and institutionalisation of art through the Foksal Gallery. While their art was abstract and autonomous, it was motivated by a desire to create a direct relation between art and life, to infuse art with poetry, sensuality and a sense of mystery. Finally and most significantly, Ronduda defines a third category, ‘pragmatist art’. He writes:

The artists I refer to as pragmatists focused on the detail, a specific fragment of reality, the here and now, on studying, exposing and deconstructing the limits of their own perception, imagination and consciousness, and on analyzing the structures and relationships governing reality... Unlike the post-essentialists, the pragmatists tried to intensify the processes of the world’s ‘disenchantment’, wanted to infiltrate reality in order to modernize it, albeit in an alternative fashion, different from the officially promoted model of modernisation... The former wanted to free themselves of materiality, isolate themselves from the physical reality; the latter, conversely, wanted to infiltrate, penetrate, co-create and change it.

Unlike in the West, where Peter Bürger’s definition of the avant-garde is still prevalent, Polish avant-garde art around 1970 was either funded by the party in order to promote the country as a progressive modern state, or occupied a pragmatic position that sought to bridge state ideology and artistic autonomy – a position that appears paradoxical from a Western point of view. In Poland, however, the legacy of the artist-scientist was kept alive under a new so-called liberal communism initiated by the first secretary of the Polish Communist Party, Edward Gierek, resulting in new art movements with the programmatic titles ‘New Socialist Realism’ (Zygmunt Piotrowski), and ‘Soc Art’ or ‘New Red Art’ (KwieKulik). Given these differences in the relationship between art and politics, how is it possible to usefully compare the work of the Workshop of the Film Form to the structural film experiments...
of the Continental, Anglo-Saxon and North American co-ops? The experimental films of the Workshop and KwiekKulik do bear a formal resemblance to the expanded cinema practices of Western experimental filmmakers, through the expansion of the dominant cinematic form across multiple projections, a self-reflexive interrogation of the medium, and the participation of the audience in the projection event. Ronduda explained that KwiekKulik’s films sought to activate the audience, 'in order to rouse them from the passivity typical for the recipients of art in the “Closed Form culture model” (they [KwieKulik] recognised some of the worst features of the Closed Form communication model in the “normal” cinematic screening)." This sounds similar to the theories of the London Filmmakers Co-operative’s Malcolm Le Grice, who saw expanded cinema as an alternative ‘Brechtian’ model to mainstream film reception. Both scenes were concerned with the deconstruction of the official representation of ‘reality’. In one of Robakowski’s biological-mechanical records, Exercises for Two Hands 1976, the filmmaker strapped two cameras around his arms, destabilising the controlling authorship of the camera-eye. Similarly, in Western Europe, in the triple-projection Adjungierte Dislokationen 1973, VALIE EXPORT presented two sequences that had been filmed by placing one camera just below her chin and strapping another on her back. Another obvious comparison can be made between Robakowski’s Test 1971 – a film made by punching holes into the celluloid strip – and Taka limura’s performances or Annabel Nicolson’s Reel Time 1973. The list of formal overlaps is long. However, as Piotrowski pointed out, it is crucial to place the work within the specific national state ideology. While much Western European practice followed Louis Althusser’s critique of the ‘state ideological apparatus’, the Polish ‘state ideological apparatus’ represented a ‘sort of liberal version of classical Marxist-Leninism or so-called “real Socialism”’.11

Activities on Moses
Warsaw-based Zofia Kulik and Przemysław Kwiek started to collaborate in 1971. Fusing their surnames as KwiekKulik, they produced a series of radically process-based, participatory film experiments, which they called ‘camera-targeted activities’ (‘Działania dokamerowe’). Would it be accurate to call these ‘activities’ expanded cinema? There is a danger of misinterpretation in applying English terms globally when, despite their formal similarities, the practices are based in different socio-political contexts. What then is the relationship between expanded cinema and KwiekKulik’s ‘camera-targeted activities’? Synchronisation of an Open Form Film onto 3 Screens, also
beautiful, lush record of what as appears a spontaneous, enjoyable and rather playful group game. Despite modest means of manipulation the possibilities appear to be infinite. The middle and left screens of Activities on Moses present slides from Kwiekulik’s vast photographic archive of found objects, photographs and thousands of slides. Kwiekulik’s image archive is an attempt to visually restructure the world by shifting the relationships between form and colour, objects, people and nature. In thousands of photographs they documented surreal interventions in public and domestic spaces: bright yellow crepe paper balls on the streets of Warsaw, a red flag on the grass, a beautiful circle of lush oranges on the floor of the artists’ apartment. As Zofia Kulik put it: ‘We wanted to create a set of visual data, like a visual bank and we did not care how we spent its money’. Kwiekulik reconfigured this visual data as a personal hypertext, which they named Bank of Aesthetic Time Effects, in performances and slide and film projections. In Activities on Moses there is a dynamic relationship between the different images. Rarely are the three projections shown together; rather they alter constantly, resulting in a visual dance across three screens. The individual combinations of slide and film projections are never arbitrary but carefully calculated. Activities on Moses demands a lot of attention from its audience since the various scenes follow each other in quick order, creating an engaging and ‘active’ film presentation.

KwieKulik’s interest in variability and process gave birth to the idea of an ‘open film’, meaning a film that is never finished, a constant work-in-progress. For example, three more scenes that could be included in the triple projection also exist. One of these scenes shows KwieKulik’s so-called ‘provocations with the camera’. Activating the space of reception during the projection of Activities on Moses, the artists ‘provoke’ the audience, filming them close-up with a hand-held Super-8 camera. These ‘camera-targeted activities’ were part of a larger practice of games and happenings called ‘Działania’ (‘activities’), a term which KwieKulik appropriated and made their own by writing it with a capital D.

KwieKulik’s ‘Camera-Targeted Activities’ and Oskar Hansen’s Open Form Activities on Moses is a collaborative activity, which manipulates, contaminates and literally sullies Moses. His cold marble flesh is covered with people, paint, bright crêpe paper, clay and little paper horns. The excremental character of the clay, the growth of white bumps and the viral spreading of crêpe paper, could be interpreted through Julia Kristeva’s notion of ‘abjection’: that which cannot be contained under the pressure of the state patriarchy. This may be a plausible insight from a Western point of view, but in Poland at that time the discourse of subjectivity did not refer to feminist, Freudian psychoanalytical theory: rather, subjectivity was directly linked to social reform. According to Ronduda, Oskar Hansen’s concept of the Open Form was an ‘adequate response to a new concept of
known as Activities on Moses (figs. 50–2), consists of a maximum of four film projections, which are not necessarily always shown together. In its triptych format, which is based on one film and two slide projections, the screen on the far right is a filmed performative intervention by the artists and a handful of art students on Michelangelo Buonarroti’s marble sculpture Moses of 1513. The students intervene with the sculpture in a direct physical way and Moses seems to tolerate it stoically. Close-up shots show the lively group throwing coloured paper strips at the figure, placing little humps of clay on his white legs, wrapping the torso with crêpe paper and pouring buckets of paint over his defined muscles and feet. Shot on 35mm film, this sequence provides a
beautiful, lush record of what as appears a spontaneous, enjoyable and rather playful group game. Despite modest means of manipulation the possibilities appear to be infinite. The middle and left screens of Activities on Moses present slides from Kwiekulik’s vast photographic archive of found objects, photographs and thousands of slides.16 Kwiekulik’s image archive is an attempt to visually restructure the world by shifting the relationships between form and colour, objects, people and nature. In thousands of photographs they documented surreal interventions in public and domestic spaces: bright yellow crepe paper balls on the streets of Warsaw, a red flag on the grass, a beautiful circle of lush oranges on the floor of the artists’ apartment. As Zofia Kulik put it: ‘We wanted to create a set of visual data, like a visual bank and we did not care how we spent its money’.16 Kwiekulik reconfigured this visual data as a personal hypertext, which they named Bank of Aesthetic Time Effects, in performances and slide and film projections. In Activities on Moses there is a dynamic relationship between the different images. Rarely are the three projections shown together; rather they alter constantly, resulting in a visual dance across three screens. The individual combinations of slide and film projections are never arbitrary but carefully calculated. Activities on Moses demands a lot of attention from its audience since the various scenes follow each other in quick order, creating an engaging and ‘active’ film presentation.

Kwiekulik’s interest in variability and process gave birth to the idea of an ‘open film’, meaning a film that is never finished, a constant work-in-progress. For example, three more scenes that could be included in the triple projection also exist.16 One of these scenes shows Kwiekulik’s so-called ‘provocations with the camera’. Activating the space of reception during the projection of Activities on Moses, the artists ‘provoke’ the audience, filming them close-up with a hand-held Super-8 camera. These ‘camera-targeted activities’ were part of a larger practice of games and happenings called ‘Działania’ (‘activities’), a term which Kwiekulik appropriated and made their own by writing it with a capital D.

Kwiekulik’s ‘Camera-Targeted Activities’ and Oskar Hansen’s Open Form Activities on Moses is a collaborative activity, which manipulates, contaminates and literally sullies Moses. His cold marble flesh is covered with people, paint, bright crêpe paper, clay and little paper horns. The excremental character of the clay, the growth of white bumps and the viral spreading of crêpe paper, could be interpreted through Julia Kristeva’s notion of ‘abjection’: that which cannot be contained under the pressure of the state patriarchy. This may be a plausible insight from a Western point of view, but in Poland at that time the discourse of subjectivity did not refer to feminist, Freudian psychoanalytical theory: rather, subjectivity was directly linked to social reform. According to Ronduda, Oskar Hansen’s concept of the Open Form was an ‘adequate response to a new concept of
subjectivity – subjectivity remaining in a permanent process of evolution.\textsuperscript{17} Hansen, an architect and theoretician, taught in the sculpture department at the Warsaw Academy of Fine Arts, where he applied his theory of Open Form. For Hansen the modern artist was the ‘artist-scientist, whose artistic work alongside modern science contributes to a creative transformation of reality’. He propagated an anti-hierarchical, dynamic relationship between artist and viewer, which he sought to produce through the ‘art of events’. These were based on activities, communication, and an interdisciplinary process-based approach to art, including ‘provocations’, a method by which a given situation was interrupted in order to analyse and potentially alter its meaning.\textsuperscript{18} Hansen radically challenged the status of the object and the notion of the ‘ideal’ or ‘closed form’. In Activities on Moses, the ‘closed form’ was represented by the late Renaissance sculpture and the traditional material of clay, a standard in the sculpture department. These forms were ‘closed’ because they were considered elitist, bourgeois, and ultimately un-socialist. KwieKulik’s activities, however, produced a social situation that allowed for communication, participation and play. These playful activities explored seemingly endless variations of meaning, which undermined the monopoly of one predetermined definition of truth, reality, meaning and values.

KwieKulik’s Bank of Aesthetic Time Effects and Tadeusz Kotarbiński’s Praxeology

Activities on Moses was preceded by several Open Form films. Activities on an Actress’s Face 1971 (fig.53), for instance, shows the ‘closed’ form of a classically beautiful blonde actress manipulated with paint, paper, sticks, tape, ropes and liquids. The players were engaged in spontaneous ‘moves’, which were judged in terms of ‘bad’ or ‘good’ strategies (while ‘bad’ moves were limiting, leading to a ‘cul-de-sac’ of moves, ‘good’ moves opened up possibilities).\textsuperscript{19} Gradually the effect of the manipulations on the model becomes visible and at one point she starts crying, Activities on Moses and Activities on an Actress’s Face appropriate Hansen’s concept of ‘scalability’, which is based on the idea that the same technique can be applied to different objects and situations, from public space, to sculpture, and to human beings.\textsuperscript{20} In this respect, KwieKulik’s ‘pragmatist’ approach to art radically blurred the boundaries between the personal and the political, private life and art. In one of their most controversial slide works, Activities with Dobromierz 1972–4, they placed their newborn baby son within different spatial arrangements in their small bare apartment in Warsaw. These beautifully composed photographs show, for instance, a bird’s-eye-view shot of the naked baby on the floor surrounded by a neat circle of oranges or, in another shot, by cold frozen ice pickles. Activities with Dobromierz, Activities on an Actress’s Face and even Activities on Moses can have a slightly disturbing effect on the sensitive viewer. KwieKulik’s treatment of human beings and precious masterpieces as mere objects devoid of emotions and cultural value relates to theories of the Polish philosopher Tadeusz Kotarbiński. Mainly unknown in the West, but absolutely key to the economic and philosophical debate in Poland in
the 1960s, Kotarbiński developed the concept of praxeology, the general theory of efficient action. Kotarbiński’s concretist, reist (the doctrine that only material things exist) approach was based on logical empiricism, taught by Kazimier Twardowski, who headed the Lvov-Warsaw School of Logic. The absence of Freudian psychoanalysis in postwar Poland worked in favour of this nominalist philosophy of the human solely as a physical body, an object. The pragmatist approach that scientists and artists alike had first developed in the utopian years of the Thaw period was a fundamental redefinition of human communication and behaviour, which enjoyed a new dynamic moment around 1970 when Edward Gieriek sought to inaugurate a new phase in communist Poland.

Praxeology’s investigation into the maximum efficacy of action was not only applied to the problem of Poland’s inability to create an efficient production structure: it was also key to KwieKulik’s practice. On the one hand KwieKulik’s activities contradict Kotarbiński: their game activity and the slides in Activities on Moses engage in a very inefficient production of absurd image constellations. In the Polish context, however, these constellations-in-progress are interpreted as a positive appropriation of praxeology: by producing a maximum of images with a minimum of material, KwieKulik engaged seriously with Kotarbiński’s theory of efficient action.

Conclusion

Activities on Moses exemplifies this as it developed partly out of Przemysław Kwick’s sculpture experiment in which, between 1967 and 1970, the stages of the making and subsequent destruction of a ‘classic’ nude clay sculpture were documented in hundreds of photographs. When Kwick started to record these processes with a film camera (operated by Pawel), the basis for KwieKulik’s ‘activities’ was laid. In light of this, is Activities on Moses a process-based sculpture or an expanded cinema work?

KwieKulik, together with the members of the Workshop of the Film Form, were concerned with art’s transformative effect in Polish society. Activities on Moses occupies a radically hybrid position between fine arts, conceptual practice and experimental film. The work’s resistance to formal categorisation and art-historical definitions differs from most Western European structural filmmakers, whose practice was specifically rooted in filmmaking (rather than in video art or sculpture). In the case of KwieKulik and the Workshop of the Film Form, art practice was never self-referential but part of a larger socio-political reality. Exploring the possibility of pre-semantic (visual) languages through the deconstruction of ideological representations of reality the artists sought to scientifically deconstruct the mechanics of human perception. Kwick put it precisely:
we flogged our old world with visual means, unfolding its peacock’s tail enchanted in matter. Ontological concretism says: universals and hypostases don’t exist. You can neither sculpt nor paint them ‘from nature’. What exists are things, their configurations and structures, which can be transformed and multiplied infinitively in the course of a process.\textsuperscript{24}

How could Hansen’s Open Form theory and Kotarbiński’s praxeology be applied to Western art? The capitalist system in the West tied artistic production to a free market economy, which defines ‘product’ within a closed discursive field. Artists from both sides of the Iron Curtain worked against the systems ‘closing in’ on art, but within different parameters.\textsuperscript{25} In the age of globalisation it is only in the detail that we find the devil of a resistance to the homogeneity of meaning and value. The comparison between Open Form Film and expanded cinema is as interesting as it is precarious, and only really of value when the respective contextual conditions are at the centre of interpretation.
My analysis of Polish experimental film is based on Łukasz Ronduda’s recent publication Polish Art of the 70s, 2009, and primary material from interviews with Zofia Kulik.


Ronduda 2009, p.177.

Piotrowski 2009, pp.11-12.


After the 1970 miners’ protest, Gierek promised a new era in communist Poland. In the late 1970s an ineffective economy and unacceptable working conditions gave rise to the Solidarity movement, eventually resulting in martial law in 1981. See Piotrowski 2009, p.11.

Ronduda 2009, p.177.


Activities on Moses was first shown as a triple projection in 1971 at the Nowa Ruda Festival, and at the Gallery EL in Eiblog, Poland.

A copy of Michelangelo’s Moses stood in the hallway in the Warsaw Art Academy.

The impressive archive is currently stored in Zofia Kulik’s private house outside Warsaw.

Interview between Zofia Kulik and Maxa Zoller at the artist’s home in Warsaw, 8 April 2009.

It was the artists’ intention to present and explore different modes and formats of image-making, from the professional 35mm material to the amateur Super-8 film and slide projection, as a radical process of open-ended deconstruction.


The technique of camera provocation consisted of the following steps: observation of existing situation – provocation – observation of the provocation and analysis of its effects – new situation.”

Ibid., p.180.

A collaboration between students from the Łódź Film School (Paweł Kidwiak and Tadeusz Dębski) and the Studio Academy (Zofia Kulik, Jan S. Wojciechowski, Przemysław Kidwiak and Bartłomiej Zdrojewski).

Ibid.

Ibid. The actress was Ewa Lemańska, who became known through a popular TV series, so the work becomes a critique of the ‘closed form’ of popular entertainment.

That Artur Zmijewski’s videos have not been contextualised within this very specific Polish tradition exemplifies an homogenised Anglo-Saxon art discourse disregarding local meaning.

Paweł Kidwiak’s 1, 2, 3… A Cinematographer’s Exercise 1973. Video A 1974, his live TV performance Studio Situation 1974 and others, are outstanding examples of radically transdisciplinary, playful and yet highly analytical art.


Some Notes on Some Expanded Films

Written as notes to David Curtis, co-organiser with Simon Field of the 1970 International Underground Film Festival at the National Film Theatre, London, and included among the Festival programme notes. From the British Artists’ Film and Video Study Collection.
Some notes on some expanded films.  
by Werner Neues

In 1966 and 67 I made a number of films or projection-actions, a type of work which later became known as expanded cinema. Reflecting on the materialistic conditions of the medium, I was very much concerned with the projection situation. For example, "Fehlstart" (False start) is showing many different actions, I used the space between screen and projector. I placed myself on a ladder just in front of the screen, and did live actions before the screen. Fehlstart dealt with problems of identity of filmic reality and life-action reality and the different sizes of the real and the projected body.

Because it is projected at different times of my life, this piece also deals with the different processes of both the film and myself getting older (print life, print generations, scratches, loss of colour).

The film "Bogen" (Arc) describes the changes of light in a fixed picture. The light-arc was made by shooting one frame every minute from midnight to midnight. The resulting 1440 single frames (stored minutes) are projected as a one minute film loop at 24 fps/sec. The loop is projected until the visible picture is completely destroyed by scratches, little particles of dust, etc. On one level it is a demonstration of the lifetime of a print.

In "Schnitte für ABABA" (Splices for ABABA) I took the splices and their position as a line in the frame as one theme of the film. A shot of policemen catching one of their own I took as leader in front of the film and the leader materials green, red and black are the visual materials from which I made the main body of the film.

A red/green flicker film with 27 frames of black leader between flicker phases, it is organized in the form of a square eccentric time-spiral, with a repetitive instrumental sound. (Please refer to the accompanying diagram.)

Different possibilities for showing the film are:

1.) On the screen. After the title "Ende" the projector lamp is switched off and the film keeps running for another six minutes with sound. The cinema stays completely dark except for the illuminations done by spectators.

2.) Film starts with the police scene. After the hand-scratched title the projector is moved and the projected image changes places from the screen to the cinema to the spectators. The projector is moved during each 27 frame phase of black leader. The heads of the spectators are cut off by the splices.
3.) The film projection starts outside on a wall. After the title the projection is turned toward a forest, which starts to dance in the pulsating rhythm of the red/green phases - red coming/green going. In the diagram the excentrical time spiral starts from the center going to the upper right. At first 1 frame green, two red, 27 black, 1 green etc. Each number represents a colour change. Before a change at a corner there are always 27 black frames which are also used for the change of the direction of the projection. The last sequence of colour changes consists of 27 segments of colours: 13 green/14 red/11 g/12 r/9g/10 r/7 g/8 r/5 g/6 r/3 g/4 r/1 g/4 r/3 g/6 r/9 g/7 r/10 r/9 g/12 r/11 g/14 r/13 g/and 27 black frames. The plan of frame sequences is to be read from the center in a right angle spiral ending in the upper right corner.

The films "Gurtrug Nr.1" and "Gurtrug Nr.2" (gurt means belt and trug means illusion, a metaphor for cinema) were conceived as palindromic loop projections. They should be played until the audience has gone. The palindromic title indicates that there is no beginning and ending of the film. An expanded way of showing "Gurtrug Nr.1", in which 26 people show divergent movements from place to place within the frame, each person's movement having its own character, is to have 26 people in front of the screen follow with sticks the movements of the actors on the screen. Because the shots last about 30 seconds each, intercut by a different shot, there is periodic confusion as the actors find themselves again on the screen.

In "Gurtrug Nr.2" a group of people is shown within a triangular matte. They lie on the ground and change their positions. One or two stand up and move to a different place where they lie down again. The film is projected by two projectors on two screens one above the other so that the triangle in the bottom image sits on its base, its base on the bottom of the frame, its apex at the top. The upper image is the inversion of this, thus forming a sandglass for time measuring. One film begins with its beginning, the other begins with its ending and ends with its beginning. This means that the films are making a time cross on X, and they show the same picture only at one point for one/24th of a second. What is happening in the visual structure is reflected by the sound of two groups counting. One group starts with 123454321 etc., the other group starts at the same time counting 543212345 etc. Both groups articulate the 3 at the same time. The film is a kind of reflection of life reflecting itself in a surprising time construct.

In 67 I made some contracted-expanded film performances. I showed two prints of the same film on two projectors projecting on the same screen in the same size. The pictures were only different
The pictures were different only by the small difference of angle in which the projectors stood beside each other. This plus the fast opening and closing of a shutter in front of each lens of the projectors produced a three-D simulation, because of the angle and time phase interferences.

For "K/brper" (B/ody) I used two screens one above the other separated by a line of burning candles. On the upper screen is the "B", the head of the actor and the "ody" is on the screen which is underneath. The head is able to move related and unrelated to its body.

"Ach, wie gut, daß niemand weiß" (Oh, how good, that nobody knows) is a film that ends before it starts. It is only made out of green leader, which normally indicates to the projectionist the beginning of a film roll, as red leader signals the end of a roll. Green leader is old exposed film material which later has been washed out and coloured green. Sometimes, when the washing process wasn't perfect, one still can see shadows or phantoms of old exposures. Though the film is not a film in the traditional sense, because it is ending before the start, it becomes a film by its projection. The projection is done onto the audience from above or onto the normal screen, in which case one can follow the phantoms though not really being sure if there are some or not. Or one follows the tracks of previous screenings, such as dust particles or scratches etc.

"Kratz- Beiß-Loch-Fließ- Flicker-Filme" is an anthology of film material concepts and expanded cinematographic actions. To give some examples: One strip of film is cut irregularly down the middle and is projected by two projectors trying to give one image on the screen. One film is running through two projectors, projecting two pictures or one superimposed picture. The film is projected on a live scene, on an actor who is trying to do what he did before when he was shot for the film. The film is projected on a rubber screen behind which actors act against the material, deforming the screen. Transformations of the screen, as painting it black, different materials as screens. Objects between projector and screen. Movements of the projector and screen. Movements of the projector and of the screen. Layers of transparent screens through which the spectator can move. Colour film is projected on a screen that is coloured differently from and in, as the film. The projector is moved the same way the camera had been moved during the shooting of the film.
The spectator follows the carried projector. Interactions between the light of hole-punched film and actors. The spectator is moved and has to move during projection. Etc.

In the film "operation" a filmed chest operation is projected on the chest of a spectator. The chest serves as screen which moves by breathing.

In early 68 I made a series of one-frame-film performances which I called "Stehender Film/Bewegter Film" (standing film/moving film). By my definition the smallest element of filmic articulation is the kine, which is two frames. The difference between two frames is the filmic information. One frame is a photographic information. The minimal differences are used to produce the illusion of movement in the head of the viewer. The maximal differences are used to produce the thaumatrope-effect or gestalt fusion in the brain.

The formula for a kine is: \( k = (a+1)(x, y, t) - (a)(x, y, t) \). In words this means the linkage of the two frames \((a+1)\) and \(a\) constitutes the filmic information, built on the differences of the three parameters of filmic information, or dimensions of the signals, the coordinates \(x, y\) of space and \(t\), the coordinate of time. The time coordinate is missing in the photographic information in one frame.

I hung film on a mouldy wall until the bacteria took over the film layers. I projected one mouldy frame with a moviscop onto a wall. Disturbed by the heat of the projection lamp the microbes on the film started to move, carrying the green of the grass to the heaven and carrying the blue from the sky to earth and carrying Dore O. all over the screen. This one frame film is my philosophic answer and contradiction to my theory of what filmic language is.
On Performance: Expanded Cinema Work in the 1970s

Interview by Duncan White (Berlin, February 2008)

Birgit Hein: What I find most interesting about expanded cinema is that it really makes a connection between film and art. It goes into the space. It’s an event. And of course in this way film could get into the kind of gallery/museum structure – expanded cinema extends film into the art scene. But then there are so many different forms of expanded cinema. I would say, expanded cinema is very much a rethinking of cinema. Expanded cinema never really functions in a movie theatre because you need more space, you need more than this one flat screen, and often the audience must be able to move in the space. So, this is why we started our Performance in the exhibition space of the Kunstverein in Cologne, because we needed the whole space, all around us.

Duncan White: You were saying earlier that in the UK that expanded cinema tends to be ‘flat’.

BH: It was, in my opinion, it was more because of the screen, or a wall – a flat space to project onto. And this was how Wilhelm and I worked until Documenta 1977. Our work was also only about the screen and only visual. Maybe a visual pleasure – playing with space and illusion. It was not until afterwards that we started performing – performing and screening. We were basically using three screens. In the beginning there were more but when we started to move around places we reduced it to three screens, three projectors and a slide projector. We had huge slides so we could project very big. And we changed also the format of the screens. Like smaller and bigger frames with zoom lenses. So, it was three projectors and the slide projector.

And an end.

DW: What was it an end of?

BH: An end of basically concentrating on form. I had tried to write a text for Edinburgh [International Forum on Avant-Garde Film, 1976] about form and content, but it turned out that the work was becoming too specialised, and
the questions became more and more specialised and nobody would understand. In reaction, we ended up having screenings where the projector was in the room and the [film] material was damaged – we had arranged that – so, the people, while they were looking, always had the feeling that behind them the film was exploding and crackling. [laughs]

So, it was very much like an angry art. And then we decided that we wanted to get ourselves more personally into the film. This was very important for the future. Because for the first time we included Super-8 home-movie material, TV newsreel material of the war in Vietnam and the trailer From Here to Eternity, which we found in the projection booth of one of the cinemas we were running at that time. We loved this trailer, it’s so perfect. It’s really like the whole film in 10 minutes.

**DW:** A kind of compressed narrative. An abbreviated form?

**BH:** Yes. You have everything. You have the emotion. You understand the story. You don’t need the whole film. So, we took it as an example or an encapsulation of Hollywood in contrast to the formal pieces we had, and in contrast to the TV documentary footage. Wilhelm at that time worked at the WDR – West German Television. He found newsreel material from Vietnam in the wastebasket. They had thrown it away because it was too heavy to show on television. For example, a dead soldier being carried by soldiers out of a river where he had been shot. And it was very close and very real, you know?

**DW:** What year was that?

**BH:** Around 1968. Wilhelm just took it and later we included it in the performances. The show developed and changed very, very much. These [life-size paper cut-outs of Superman and Wonderwoman] we found when we were on tour in the United States. You could buy them in a souvenir shop. And we would glue them on cardboard, so that they are strong and then we would move them like a jumping jack.

**DW:** And it would be quite sexualised. So, was that a separate show from From Here to Eternity? The Superman and Wonderwoman? (fig.30, p.123)

**BH:** It started as From Here to Eternity and at that time we called it Performance. And then we realised ‘performance’ is a very, very bad word because everybody thinks performance is boring.

**DW:** Yes, it’s very freighted. Loaded.

**BH:** And then we started to call it Movie Show. Superman and Wonderwoman would come in after – when we had found these puppets. The Show would be nearly never the same; always changing.
DW: Did you have a kind of structure for the show? What would go first and what would follow? And who was operating the projectors? Was it friends?

BH: We did it.

DW: So you were in front and behind the projector?

BH: Yes, but we had one piece, Die Monster (fig. 29, p.121), which could not be done by us. The cinema had to be dark. We would silently go to the screen and then the lights should come on. Our helpers should switch on the light in the right moment. Our daughter, she was seven years old at the time, she did it best. She sometimes travelled with us. For example, when we were in UCLA in this famous Hollywood art school, we had a student who was supposed to help. The light went on – it was just the projector light – music would start and we would dance a kind of slow rock and roll. We also had found these rubber [Frankenstein] heads on the tour in America, I don’t know where. And then we had a piece which I really, really loved, which we only developed after we had been in Milan in 1979. We were in this big square in front of this Cathedral and people were selling doves – plastic doves – there were loads of them. They would fly beautifully. Really perfect. So we bought a big box of these doves and we would let them fly in the cinema. It was always very, very nice and very funny in whatever space that we worked.

With the Show, already there were fewer pieces, but the length of the show was always the same. It started with eight or nine different pieces and it ended up with twenty-seven. And there was stress to it. For example, in one show in Geneva, we realised that we had forgotten one reel. One of the three reels [for the three screens]. I don’t know how we managed it but we had to improvise heavily and of course leave out some parts.

DW: Did you think of it as theatre? Or did you think of it as something else?

BH: Theatre? No, because we were always in the audience with the machines. For example, we needed to stand on chairs to run the machines. You would hear the sound of the machines and would see the illusion there on the stage in the same time. For example, we had this Kiss number. That was very effective. We always did it until the people started shouting or coughing. So it was never the same length.

DW: You would wait for people to react?

BH: That’s right. We called it Kiss as a reference to Andy Warhol. Lit by one 16mm projector image, we would stand there and start kissing. In a movie you would have the kiss as a huge picture on the screen. But there, we were very small but we were there in person. And everybody would know that we were kissing and kissing and kissing.
DW: So, in terms of the audience you were [by now] very keen to get out of the art world, weren’t you?

BH: We would play in the weirdest places. Like, for example, in a pub, where it was often difficult to have [a stage]. So we would take two tables. We preferred pubs that already had a cabaret programme. That was very popular in the end of the 1970s. In America, as well, filmmakers would show their films in bars and it was very popular to have pubs with programmes of music or cabaret or literature or whatever. We had the problem that sometimes they said that the bar must run all the time. But we needed complete darkness, like for the monster number. And the best thing was what happened sometimes when they turned off the light without having asked for it. Then we knew they liked it. In this surrounding we learned very, very fast which pieces were really good and which pieces were [just an] intellectual construction. So in the end this influenced us of course very much.

DW: You mean the way people responded to the work influenced its content?

BH: The funny thing about the performance was that even if nobody would say a word you could always know what people think, if they liked or hated it. You could really feel it. And, of course I loved it – this tension.

DW: And would that influence how you would improvise and how you would respond to the audience?

BH: No, we couldn’t improvise, because the pieces were constructed. We would never address the audience. There were no such pieces.

DW: Is there something you wanted to say about the question of narrative? Because it seemed to me that for you – after 1977 – you saw expanded cinema and narrative as being related?

BH: Yes. Definitely. Definitely so, because at that point [we needed] to get a certain kind of content, real content into the show.

DW: What do you mean real content?

BH: As I already said, the trailer was a kind of ‘instant’ Hollywood film but at the same time it was also a World War II drama, whose tragic content – in the Show – came into direct conflict with the actual war documentary of a dead soldier in Vietnam, which in turn is commented on by the safe world of the home movie, but also by the white plastic pigeons as ‘doves of peace’ which flap with their wings over the heads of the audience and throw shadows on the screen.
The performance wanted to get out of this narrow structure of the laws of structural film but it was completely based on that. It was dealing with the idea of cinema, sometimes even without using film. The whole show was always dealing with illusion and reality – with the illusion of perception and the image of reality. So, us being there became important, in order to contrast with what was on the images on the screen. It was very important to have these two realities – the screen and us operating as a reality, and the machines. The projection machines as reality. And so the narrative of the content was also very much on the level of dealing with such questions. So, to me that’s also a story. You can construct a story. For example, the Frankenstein number. Of course, it referred to the film. The audience always had to construct their own interpretation. So, they were always asked to consider what they knew, and to access their knowledge, so they could understand what we meant. For example, if somebody has never seen the Frankenstein film, of course he will not understand the irony. Or Superman and Wonderwoman.

**DW:** But of course everyone has, everyone knows...

**BH:** Yes, this is why we took these. And at the same time you have the real material.

**DW:** So, it wasn’t so much that you were leaving the art world as you were combining the art world with other places, other narratives.

**BH:** Yes. With life. Yes. And it was amazing that we could survive. Then, the whole performance period stopped when we got our PS1 grant and went to New York for more than a year in 1981–2. We had intended to continue. But then we were confronted with a completely different, professional scene. The performance spaces were very professional and we understood very, very quickly that we would not have the level to perform there. Which was also good, because it was the complete break in our work. And in the end it led to [the film] Love Stinks 1984. And so for me, that was what I really always wanted ... to work in that way, because it is also a narrative: there was no continuing story but [a series of] situations, and so in the same way the viewer had to construct the content.
On the Origins of Expanded Cinema

Interview by Duncan White (Karlsruhe, February 2008)

Peter Weibel: So, my own background was coming from the classical Viennese philosophy of analytical language—from Ernst Mach to Wittgenstein. I started all that stuff before I was eighteen. For example I was reading, when I was sixteen years old, George Boole’s Laws of Thought, and I started with this work because I was interested to learn about the mechanisms of the mind. I also read Automata Studies 1956 by Shannon and McCarthy, and later the other book by Shannon and Weaver, The Mathematical Theory of Communication 1963, in which I saw the mathematical and statistical models of how to create languages. Later I discovered Warren S. McCulloch, one of the founders of communication theory, and his book Embodiments of Mind (MIT Press, 1965). I was also interested in people like Willard Quine, and what he called ontological relativity. His sentence was, ‘to be is just a value of a variable’, or a change of a variable. And having these ideas, I wanted to see how I could introduce them into art. And to say, ‘Okay, what you see is actually a value. You can change the value any time, there’s nothing fixed, and when you fix the value, then it is you the spectator who does it.’ So, for example, at the beginning I was still using the projected images of classical cinema. So then I said: ‘Why should I fix the [beam of the] projector on this screen? Could I not have a mobile projector?’ These were the simple beginnings, about 1964.

Duncan White: Had you seen people moving projectors around before? Or is it something you just thought of?

PW: I hadn’t seen it. I was dreaming of these kinds of things, and then later at the Cinémathèque Française in 1964 I saw the New American Cinema—Kenneth Anger, Gregory Markopoulos, et al. And I was wildly enthusiastic about it because it was more about content, record, camera motion etc. [I realised then] I wasn’t the first to think about different ways of cinema. So, when I came to Vienna—end of 1964, beginning of 1965—then I met all these people. But I had already, in my own mind, different ideas of poetry, art and uses of media. For example, through the effect of what I would call mathematical communications theory and cybernetics, and [also] logical
mathematical ideas. So I was very well accustomed to the world of formulas but I wanted to take these formulas to cinema. And since it was only a set of variables to change, I said, 'film is a calculus of variables, and you have an enormous order'. And the order means: first you make a shot, then you cut it together, then you project it. And you have different machines and different elements, actors and machines, and also you have a certain sequence. Why not change the sequence? Why not project something which wasn't filmed? Is it enough to have the projection of the light, [and] not the celluloid? Could I change the elements of this calculus? Could I even omit some elements? Maybe I can reduce it to a binary code? So, I said, 'Okay, you come in the room like this one, you see shadows.' So, I ask people to stay [still] for a moment to fix the shadows, then I go to the screen and make a drawing of the shadows, and then [they leave] and you can see a shadow drawing which is 'cinema', because cinema is in fact just a binary code of light and non-light. So I started to make this kind of work between 1964 and 1966, but I could never show it. This was at the point in 1966 when I approached Peter Kubelka and his film museum to show it. And they said what I'm doing is not cinema. For me, it was a shock to realise that the people who do radical cinema [might not understand my interests]. I rate Kubelka's Arnulf Rainer very highly – I even wrote about it – and we had a lot of discussions. I had done a great deal of writing about these films and made analytical studies, counting frame by frame and developing mathematical models. I did the same with Ken. So Ken became a friend, he supported what I did, but Kubelka said what I'm doing is not cinema at all, and he refused to show it. So I was a little bit shocked that people I admired and I was following blocked me and stopped me and thwarted me.

**DW:** How did you respond?

**PW:** So, I had two other friends [Ernst] Schmidt and [Hans] Scheufl and we had a group of friends; and we did a first show together. It was in the middle of January 1966. The others showed collage and montage films and they called me in between acts as a kind of verité – but it was not taken seriously. It was just an act in between to make fun. But then something funny happened. It was the EPRMNTL [festival] in Knokke [December 1967 – January 68]. My friends, Ken and the others, had films to show, but I didn't actively have any films – [only] expanded cinema events and actions, etc. – so I wasn't invited yet, because at that time [expanded cinema] was still not accepted. But my friends came back with the sensational news that my ideas are correct. [They had seen] people jumping on pneumatic structures and there had been mobile projectors projecting on this pneumatic structure [i.e. Jeffrey Shaw's Movie Movie 1967]. So they learned about other experiments and they realised how you can project films [differently]. Because I [had] said I wanted to take film which existed, found footage – and, as such, project onto my naked body.
So this takes us from early shadow pieces to other pieces where I projected an ear onto myself using 8mm film and filmed my ear, then I was reading a poem and the sound came from my body. These were my ideas. I said, 'Okay, why must the soundtrack be on the film strip?' This is only orthodox cinema. But I was struck by this idea: you can not only move the projector, you can also take the soundtrack and move it somewhere else. So I said: 'Here we have the projector of light and then the soundtrack even of the camera filming—zrrrm —is on a magnetic tape.' So I record the sound of a camera ... So I split the visual appearance and the acoustic appearance, and it's how you can destroy the apparatus. People before—they destroyed the piano, or they destroyed the typewriter, and I said, 'Let's deconstruct the machine aspect of cinema—the apparatus.' The camera is a machine primarily to record vision, then you have—separated already—another machine recording the sound. Then you bring them together. Why not leave them separate? Even exchange them. Why not take magnetic tape and project it? Even if it is ruined because it has no sprocket holes, but let's try it. And take the film strip and let it run on the magnetic tape recorder even when it has no effect. But just to show you can mix it and you can change it.

Naturally, nobody liked these ideas because they still believed in the classic notion that you should have a film strip, you should project nice images, and you have a cut and you have an interesting cutting system. But I said no. I did not say at that time, 'Let's expand the apparatus': I didn't have the name. I was just doing these experiments so I had more or less this logical idea and I was speaking always with logical terms. I was saying for example, in logic you have 'AND/OR', and I realised that with film the cinematic apparatus is a real logical apparatus. We can make this and this; this or this. So for me it was a calculus of operations that could be changed.

**DW:** Were you trying to create a particular kind of response? 
Was the response more important than the work?

**PW:** So people came in and heard the sound of the camera [and] expected to see a camera, but there was no camera. It was only the sound. That was like a coded split reality. The sensory rate at which your head is combining the sensory impulse, the visual impulse with which you were combining, I said: 'This represents the brain.' So the cinema is here not to make the same as our head—to integrate all sensory impulses, no, no. Cinema should separate [them], because with an artificial machine, why do the same as nature does?

I would like to see the effects of this integration on that integration. So from a mobile projector, to projecting on my naked body, because then there is a different sense seeing; because then you are faced with—my major problem at that time—the difference between representation and reality. When you project a film of a body onto a body, then the representation of the body is nearly equal to the real body. So I said, 'Why the need for projection?'—
I could cut my skin and say, 'This is a film.' Then I said, 'Okay, let's cut the body seriously, with a razor blade, let's cut the hairs that are signs of the body—and I can call this a movie.'

But in Vienna at that time nobody liked it. But [after Knokke] they said similar—not as radical—scenes had been seen. There was a girl dancing in front of this film in which some elements of the girl had been projected too. So, there was a narrowing between reality and representation. For me it was the main idea when I projected grass on grass or glass on glass. What is the difference? And then I could say, we can enforce the gap and show that it is just a representation of reality, or you can make the gap as unforeseeable as possible, and say, reality is representation. Or I treat representation as reality. So these were the two stages, and the work developed in order to counter the growing gap between representation and reality. That means the gap between the map and the country, like in Lewis Carroll (Sylvie and Bruno 1889). I wanted to make it as close as possible, to narrow the gap a little. Then I did a lot of so-called actions—body actions which for me were a form of cinema. For example, I wanted to make a 'horror film'. The horror film would be just to make a fire. To destroy the cinema hall. This was called Exit because when you [appear] to set fire to the cinema [with fireworks] it is a horror film, then people have to leave. The other scene was the Tapp und Tastkino 1968, which in fact was always a piece by VALIE EXPORT from the beginning, but slowly turned into a feminist piece. Slowly my name was dropped. In the beginning it was not so much a feminist manifesto—at that time there was a kind of 'bosom-stars' cinema with Gina Lollobrigida and other well-endowed movie stars. So, I said, 'Why do we have an industry fetishising the representation of breasts? Why not democratise it so everybody has the chance to have the real breasts of a star?'

It was normally only the producer or the lover or the chauffeur or whatever. And why is it permissible to see a naked breast and why not be allowed to touch a naked breast—and you see again, to touch it is tactile cinema. And cinema is about seeing, so this is a representation. But when you touch it, it is reality, so it came out of these ideas about representations of reality. When you see something it is representation, when you touch it it's tactile reality, no? So I said, 'Okay, instead of seeing a film, you don't see the breast. Therefore we make the box, you only feel her. You have a dark, non-visual, experience but your hand is feeling', and this sensory deprivation was part of cinema, so in that sense, it's an expanded movie.
Conceptual Synchronicity: Intermedial Encounters Between Film, Video and Computer

For a contemporary discussion of the convergences that result from transgressions and the crossings of media borders, it will be useful to remind ourselves of the conceptual history of intermedia and intermediality as it emerged alongside the increase of technical media and avant-garde aesthetics in the twentieth century. Marshall McLuhan set the tone when he concluded that the encounter of older and newer media would be violent. Each emerging medium would rip up the structure, the ‘gestalt’, form and scale of its preceding media. In a similar spirit of exploration and experimentation, characteristic of postwar arts using novel technologies that break up genres, Dick Higgins determined intermedia as a *conceptual fusion* whereby elements of different media are brought together and build a new form that is not the sum of its parts but the convergence into a third form: \(1+1=3\), an equation that reminds us of formalist film theory and practice in Eisenstein’s concept of montage. It is in this contradictory tension between violent rupture and conceptual fusion that I wish to situate the importance and ongoing significance of expanded cinema.

The artists whom I consider most important here – Paul Sharits and Stan Vanderbeek – engaged in the examination of the specificities of film in relation to the surrounding media of television and video and early computer graphics. They developed artworks that sit in-between existing forms such as photography, film, video and painting in order to explore the common elements of diachronic media. In doing so, they ‘expanded’ film and video violently into the sphere of another medium, thereby rendering the medium-specific properties of their given media in the most extreme way.

In order to acknowledge these works in the wider context of conceptual experiments, the violent in-between forms need to be situated, firstly in relation to expanded forms in film that exploit the effects, both
visual and audio, available with and through the cinema and beyond. In this respect, Tony Conrad provides cinematic connections between sound and image that can be deconstructed. Secondly, the context of performative forms in film, video and computer experiments need to be mapped out, to demonstrate how intermedia arts exploit the performative capacity of different media forms. For example, Steina Vasulka exploits the electronic modulation of video signals and manoeuvres to play sound and vision live from the same source of a concert violin, whereas Jud Yalkut performs live filmic, kinetic and video projections that fuse the visual capacities of different media sources by expanding or abandoning their apparatuses. Finally, and in particular with regard to the computer as a calculating machine, it is important to note the endeavours of John Whitney and Woody Vasulka, who both determine a systematic abstraction by forcing the medium (Whitney in film and computer; Vasulka: invideo and computer) to reveal its matrix structure in a way that lays the ground for a more comprehensive structural comparison between different media.

**Film and Video**

This violent encounter of media properties is particularly heard and seen in film installations by Paul Sharits, in which he systematically analyses the materials of film and the cinematic apparatus by questioning perception and projection. He expands the concept of projecting film with multiple screen installations and aims to immerse the viewer in temporally and spatially disturbing perceptual film environments. This direction is grounded in Sharits's research interest in the persistence of vision. His curiosity about the projected image leads him to create distortions of the standard systems of film projection.

The approach in Sharits's films is twofold. He uses projection with variable frame rates in order to interfere with the viewing impression of apparent motion, and he inserts frame cuts to interrupt the image and disturb temporal development using flicker effects. In the silent film *Piece Mandala/End War* 1966, monochrome colour frames are interlaced with black-and-white images of a couple making love. The monochrome frames serve as an interval that separates and connects the still frames, which show different shots of the same couple from front, rear and either side, these perspectives alternating throughout the film. The flickering rhythm gives the impression of circular mobility as the figures rotate on the spot, denying the usual sense of development encountered in 'moving images'.

Sharits, like Hollis Frampton, was attempting to radicalise filmic development in time. Frampton examined filmic structures in order to explore the paradoxical idea of non-narrative movement in time by employing non-developmental (and thus non-filmic) structures. Frampton, for instance, emphasised that his interest was not in making films 'about' light, colour and so on, but that he conceived of film as information 'on' light. The investigation of abstract mathematical orders in his film *Zorns Lemma* 1970 is not, in the end, about mathematics, but is in fact part of mathematics. By driving the
inherent tension that exists in-between our understanding of film and non-film to the limits, the non-negotiable development in time is rendered crisp. Clearly, the crossing of antagonist concepts is needed to bring the specificities within one medium to evidence.

In the 1970s, Sharits, Frampton and Tony Conrad were faculty members at the Centre for Media Study at the State University of New York in Buffalo, where they explored the materiality of film in conjunction with pioneering video artists Steina and Woody Vasulka and Peter Weibel. Sharits engaged in disturbances via the projection of flicker, loop and frame cuts and also the removal of the shutter so that he could gain paradoxical images that seem to move multi-directionally. With the goal of making the border between film and non-film perceptible by violently drawing the viewer’s attention to recognising at the same time the frames and their apparent motion, Sharits focuses on the visibility of the transition from one frame to the next. This is particularly evident in the films Ray Gun Virus 1966 and N:O:T:H:IN:G 1968, in which each image is made to flicker as it makes the transition. Sharits interferes with the shutter and the frame rate to cause variations to the flicker effects and vibrating colour impulses that on a philosophical level correspond to the meaning of ‘Nothing’ in Zen Buddhism, where existence and nothingness are not separate entities and dualism is resolved. In his comment on N:O:T:H:IN:G, Sharits stresses his concern with space and motion, to ‘create virtual shape’: ‘in negative time, growth is inverse decay’. The film has at its centre the picture of a light bulb – not purely as a reminder of the projection source but of light meaning emptiness (or, for McLuhan, ‘pure energy’). This concept of non-development manifests, when the film almost physically reverses the direction of projection through strong reflection effects that come from alternating frames at different speeds.

This is evident in something like Epileptic Seizure Comparison 1976, in which the two-screen loop projection is combined with the reflective walls of his specially designed film installation. Sharits explains how he wants to invert projection within the immersive space: ‘Side walls must be smooth and be painted with reflective aluminium paint to exaggerate the frenetic pulsing of the screen images.’

Indeed, Sharits’s multiple-screen installations go beyond analysis of the material properties of film. His research on the cinematic apparatus and the film strip brings his work close to the open structures of video and its internal instability of signal processing.

As well as using reflection, Sharits makes the appearance of the film medium as fluid as electronic processing, when he projects up to three film loops next to each other with variable frame rates in the installations of Synchronoussoundtracks 1973. The speeds of the loops differ and alternate between synchronous and asynchronous rhythms. This projection performance of film merges into a seamless interplay of the screen images, which seem to move in vertical and horizontal directions and out of frame. By blurring the visual impression of vertical and horizontal image movement, the projected images of colour are seen as travelling in horizontal motion.
through the screens installed next to each other. This drifting of film images across horizontally projected film frames gives the impression of being out-of-sync, which is unusual in film. Indeed, this concept of framing unbound images belongs to the open structure of electronic processes in video. There, horizontal drifting occurs when the electronic scan of the video signal is not adjusted so that the scan lines run adrift and the image moves out-of-sync horizontally.

Another element of convergence between film and video can be found in Sharits’s treatment of sound in *Synchronoussoundtracks*. As Sharits describes the construction of visual analogy with tones: ‘Three speakers arranged five feet apart and five feet from the floor. Each speaker is in logical relation to one of the three screens. The sound is of sprockets passing over a projector sound head. The frequency oscillates in direct (synchronous) relation to the sprocket hole images on the screen.’ The resulting correspondences between sound and vision give the impression that image and sound are coming from the same source. This conceptual synchronicity resembles the audio-visual synchronicity that can be technically realised in video. It means that the video information can be displayed audibly and the audio signals can control the video, and both outputs, visual and audio, can be heard and seen simultaneously.

Notably, Sharits, in his radicalisation of time-based media, conceptually employs some of the properties of the electronic medium, and draws the viewer’s attention to the fluidity of an image that looks like frame-unbound video. Sharits expressed his views on television when he noticed in commercials a rapid cutting that was similar to his use of flicker. His research into the material possibilities ‘for developing both sound and image from the same structural principle’ culminated in a vision of media systems that seem to blur film and video in particular. ‘One may find it necessary to construct systems involving either no projector at all or more than one projector and more than one flat screen, and more than one volumetric space between them. A focused film frame is not a “limit”’. And Sharits’s overall use of flickers, loops, rephotographed footage, frame cuts, and multi-screen projections with removed shutters served the goal of creating an essentially open cinematic apparatus.

The intermedia research context at the Center for Media Study at Buffalo also fuelled Tony Conrad’s consideration of convergences between filmic and electronic capacities. In his film performances, the ambiguity of sound-image relations stands out. In *Bowed Film*, a series of performances that Conrad has staged since the early 1970s and continues to perform today, the artist uses the ‘instrument’ of a violin bow to ‘play’ a film strip that is spliced together as a loop and placed around his neck. The ‘film’ is to be heard and not seen (although he has performed this piece using pickups, distortion pedals and amplifiers). Here, the enforced performance of the material source exceeds the standard representation (the spliced film loop cannot be projected) and transfers it to another medium. We hear the information we cannot see. But in video it is possible to present the source information visually and audibly at
the same time because of the structural transformativity of audio and video signals in the electronic medium.

Similarly, Steina Vasulka highlights the intermedial characteristics of the audiovisual medium of video in her Video Violin performances (1970–8), in which she plays live video with the violin. The performative qualities of the medium are forced to become apparent, and the violin becomes an instrument for the simultaneous generation of image and sound, as the sound of the violin playing—recorded using a microphone—is connected to video devices (scan processors and multikeyers). In real-time processes, the visual representation of the artist’s performance, recorded simultaneously with two video cameras, is modulated by the audio signal (generated from the violin) and determines the electronic flow. The movements of the bow on the violin’s strings in real time generate immediate deviations on the image position of this movement. Thus, Vasulka plays violin (sound) and video (images) at the same time as information from the same source is simultaneously heard and seen (fig.54).

There are further intermedial shifts from film to video in Jud Yalkut’s expanded cinema environments, which mark the fusion of projection and performance in spatial environments. Yalkut—who has collaborated with Nam June Paik on his videotape studies, and also documented Paik’s magnetic performances with film—experiments with projection systems and, like Vanderbeek, works predominantly with multiple projection and portable screens and collage. For the spatial installation USCO, Yin/Yang Sine/Pulse 1967 he uses two 16mm films as well as projectors, loops and semitransparent weather balloons that hang from the ceiling and reflect images projected directly onto them. The reflection is overlaid by another reflection that comes from the silver-metallic walls of the space, which mirror the projected scene. The image and light sources are multiplied, dissolving any sense of unidirectional projection. A disturbing experience of perception arises, which destroys the usual understanding of film form—the effect comparable to that of Sharits’s installations—and expands cinematic space into an almost immersive perceptual environment. These techniques continue in the video works, where effects of overlaying and superimposition are filmed and re-edited to create in-between forms of ‘videofilms’. In exemplary ways, the concept of Yalkut’s multidirectional and multi-layered intermedia art is executed in his 1966 film Turn, Turn, Turn (fig.55), which stands in-between a camera recording of
the dynamics of free-floating images of kinetic and cinematic spaces in all directions on the one hand, and an expanded media installation that turns and meanders freely in space and behaves like an object in excess of standard limitations of projection and frame on the other. For the viewer, orientation and media levels defuse as internal and external views are merged into an almost three-dimensional media-film experience.

**Film, Video, TV and the Computer**

John Whitney’s film experiments with graphic notation and early computer technology informed many of the cross-media experiments of the time. In a series of works, *Matrix I–III 1970–2*, Whitney created abstract films using computer graphics programming. Going a stage further, Vanderbeek’s remarkable film-video-computer experiments combine video image processors with computer graphics programming. This happened at a time when – with the exception of the chroma-key experiments of Ed Emshwiller and the computer films of Larry Cuba – there was little interest in converging (rather than mixing) different technologies. Yet, in the 1960s, Vanderbeek, with the support of Bell Telephone Laboratories, had tried to develop multimedia performances and computer animation.

In Vanderbeek’s later video experiments, pulsating rhythm and concentric arrangements of extended feedback images create a form that comes across as the ‘content’ of a dynamic and process-based video work. But Vanderbeek not only uses forms specific to video, such as feedback; he also, and more importantly, makes intermedial transitions from film to image processing and early computer graphics, as with works such as *Symmetrics 1972* (fig.56), which was made using primitive computer drawing techniques. After having completed a number of short films during the late 1950s that were inspired by happenings and included animated collage, Vanderbeek began to work with a compilation of different media forms in his work, *Telephone Mural/Panels for Walls of the World 1970*. Here Vanderbeek explored the graphic potentials of videotape-mixing “by way of electronic mattes, superimpositions, and other electronic means of integrating as many as eight separates images onto one screen”. The kaleidoscope of this video collage shows the artist’s vision of a simultaneous worldwide linkage that could be realised through satellite television. (Nam June Paik also pursued the idea of satellite transmission and was finally able to realise a full-scale live performance telecast to Korea, the Netherlands, Germany, the US and France in 1984: *Good Morning Mr Orwell.*)

As Mark Bartlett notes in his chapter for this volume, Vanderbeek’s experiments with TV were crucial to the development of his conception of expanded cinema. Gene Youngblood has described how the WGBH television/video system
had monitors and switching circuits, 'by which different sources of video information are selected, mixed and routed in various ways'. And he has suggested that 'within its basic ingredient – alternating current – exists the potential for an art of image-synthesizing that could exceed the boldest dreams of the most inspired visionary'. In the video Vanishing Point Left, produced at WGBH in 1977, Vanderbeek focuses the visual potential of the electronic medium, and experiments with its capacity for abstraction and image flow. He works with movement, layering and flicker to transform forms that refer back to the projection surface of video and clearly articulate video as the 'constant flow of images'.

Other experiments with television are an important example of this intermedia approach to expanded cinema. British video pioneer David Hall developed a series of 'TV Interruptions', a way of interrupting the televisual programme flow by talking back to the medium with its own means. In a similar way, his videotape This is a Television Receiver 1976 enforced video's encounter with television through rewinding and re-recording the same videotape three times in a row until the material on screen becomes a hopelessly jumbled series of ghost-images – until both the meaning and the material of the video are destroyed while it is still being screened. The loss of sound and vision from generation to generation of videotape exhausted the capacities of the analogue medium of the time. Hall's installationtape merges video and television on the same technical basis, both visually and aurally, and uses video as an intervention into an intermedial enrichment of television.

**Expanded Cinema into Expanded Media**

With the focus on pioneering examples of expanding film into media, and on Sharits and Vanderbeek in particular, I wanted to present two striking examples of 'expanded media'. In a historical view, I see close interrelationships with neighbouring media technologies: in particular, performance and video and computer graphics. I find it important to highlight such interrelationships where artists have explored and extended the intermedial potential of the media they use in ways that blend ideas of film with video and the computer. Striking endeavours, traceable in the expanded cinema of the 1960s and 1970s, have contributed to expanded media. The film-makers and video artists who cross borders provide an intermedial model for the convergence of elements of different media in an artwork. This happened before the digital computer made it possible to integrate such machine operations and dissolve media borders. When in 1966 John Whitney was given access to one of the first IBM computers, it was an analogue machine ready for visual graphics to explore their aesthetic potential. Whitney, in collaboration with Larry Cuba, wanted to employ analogue computers for creating abstract films and could only later use digital computers for the purpose of creating 'digital harmony' in graphic abstraction. However, he was not interested in exploring other media, and in particular – as Cuba confirms – not interested in the video technologies that developed in parallel after the mid-1960s. A comprehensive interplay of media is crucial to the notion of
expanded cinema where the exhaustion, radicalisation or extension of the capacities of film, for example, are realised in the encounter with surrounding media technologies. This manifests itself in the interrelationships between media that either integrate and blend elements, or explore the overlapping capabilities of video and computer animation. These mergers have violently pushed film and cinema to their limits and transformed their elements.

There will be many more examples than the ones discussed in this article that are suitable to demonstrate the interplay between film, video, and computer in the 1960s and 1970s. This was a vital historical period: film was fully developed, video was emerging and computer technologies provided the horizon. The recognition of cross-media concepts and practices, however, requires an intermedial perspective in the research that looks at borrowing, blending and conceptual synchronicity in both directions. It is not sufficient to regard how video relates to or differs from film and computer graphics, or vice versa. Nonetheless, I find it important to look (on a structural level) into film’s extension into video, and video’s relation to analogue and digital computers. Artists at the time were systematically looking for similarities and differences between the existing and the new media technologies in order to pave the way for more complex media mergers that are characteristic of our present time. And it is in this perspective that experiments with film in relation to video and the crossings between film, video, and computer technologies have contributed to expanding the film medium into plural media.

The Domestic Spaces of Video

We are accustomed to expanded cinema announcing its intention to activate the space of reception and raise awareness of the technical and industrial realities that create movies. This endeavour is linked to the belief that the conventions of ‘illusionist’ narrative cinema and the hegemony of the televisual entertainment industry produce a hapless, passive viewer unknowingly ingesting the ideological messages of late capitalism. However, I shall argue that televisual media have produced an active space of reception in both the hands of artist-practitioners and in relation to the complex dynamics of the domestic environment, with a particular emphasis on the role of women in both.

Televisual Origins

All film is fundamentally spatial, whether weaving its out-of-body magic in a high-definition mainstream movie or ‘emancipating’ a mobile viewer in a gallery constellation of projections. In its initial, analogue phase, video – so often cast as the poor relation of film – was as grounded in actual and simulated space as any moving image rendered on celluloid. In the 1960s and 1970s, artists first accessed the materials of an already spatialised television industry. The TV receiver acted as an interface between dual enclosures, the before and after spaces of the image. The television studio marked the point of origin of the analogue signal. It then traversed infinite transmission space and reached its destination in multiple ‘reception rooms’. Both TV studio and home were inhabited and productive environments, economically interdependent, possessing complementary technologies and distinct social codes. Practitioners like William Wegman used early video technologies to similarly connect the twin spaces of artist’s studio and gallery. Meanwhile, those videomakers in the UK and Germany who transmitted their work on national television exploited the simultaneous connectivity of broadcasting. If we add the four dimensions of the TV 'box' itself to the spatiality of these conjoined interiors, we can claim that early video was already functioning within an expanded and populated imaging field.

It is harder to propose video technology as a medium of art. Even when created on a home movie format, film maintains its immersive quality and monumental scale, and its association with the public space of the cinema. In contrast, the status of early video was marked by its domestic origins. ‘When people saw those screens in the gallery’, Steve Hawley said, ‘they just thought about the domestic, they thought about having their tea.’

Liz Kotz
bemoaned the tarnishing of the monitor by its homely roots as well as ‘the
degraded industrial uses of video technology’, and went on to ask, ‘[W]ho
among us would not prefer the luminous image freed from its ungainly
technical support?’ Vito Acconci seemed less concerned with the inelegance
of the monitor than with its physical mass. ‘Video was too much a point in
the space’, he complained. ‘[V]ideo was too much sculpture.’ Whether we
liked them or not, the much-maligned receivers of early video were always
and already objects located in spaces – architectural, cultural, industrial
and domestic.

The mobility of the viewer has been celebrated as one of the
achievements of both expanded cinema and installation art. However,
unrestricted movement was already a feature of all forms of video
spectatorship, with television often acting as a background to other activities
in the home. Expanded cinema also emphasises the materiality of the
apparatus that creates the illusion of the cinematic image in the enveloping
darkness. Radical film practitioners, still bound by the need for blackout, have
contrived to bring the previously concealed projector to prominence within
the filmic event. Unlike film, televisions have always operated in both daylight
and tungsten-lit, night-time environments and have never made a secret of
their technological base.

Where the liveness or ‘present tense’ of the expanded cinema event
has been much discussed, broadcast television began as an entirely live
medium. It exploited what John Ellis called the ‘co-presence’ of the televsional
image, manifest at the level of content in the synthetic companionship of TV
presenters. Assuming a ‘community of address’, newsreaders and talk-show
hosts speak to each and every one of us, across the spectatorial divide. Over
time, their household names become accepted as adopted members of the
family. Peggy Gale has argued that television’s talking heads, being roughly
life-size, have the added effect of anthropomorphising the ‘box’. This sense
of haunting is enhanced by the television’s ability to emit light and embody
the image rather than project it onto a distant surface as in the case of film.
In 1986, Nam June Paik created entire families of anthropomorphic Robots
made up of a bricolage of vintage television sets tuned to different TV
channels. The fictional ‘mother and father’ satirised both breakfast television
presenters and the average nuclear family that had apparently internalised
televisual culture to such an extent that their bodies had metamorphosed
into television receivers.

Broadcasters require that viewers identify with the on-screen
environment. This is achieved partly by the ‘co-presence’ of the image, and
also by set designers’ ability to reproduce appealing domestic interiors.
Nowadays it is the home that mimics the idealised spaces manufactured by
television. We all aspire to become what Pierre Bourdieu termed ‘citizens in
the republic of taste’, so we frantically redecorate as instructed by make-over
shows. Aided by stylistic alignment, television doesn’t so much infiltrate
domestic space as become fused with it. According to David Foster Wallace,
teenagers have no memory of a world without television, mobiles, texting,
Fig. 57 David Hall. *This is a Television Receiver 1976*
Commissioned by BBC TV as the unannounced opening piece for their *Arena* video art programme, March 1976. Produced by Mark Kidel, conceived by Anna Ridley and presented by David Hall

Twitter and the internet. Broadcasting and its precocious offspring challenge the very notion of private space and, by extension, the concept of a discrete, bounded arena for the practice of expanded cinema. It is now possible to conceive of any-space-whatever as the site of an expanded moving-image event.

**Counter-cultural Practices**

The medium is not, as Marshall McLuhan would have us believe, the entire message. As in any filmic practice, television images carry legible communications, and such signals can be toxic. In spite of a lifetime’s creative exploitation of the medium, Nam June Paik claimed that he used television technology ‘to hate it more properly’. Norman Mailer denounced television as ‘a multimillion-celled nausea machine’, and according to Richard Serra, TV personalities practice their dark arts of persuasion for the benefit of their paymasters. In *Television Delivers People* 1973, Serra denounced TV entertainment as ‘soft propaganda’ designed to deliver viewers to the ‘corporate oligarchy’. A commercial transaction takes place, in which the viewer is sold to the advertiser by the networks. Not only that, said Serra, ‘but the viewer pays for the privilege of having himself sold’. Martin Roberts has argued that today even public service broadcasting is ‘driven by the economic interests of capital’. With so much to gain, broadcasters transmit their coded messages by employing the ‘community of address’ and maintain the necessary co-presence with the viewer by adhering to a strict regime of realism. The representational coherence of the image is combined with cinematic narrative conventions and documentary techniques that together
constitute the grammar of television. Even when ‘experimental’ visual styles have been adopted, the underlying narratives upon which ideology and commerce both depend have remained largely unaltered since the birth of broadcasting.

In order to make any counter-cultural inroads, video artists would have to tackle the content of television and ‘worry the borders of televisual language’. So said David Hall in 1971 when he staged a series of ‘TV interruptions’ for Scottish Television. Hall believed it possible to subvert the commercialisation of televisual space – from the inside. Broadcast unannounced, his spare, formal videos confounded the narrative expectations of a burgeoning TV audience and broke the logic and flow of the evening schedule. Broadcast in 1976, This is a Television Receiver (fig.57) was an object lesson in self-reflexivity. The well-known newsreader Richard Baker delivered a statement describing the mechanisms that simulated the image of his face and the sound of his voice while Baker himself remained entirely absent. Hall contrived to drown Baker’s voice in sonic distortion and vaporise his face by copying the analogue recording down several generations. The death of the image by abstraction severed the umbilical cord between the staged domestic spaces of television and concrete interiors occupied by viewers. The resulting semantic implosion might have triggered mass switch-over to BBC1 or prompted phone calls to the broadcaster reporting a fault, but Hall nonetheless succeeded in expanding our understanding of televisual space by contracting it; that is, by cutting off the unidirectional flow of conventional broadcast material, and momentarily restoring the integrity of domestic space.

In the 1970s, artists such as Serra and Adrian Piper forestalled any kneejerk rejection of pictorial estrangement by adopting the direct address of television and embracing its structural capability for verisimilitude. Rather than disrupt narrative integrity, they capitalised on the incongruity of a domestic object of entertainment placed in an art gallery. It is hard to imagine how unusual that was at the time, and indeed, how extraordinary it was to witness television technology speaking of subjectivities other than those sanctioned by the broadcasting corporations. In Cornered 1988, Piper spoke directly to camera and challenged gallery-goers’ prejudices based on racial difference. She offered her identity as either black or white, whichever made us feel more comfortable. Of course, the result was to make audiences feel distinctly uncomfortable, but within a gallery space, the art flâneur could always move on.

Television viewers can also change channels if they dislike what they see, and in 1984, Michel de Certeau argued that far from being passive consumers of televisual culture, viewers behave more like the ‘liberated’ audiences of expanded cinema, in that they regularly poach cultural products and ‘adapt [them] to their own interests and their own rules’. However, when the UK artist Kevin Atherton appeared on Channel 4 in the same year, he worked to loosen what he saw as television’s hold on the public imagination. Appearing between more benign works, a belligerent Atherton leaned in and ordered us to answer his ‘bloody questions’ about our viewing habits,
concluding that we were incapable of discernment when it came to the small screen. By the mid-1980s, it was already commonplace for presenters to upbraid the contestants in game shows. However, Atherton broke the cosy conspiracy that unites presenter and viewer as a normative ‘us’, against contestants characterised as aberrant, reprehensible or absurd. This time, it was the audience at home that was made to feel foolish. TV personalities customarily act as border guards between any nastiness abroad and the home defined as a place of refuge, solace and recurring certainties. Atherton became an anti-presenter, an agent of explicit aggression embodying the inherent ‘nastiness’, the rapaciousness of televisual programmers motivated by the needs of a market economy.

Hall and Atherton infiltrated the institution of television and attempted to play it at its own game, appropriating the extended space of a domestic, televisual installation. Those artists – like Piper and Serra – who transplanted television technology into the gallery also relocated the spatial and familial associations of the private home. However, these resonances become strained in a gallery setting and are modulated by the behavioural codes and power relations associated with the public appreciation of art.

One might celebrate the white cube’s liberation from personal histories enshrined in the paraphernalia of the home. However the status of the gallery as a space of emancipation for the viewer (cinematically expanded or otherwise) is always open to question. Vito Acconci calls the gallery ‘a place where a community can be called to order, called to a particular purpose’. Where other artists might disavow the ability of video or film to manipulate audiences, Acconci revels in ‘calling to order’ a gallery-goer accustomed to what Laura Mulvey dubbed the ‘cloak of invisibility’. This enchanted shroud provides cinema-goers with the voyeuristic privilege of observing on-screen subjects without being implicated in the act of looking. In Theme Song 1973 Acconci ‘castrated the gaze’, as Mulvey would say, by leering out of a monitor placed simply on the floor. From his cube within a cube, Acconci pressed up against the screen and attempted to seduce gallery-goers, and, as he said, ‘wrap myself around the viewer’ – particularly if she was a woman. The work transformed what began as a domestic object of private leisure into an instrument of exposure in a public place. Like television, Theme Song merged two separate locations, this time the space of Acconci’s home and the cultural arena of the gallery. In this hybridised enclosure, Acconci used both his status as an artist and the evocative power of video realism to slam home his lesson in spectatorial self-awareness.

Both Atherton and Acconci replicated the unidirectional mode of transmission and reception inherited from television. However, in the 1970s, another video trick – live relay – enabled artists such as Peter Campus and Les Levine to create a two-way flow of information within the gallery itself. Through the unique ‘liveness’ of video technology, audiences could now engage in mutual surveillance or instantaneous communication with the artist, located elsewhere in the building. There was no post- to the production and the work existed only in the instant of electronic connectivity. The studio
and gallery were one and the same place, and the distinction between the making and receiving of information was lost in the tangle of wires, monitors and closed-circuit cameras. The convergence of the production and consumption of video art in the 1970s and 1980s was soon followed by the introduction of flat-screen monitors, hastening the demise of the despised television 'box' along with the anthropomorphic aura that clung to it.

We can now fondly remember the days when Gary Hill stripped the monitor to its technological bones and César shot at it with a pistol, and Nam June Paik or David Hall multiplied it to create monumental video sculptures. In the late 1980s, when video projection finally displaced even the flattest of monitors, the image was proclaimed liberated. Tony Oursler rejoiced: 'It just seems like cutting the wings of the medium to keep it in a box.' And yet it is Oursler who has been most reluctant to give up the spatial dimensions of a monitor and the impact of its immanent 'objectness', as well as its domestic parallels. Like innumerable installation artists, Oursler migrated the personal environment of home to the gallery and in his case, populated it with stuffed effigies of tortured souls onto which he projected a single eye or a face expressing emotional turmoil. This revived the old tensions between the provisional nature of the video image and the material base of the monitor: what John Welchman calls 'the battlefield between depth and surface'.

Women and Domestic Space
If Judy’s motivation is fear, then we should consider what domestic space might mean in terms of gender. The home is traditionally associated with femininity, itself aligned with interiority of both body and psyche. Julia Kristeva has argued that concepts of space and femininity are inextricably bound, while Linda McDowell counts the home among 'a range of places in which our sense of ourselves as a man or a woman is constituted'. Power relations between the sexes are seen to be reproduced, if not generated, in the home. These in turn determine the ordering of space itself. Writing in 1980, Claudine Herrmann attributes to men a colonising instinct. 'The disposition of space is above all an image of power,' she observes, 'the maximum power being attained when one can dispose of the space of others.'

Classic feminism would say that this spatial legislation was first exercised over women who were confined to hearth and home while men pursued careers in the public spaces of politics and industry. In the West, a life of domesticity was the dubious privilege of middle-class women, while their poorer sisters laboured outside the home – in the fields before the Industrial Revolution and in service or in factories after it. However, up until the 1960s, all women were seen as natural homemakers, whether or not they also went out to low-paid work during the day. The impulse for feminist artists working in analogue video was to create images of escape from the prison of domestic drudgery.
A contemporary image of emancipation might be extracted from Eija-Liisa Ahtila’s *The House* 2002, which features a woman literally taking flight from the bounded space of her woodland cabin.

Within 1960s feminism and beyond, another perspective understood home as a creative space for women as well as a buffer: what Herrmann calls a ‘no man’s land’ establishing a safe distance from men’s aggression, the threat of which was so convincingly performed by both Atherton and Acconci. But home can also fail to provide sanctuary. In Afghanistan, laws to legitimise rape within marriage were recently proposed, and the trial of the Austrian Josef Fritzl, who held his own daughter in sexual slavery, provided a sharp reminder of what any women’s refuge would confirm, that women are also abused in their homes. A domestic space is, therefore, an ambiguous terrain for women.

Historically, societal authority decreed that women remain in the home, where their sexuality could be more effectively regulated. In 1968, VALIE EXPORT strapped a cardboard contraption, something between a toy cinema and a TV set, to her chest and invited men to insert their hands and fondle her breasts for a stopwatch-regulated duration. In *Touch Cinema*, EXPORT evoked both the cinematic and domestic consumption of female sexuality while satirising the traditional association of interiority with women’s bodies. Katharine Meynell parodied another patriarchal myth: the voraciousness of female desire, the fear of which is at the root of all taboos surrounding women’s bodies and their functions. In *Vampires Eat 1992* (fig. 58), Meynell performed noisy, lascivious licking from a small LCD monitor lodged in the seat of a nondescript dining room chair, a provocation that echoes Welshman’s view that video acts as a ‘media membrane’ that ‘traps and filters an encounter with the body’.13 Meynell is caught in the act of erotic transgression in a domestic setting that traditionally demanded of women sexual restraint, while nowadays continuous availability and porn-star enthusiasm is the more likely expectation. Meynell also anticipated the later conflation of sexual display and domestic space that is now commonplace on the internet.

Women’s primary activities in the home are not sexual but domestic, namely housework and childcare. Both activities featured in early expanded cinematic works. With poetic irony, Annabel Nicolson took a broom and swept the sea while in *Aperture Sweep* 1973 Gill Eatherley used the same implement to banish imaginary dust from a wall with a film of the same activity projected alongside. The double-edged ‘happy trap’ of motherhood was the subject of my video installation in 1986. *First House* (fig. 59) consisted
of a child’s playhouse with monitors for windows and no doors. The video screens acted as both a glass barrier and an entrance to the world of a child’s game, which involved tapping on the windowpane with a metal spoon. The image bounced off its own skin, oscillating between the conceptual joke of glass hosting an image of glass, and a portrait of the symbiotic relationship between mother and child. Tara Babel saw in it ‘the centrifugal force of a domestic environment’ that evidenced the conflicted nature of the mother-son dyad.¹⁶

First House was also about privacy, creating an enclosed, interior space and restricting vision. If Herrmann’s notion of domestic space is a ‘no man’s land’ of feminine occupation, then it is also a shelter from the male gaze and its attendant anxieties. In spite of the efforts of early feminism, woman-as-spectacle, as positively or negatively charged erotic object, has become increasingly embedded in popular culture and John Berger’s 1972 analysis of the female psyche hardly needs revision in the age of perpetual surveillance:

From earliest childhood, she had been taught and persuaded to survey herself continually. And so she came to consider the surveyor and the surveyed within her as the two constituent elements of her identity as a woman.¹⁷
The proliferation of video technologies and the internet today provide the structure for the continual exposure of femininity – in costume – while simultaneously stoking the internalised anxieties of individual women about the adequacy of their performance.

**Online Dissolution of the Domestic**

In the 1970s and 1980s, artists such as Joan Jonas in the USA and Tina Keane in the UK illustrated and subverted the phenomenon of self-policing femininity by performing live with closed-circuit video systems in which the object of the monitor held in tension the body of the artist and her televisual representation on-screen. Today, the radical discrepancy between the live woman and her mediated image has been lost in the continuous performance of femininity through 24-hour webcam accessibility. Women have increasingly embraced the aspirations of a celebrity culture and willingly offered themselves up for media scrutiny. In 1996, Jennifer Ringley, a pioneer of ‘lifecasting’, set up webcams in her house and, without recourse to Meynell’s irony, allowed visitors to her JenniCam site to observe her life up to and including her auto-erotic displays (fig.60). It is no surprise to discover that a life of self-exposure can have financial benefits and contemporary women have perfected the art of guileless self-promotion. Writing of the late Big Brother inmate, Gordon Burn observed, ‘Jade Goody seemed to have an innate ability to appear to be unwatched when being spied on by millions.’ Goody’s life only found meaning when exposed to the gaze of the camera and a public beyond, ready to revile or adore her according to her circumstances. To what extent she can be said to have existed when the cameras were turned off is a question that is difficult to settle. Goody followed feminist pioneers in turning inside out both domestic space and the substance of her private life, to be scrutinised on a public stage. What JenniCam and Goody left behind was the political motivation of their forebears who linked the personal with the political realities affecting the lives of all women. Today’s mediatised confessionals recast oppression as a matter of individual inadequacy and at the same time compromise the domestic sphere as a place of refuge for women, a place where they might be visible only to those whom they choose.

Contemporary practitioners of an expanded televisual arena, both male and female, have completed the transposition of the television studio and domestic space, a process begun by broadcasting itself. Where once broadcasters staged a familial setting in order to reach into the private havens of millions of anonymous homes, those same homes are now wired up like amateur television studios, so that the minor incidents of quotidian life can be dramatised for the ongoing soap opera in which individuals now cast themselves as principal actors. The ‘at home’ environment has become a performative space.
and locus of dubious authenticity, whether accessed live on the internet or re-created in the gallery space via a set of domestic objects up to and including moving-image devices. Sean Cubitt has cast doubt on the ability of the home video to reveal the secrets of the human soul. ‘The video portrait admits defeat’, he writes; ‘the human escapes’. If there is a core humanity that can indeed take flight from the tyranny of our heightened camera-consciousness, then where would it find a place to rest now that the private and public realms are interchangeable? We would have to find a blank space on Google Maps, a continent of the imagination that is off the chart, out of reach of Berger’s internalised surveyor. There we might discover an expanded creative space in which, for the time being, cameras would play no part.

1 Steven Hawley in conversation with the author, 2003.
4 Ellis 2000.
5 Gale and Steele 1996.
7 Ibid.
8 de Certeau 1984.
9 Kevin Atherton’s interventions were part of the series On Video for Channel 4, produced by Triple Vision and directed by Penny Dedman and Terry Flaxton.
10 Quoted in Archer 1994, p.35.
15 Welshman 2008.
17 Berger 1972, p.166.
18 Gordon Burn, ‘Have I Broken your Heart?’, Guardian, 7 March 2009.
19 Quoted by Catherine Elwes in Elwes 2005, p.183.
Mutable Screens: The Expanded Films of Guy Sherwin, Lis Rhodes, Steve Farrer and Nicky Hamlyn

Much of the recent interest in the expanded cinema of the 1970s has focused on the group of filmmakers at Saint Martin's in the early 1970s. The group comprised Malcolm Le Grice and three of his students: Annabel Nicolson, William Raban and Gill Eatherley. Partly because of the group's slim historical priority, but also because of Le Grice's vigorous theorising and his major presence at the London Filmmakers Co-operative and beyond, this group, who also showed together and with others about a dozen times as Filmaktion, has attracted much of the recent historical attention on the period, and has been the subject of revivals of a number of works from that time. However, Filmaktion was only one of a number of small clusters of film and video makers who emerged from art schools around the country in the early 1970s. At Derby, Coventry, Chelsea and Maidstone schools of art, Reading University and North East London Polytechnic, film- and video-making was initiated by tutors, most of whom were themselves new to the medium. As with the Filmaktion group, these tutors were not much older than their students, who were enrolled not in film but in art and design courses, since the only film courses that existed then were of the vocational-industrial kind, such as those run by the National Film School. In my own case, I had entered Reading University as a painting student and fallen quite accidentally into filmmaking because of the presence of a part-time tutor, Ron Haselden, a sculptor turned temporary filmmaker, who ran a project I happened to sign up for.²

The group of staff and students at the North East London Polytechnic (now the University of East London) was the largest and most diverse of these clusters. Guy Sherwin began teaching on the new Communication Design course at NELP in 1971. His first group of students included John Smith, Lis Rhodes, Ian Kerr and Tim Bruce. Over the next few years, Steve Farrer, Penny Webb and James Mackay entered the Fine Art course. All these students went
on to practice as filmmakers and teachers, with the exception of Mackay, who subsequently established himself as an independent programmer and producer for a number of artists and filmmakers, including Derek Jarman, Hannah Collins and Nina Danino.

Although their individual practices were later to diverge, the students in this group collaborated with each other on a number of projects. Of relevance here is the joint work *Buoilhaicte* 1976 (two screens, black and white, silent, variable duration) by Lis Rhodes and Ian Kerr, which they executed at the Festival of Expanded Cinema held at the ICA in London in January 1976. The work consisted of two hundred-foot-long 16mm film loops, one black, one clear. As the loops ran through the projectors and dragged on the floor, they gradually deteriorated, the black becoming clearer, the clear, dirty and marked. This process of reversal-exchange was recorded by photocopying sections of the loops every hour or so. In its purposefully destructive character, the work draws attention to aspects of film technology, foregrounding the powerfully contrasted functions of the film projector as both conveyor and destroyer of the image. The work evolves entropically so that, by the end, black and clear will come to resemble each other to the point where they cancel each other out, before finally disintegrating.

Rhodes's and Kerr's analytical approach to celluloid, and its perilous encounter with projection, is typical of much of the varied kind of work that went on in and around the London Filmmakers Co-operative, and which, in its diversity, gives the lie to the repeated assertion that the films produced at the LFMC were premised erroneously on a reductive conception of the medium's 'material substrate'.

The work I shall discuss here registers, in its diversity, an understanding of the medium as complex and multifarious. Most of it involves elements of performance, with its implication of work being remade on every occasion, in contrast to the standard notion of film as a fixed and hence repeatable object. It also treats the screen and/or the projector as active and material. The live activation of the projector is not peculiar to the work here; indeed, in recent years there has been a resurgence of such projection events by numerous film-artists, including Bruce McClure, Jürgen Reble, Metamkin and others, but the deployment of the screen as an active element is much rarer, if not unique. Furthermore, whereas a lot of recent projector-based work has been decorative or fetishistic in its attitude to film (a fetishism that extends to single-screen films like those by Bill Morrison and others), the pioneering
film performances of Guy Sherwin embody, by contrast, a playful yet rigorous analytical purpose.

An emblematic film-performance that turns on paradoxical creative-destructive strategies is Sherwin’s *Paper Landscape* 1975 (fig.61), which he performed at the ICA festival in 1976 and many times thereafter. Insofar as it juxtaposes images of the youthful Sherwin of 1975 with himself as he looks when the work is reprised, thirty or more years later, this is a continually self-renewing piece. In a projected Super-8 film, he tears away a paper screen bit by bit from bottom to top to reveal himself behind the supporting frame, which is centred in a verdant landscape. The live Sherwin, standing behind the transparent screen onto which the film is projected, simultaneously coats it with white paint, again from bottom to top, concealing his live body to reveal his filmed image. The interplay of material characteristics leads to various juxtapositions of image, so that at certain points one sees Sherwin’s lower body on film, his upper half live, and also his silhouette, created by the projector light falling on the wall behind the performance area. The screen bulges and pulsates under the pressure of the paintbrush, generating harsh, direct reflections of projector light, disrupting the film image and further interfering with the visibility of the artist. Thus a continuous, uneven interplay between screen and projector takes place, both enabling the presentation of the image and at the same time disrupting and partially obliterating it.

In *Paper Landscape* the screen is a threshold, a fulcrum, a kinetic object, the locus of at least two different kinds of juxtaposed images (whose juxtapositions generate further complexities), a transparent frame and a volatile membrane, activated by Sherwin’s actions upon it. In a companion work, *Man with Mirror* 1976, Sherwin again juxtaposes a filmed image of himself with his presence as performer. A Super-8 film of the artist rotating a mirror in his hands is projected onto a mirror that he similarly manipulates ‘live’. As he spins the projector beam around the space, the light switches violently and abruptly between its functions as image-bearer and blinding beam. The image expands, contracts and is deflected around the room, so that all the surfaces in the space become momentary screens. The work draws attention to the mutually defining relationship between screen and projector, but whereas the disruption caused by the screen’s instability in *Paper Landscape* drew attention to this relationship, here it is done by showing that the projector creates its screen, since what is necessary for a film projection is not so much a ‘screen’ per se as a stable interdependency between projector and projection surface. The shift between image as image and image as (antithetical) light splay reinforces this understanding: light beams are abstract beams, observable as such but not as image, until they fall on a surface, whereupon they are configured in a perpendicular dimension.

While *Buslaichte* and *Paper Landscape* focus on different aspects of the film medium/technology, both enact a creative-destructive process with the materials of celluloid and screen respectively. In Lis Rhodes’s *Light Music* 1975 (two screens, black and white, sound, 25 minutes; fig.62), this relationship...
manifests itself in an oscillation between image as iconic form and image as optical-auditory phenomenon, or light-play, to put it into an enduring historical-conceptual frame. *Light Music* is one of a number of films in which the image is used to generate sound by printing it so that it also occupies the soundtrack area of the filmstrip. Guy Sherwin has made numerous films of this nature, as has Steve Farrer, whose *Ten Drawings 1976* (black and white, 20 minutes) is formed from images drawn and sprayed onto blocks of clear film laid out in adjacent strips, which are then separated and joined together into a continuous strip.  

*Light Music* is composed of horizontal bands of varying thickness and spacing. The changing pitch between the lines generates variations in the pitch of the soundtrack: the closer together the lines, the higher the pitch. In earlier versions of the film, some sections of the image were generated by filming sound-generated stripes from a video monitor, and it has gone through several versions before arriving at its current (though not necessarily final) version. The film, which, somewhat like its counterparts mentioned above, can be thought of as synaesthetic, exploits a technological fact about film image and sound that is emblematic of the film experience generally as optical-auditory. The film image is produced by light shining through the celluloid onto a screen. The sound, whose information similarly exists on the film as an image running along the edge of the film strip, is generated by light shining through that image onto a photo-electric cell, which converts the resulting light pulses
into fluctuating voltages that continue on to an amplifier where they become sound. Thus, there are two projections taking place within the projector. The sound element constitutes a movement-translation between light and sound that figures an ongoing fascination with optical-auditory correspondences, one that reaches right back into film’s technological prehistory. Older optical soundtracks came in two forms: ‘variable area’, which appears as an analogue wave-form, and its precursor, ‘variable density’, which appears as horizontal bands of fluctuating brightness. These latter bear a clear resemblance to the images of <i>Light Music</i>. Whereas in many optical sound films, in which photographic images are deployed as soundtracks, something like the reverse is the case with <i>Light Music</i>: soundtrack is deployed as image. Certainly, at least if one understands the technology, there is a sense that we are ‘seeing sound’ as opposed to ‘hearing image’, and it is the way the image has been optimised for its sound qualities that gives <i>Light Music</i> its raw drama and character as an experience somewhere between film as moving image and film as light-play. As Rhodes herself puts it, ‘the visual aspect of the graphic strip [sic] is not enhanced by the soundtrack, rather the particular quality of the images are necessary to achieve specific sounds.’ The intermittent character of both films’ presentation as a succession of discrete frames and the variable density’s soundtrack as intermittent in appearance is duplicated in the on–off black and white bars of <i>Light Music</i>’s image structure.

<i>Light Music</i> consists of two identical films projected onto opposite walls of a room. Each projector is placed low on the ground, in front of the rectangle beamed from the opposite projector. The images are positioned so that the bottom of the frame is aligned with the junction of wall and floor. When shown at the oil tanks at Tate Modern in 2009, projectors with xenon bulbs were used, creating a blindingly bright and powerful experience. While the film embodies the interchangeable aspects of light and sound in respect to their technological reproduction, as discussed above, the presentation of the work emphasises their starkly contrasting nature in experience. The raw concrete surfaces of the oil tanks generated a cacophonous interplay of direct and reflected sound, causing a partial de-synchronisation of sound and image, depending on where one stood in the space, and in contrast to their locked relationship on the film strip. The image, meanwhile, could be experienced in a number of ways: through direct concentration on the screen, through looking at the activated walls of the room, and through literal interaction, by stepping into the path of the beams, as well as watching others do the same. The work is thus environmental and interactive, para- and ex-cinematic, something it shares with Steve Farrer’s <i>The Machine</i>, discussed below.

A typical feature of the resurgence in performances and events that involve the projector as an active tool in the generation of on-screen images has been that the projectors occupy a conventional place, behind and above the audience. In <i>Light Music</i>, by contrast, the projectors and their beams, as well as the images formed on the screens, are a central part of the work. As in <i>Man with Mirror</i>, the work foregrounds the dichotomy between the light beam as image-carrier and torchlike light source. By placing the projectors in front of
the image and thus incorporating them into the visual arena, Rhodes forces into conjunction several highly contrasted aspects of film: the bulky clattering machine, its delicate film strip, and the immaterial yet powerful image it throws out. This forced conjunction stresses the irreducible complexity of film as a technological medium of stages and parts.

The relationship between light beam, screen and image is configured in a different but no less dramatic way in Steve Farrer’s The Machine 1978–88 (fig.63), where image stability and morphology are an effect of the speed of film movement through the camera-projector relative to the latter’s speed of rotation. The degree to which these speeds are varied results in a greater or lesser degree of anamorphism in the resulting image, both at the production and projection stages, since the same machine serves as both camera and projector.19

Farrer’s practice has veered between process-based, technologically driven work and more personal imagery, often erotic in nature. In many of the films made with The Machine he has combined the two. The earliest films consisted of lightly peopled landscapes; these were to some extent try-outs, testing the limits and possibilities of the technology, as well as creating a reflective relationship between the panoramic nature of the technology and its subject matter. Later films are more diverse and playful, offering the viewer sweeping shots of quasi-animate male nudes that stretch around the screen and between which can occasionally be glimpsed inserted shots of erect penises and other details. This dual aspect connects The Machine to the milieu of the fairground, with its promise of extraordinary and saucy thrills, and where films were often screened in cinema’s early years. There is also a clear link to the diorama, the static precursor of later experiments with 180-degree and 360-degree projections.

The Machine is based in conventional cinema technology. It consists of a compact 35mm film projector that doubles as a camera (common practice in the early days of filmmaking). The Machine, however, is turned on its side so that film runs horizontally through it, as opposed to the usual vertical movement.19 The Machine makes only one kind of shot, a circular pan, and takes only one picture, a single, continuous repeating image that runs along the length of the film. The key to its operation is that although the image it produces is stable and sharp, its shutter has been removed. In this respect it is radically different from all other film technologies, based as they are on the rapid, intermittent presentation of discrete images (frames) in a sequence (the shot). This requires a shutter in both the camera, to expose the individual
frames down the length of the film strip, and the projector, to open and close the projector lamp on each successive frame.

In Farrer’s reconfiguration, technology and image are in a balanced, intimate and mutually reflective relationship, in contrast to the norm, where a camera can be used to make all kinds of shot, and where projection is standardised (the 35mm film format has remained almost unchanged since it was developed by the Lumière brothers in the 1890s). As The Machine, in its camera function, rotates at the centre of its location, film runs through it at a corresponding speed, so that an image is laid out along the length of the celluloid strip. Changes in position of mobile objects within the space register as variations on a ground, so that we see a relatively fixed setting with repositioned objects at each revolution. In its projector mode, the machine replays the image as it was made, on a 360-degree screen. The image itself, however, is not a movie in the usual sense, since there is neither apparent nor actual movement within it, only the movement of the projector as it lays out the static image around the screen: “When the film is run at the original speed at which it was shot, it is paradoxically both in constant motion and at the same time static in relation to the projection surface (as a caterpillar track remains “still” in relation to the ground as the vehicle runs over it.” The image is a kind of spatio-temporal spiral: each repeat introduces variations, so that we never quite revisit the same subject. The film strip itself can also be viewed as a transparency, and of the few films that have been made that have been exhibited alternatively as static objects, this is quite the most remarkable.

Ultimately, an intermittent experience is reinstated, but at a higher, interactive level. At any given moment we see only a fraction of the panorama, as it is enframed by the projector’s rectangular aperture. If we choose to focus on a particular portion, we must wait for the image to rotate around again to the point we are looking at in order to notice any changes that have taken place. Thus it becomes the viewer’s job to create the scenario they wish from the continuous sweep of the projector’s beam, as opposed to being subjected to a predetermined order of fixed images. What one then sees, in effect, is a movie slowed down to well below ‘critical flicker threshold’, the rate at which a sequence of frames coalesces as apparent motion. Equally, of course, the viewer can turn, dizzyingly, with the machine, to experience its continuous panning. In either case the viewer becomes acutely aware of his/her own role in making – personalising – the experience. Like Sherwin’s and Rhodes’s films, the work engenders the activation of the spectator via the screen, itself activated by the agency of a prominent projector. This is interactive moving image art in quite a different sense from most cinematically inspired multiscreen gallery work, where prefabricated narratives masquerade as multi-stranded interactive environments.

In my own expanded and multi-projector films, mostly made while I was a student at Reading University, a less literally activating approach to the screen is made. In Silver Street 1974–5, the windows of my room overlooking the busy Basingstoke Road function as a transparent threshold between private and public space, and as a screen through which views of the opposite
side of the street are framed. In Window-Lapse 1975, two time-lapse films of the same window, made over the period of a day from inside and outside the building, play side by side.

In Window 1975 (fig. 64) a three-projector work that builds on these two films, the window becomes the focal point for all three screens. The left and right screens show a time-lapse and a real-time shot of/through the windows, at different magnifications, while the centre screen has a continuous soundtrack on which discontinuous filming actions, made within the room, are recorded visually. The film concludes with the smashing of a pane of glass in the centre screen. The smashing action serves to remind the spectator of the materiality of the window, thereby drawing attention to the self-negating screen: a sine qua non, yet nothing in itself. The window's own self-negation varies with its degree of transparency, shifting between translucency, opacity when sunlight hits it at certain angles, and transparency at other times. The light that is necessary to make the window visible in the first place serves also to obliterate it and block the view beyond. These shifts in the light emphasise the window's mutable qualities, both within and between the three screens. Light shouts back, generating an asymmetric reflection that returns the projector beam to its dazzling source.

The three screens constitute a fractured grid, drawing attention to the calibration between frame edges, window openings and glazing bars. The differences between the three frames are intended to engender a self-conscious attitude of comparison and evaluation in the viewer. The work posits the eventful and irreducible complexity present in even the most seemingly straightforward of situations, the intention is to offer a way of looking at film that restores to it the possibility of something equivalent to the prolonged scrutiny possible with non-time-based art.

In 4 x LOOPs 1974 (silent, black and white, variable duration; fig. 65) which, like Window, was also shown at the ICA festival in 1976, four projectors – each running a loop of a black-on-white diagonal cross that flashes rhythmically off
and on—are moved through a series of configurations that engage the rectangle of the frame as a form in its own right. The intention is to steer the focus away from image per se towards a mutually reinforcing interplay between screen, image and projector configuration, in contrast to the work of groups like Metamkine, in which projectors are used additively in the production of conventionally image-orientated displays. $4 \times \text{LOOPS}$, instead aims to question the teleology of film production from camera to screen, as well as the hierarchies of projector-image, by incorporating production into projection. Although the projectors are located behind the audience, their successive realignment during the performance of the film engenders an awareness of their enhanced role in the (re)production of the work. At its most basic level, the switched-on but empty projector is arguably enough to make a work, but not necessarily a ‘film’. The presence of film running through the projector secures an understanding of the work as a film-event, while at the same time raising questions about what that means. This is a feature of all the work discussed here, in which technical standards, hierarchies and aesthetic relationships are questioned and remade through strategies of technological-formal reconfiguration.

1 For a detailed account of the precise constitution of Filmaktion and their activities, see Lucy Reynolds, Defining Filmaktion: http://www.studycollection.co.uk/filmaktion/index.html.


3 In the catalogue for the ICA event, the work is listed as C/CLU/CUT OFF/FF/F, but its correct title is Shwaachtame. For further discussion of this work, and others by Rhodes and Kerr, see Lucy Reynolds, British Avant-Garde Women Filmmakers and Expanded Cinema of the 1970s, PhD dissertation, University of East London, 2010. I am grateful to Lucy for drawing my attention to the correct title of the work.


5 A Quicktime recording of the version presented at The Live Record can be seen here: http://www.rewind.ac.uk/expanded/Narrative/BFL_Paper_Landscape.html, and a recording of Man with Mirror here: http://www.youtube.com/watch?v=VXO7UMLAbxg.


7 Rhodes established this practice in an earlier film, Dresden Dynamo 1972 (colour, six minutes) in which Letratrie dots of varying scale generate pitch variations in the soundtrack. The film may be found on the DVD Shoot Shoot Shoot, Lux/ReVoir, 2006.


9 Lis Rhodes, ‘Notes from Lightmusic’, in ibid, p.78.

10 For discussions of The Machine see Nicky Hamlyn op cit, pp.40–1, in which reference is also made to Rod Stoneman, ‘360 Degrees’, Artifice no.11, Summer 1989. For lively accounts that capture the experience of watching the machine, see Anna Thew, A Cinema of Pure Pictures, Oxford: MOMA, 1969, and Nik Houghton, Against the Steady State: Independent Media, no.77, May 1988.

11 There are historical precedents to this in Vistavision: http://fer.vision.org.uk/wiki/VistaVision.


13 Rare precursors include Peter Kubelka’s Arnulf Rainer 1960 (film, black and white, sound) and Paul Sharits’s Ray Gun Virus 1986 (15min colour, sound).

14 This projector-image hierarchy in Metamkine’s films, which use iconographic found footage among other things, can be contrasted with the work of Luis Recoder and Sandra Gibson, and especially Bruce McClure’s projector performances, where the projectors are also behind the audience, but during which constant reference is made back to the projectors by the nature of the image, which emerges strongly out of the projector’s function.
Unfolding a Tale: On the Impossibility of Recovering the Original Meanings

Unfolding a tale in the present past: on how categories attempt to explain and translate themselves – intention is both at a moment in time and out of time: I am writing for an event that has not yet taken place, about events that did take place, a few of which I was part of, most of which I wasn’t. Between an event and events there are many inventive doings and undoings, none of which can be undone, or only divertingly done now, received from a previous past and about to be projected into a future past from which it may emerge differently, an unfolding tale economically related. There will be a prescription which is not scripted: that the past is experienced in terms of the present, within an economy so economical it promotes its dependence on belief.

On how categories attempt to explain and translate themselves:
The previous past: categories can explain themselves by objective: ‘activating the space of reception’. In museums at present there is a particular meshing of pedagogy and commerce – an impulse, perhaps, to make explicit an imaginary series of sequences, or episodes, the inevitable consequence of which acts as explanation. The contradiction between the unnecessary need to know the original and the impossibility of doing so is not a misuse of philosophy or logic. It is only an indication that past and present cannot be reconciled in fact, only in thought, that continuing epic of everything.

The continuation of an idea is impossible, only a rendering of it. Within reproduction, modification takes place. Initial intention is fading fast. Its intrinsic purpose may have become irrelevant, incomprehensible, hence ideas may be modified or lost within or without repetition.

The continuation of the fact – of a thing performed or done – is in fact a facsimile or a re-make, a fiction, if you like, which may often be novel but is always a mock event. The continuation is an imitation. The paradox is that images here, although the same as they were there, cannot be displayed.
repeated or repeat themselves in order for us to know the original. The images remain but intention is irretrievable.

So in expanded cinema, re-performance re-screening moves quickly, instantaneously, to imitation and thence to souvenir – the epic of everything as legacy. But memory provokes the question: if expanded cinema was a reaction against the status quo then, what is it now?

To begin with, it will be translated within the conditions of the present past, in other words, the now (to the extent that different objectives may be set on the stage of the existing state of things). Say, is it questioned – is it accepted – is it collaborated with, or opposed? Or any or all of these in the economy of the inquiry? Answers will be brought in and questions taken away, redrawning again the angle (slant) of intention. The known events are scattered amongst the affected objects.

**Intention is both at a moment in time and out of time:**
Intentions are premeditated and unpredicatable. This can be lost in the making of categories. The homogeneity of a category necessitates exclusion and inclusion. Categories compress the choreography of intentions. This is very likely where the tale is pictorial, aural or oral – that is, intermittent or simultaneous at the same time. If categories define, tales tell. A category must be unique, discrete and coherent and so really impossible. A tale may be both incoherent, incongruous, fictitious or true and so truly improbable.

Whatever the intention, depiction and meaning can’t be held in place, in stasis. Intention may be told but there is always another telling – the tale of subsequent action in the imminent present. Telling and retelling is the accompaniment to all intentions and their meanings. In a paper mountain the telling will be taken away from itself and blamed for being unwrapped, irrelevant to the sequence, inconsequential to the argument. Who decides what is relevant, whose meanings are to be meant, is utterly relevant.

In diversity of intention meaning changes. But it is not enough to claim diversity if intentions and therefore meanings are directed, instructed or commissioned. The rules of the paper mountain will be no protection from alteration and control. Economic conditions, (except if imitation threatens ownership, paradoxically unique), insist on repeatable consumer products and so throw diversity into deep freeze.

And so to commodification – the process not of production but post production (re-issues, re-makes, re-constructions), in post-industrial spaces: the acceleration of the epic of everything, a conditionality that might be intentionally quasi – only as it were – almost – virtually – resembling or simulating – but not really the same as – which alters intentions.
Expanded cinema tends to be more or less different, at the moment and on the site of projection, different in its intent, divergent in its depiction and meaning. The making of the film was, is, extended into the auditorium, into the gallery. The audience is placed, or place themselves, between screens and projectors, amongst monitors, within the installation. The place of reception may be a place of capture. Is this a reduction of cinema to a memory at the edge of our eye, where one place of ‘illusion’ is exchanged for another? Where the pursuit of the ‘moving’ image continues still – a fiction of an existence so fictional that only technology can read its own writing? The illusion of realism is very affecting. It often happens with no apparent contradiction or dust between depiction and meaning (naturally, as it were). This illusion is an artifice without script, but with prescription (it is). It is able therefore to impose meaning by default.

In ‘activating the space of reception’, the demonstration of interactivity will move between the street and the gallery – the public spaces of the virtual networks (categories and intentions instantaneously received). The certainty is that the didactic and physical attempts at control will be harsh. The attempt to change ways of perceiving a given reality in order to understand actual conditions needs revolution in the place of reception. Industrial measures of time and space collide on to a digital now, but the epic is of the gaps that shift the sequence, the discontinuities of the unsaid, unheard, the absent. This tale is (politically) inexecutable in its loss.

Written to accompany ‘Expanded Cinema: Activating the Space of Reception’, conference and exhibition, Tate Modern, April 2009

1 ‘Tale’: Old English tān = Old Frisian tale, Old Saxon talo, (Dutch taal, speech), Old High German zah (German zäh, number), Old Norse talo talk, tale, number: the action of telling (Oxford English Dictionary).

2 ‘Intention’: …directing the mind or attention to something (Oxford English Dictionary).
The Contemporary
Expanded Cinema
Up To and Including its Limits: Perception, Participation and Technology

This section of the book looks at the bifurcating forms of contemporary expanded cinema. On the one hand, the early years of the twenty-first century have seen a renewed interest in live film performance and a recovery or reappraisal of twentieth-century optical and aural technologies. On the other hand, artists have continued to embrace increasingly sophisticated forms of interactive media. Both strategies, although in many ways very different, have a great deal in common. Both have developed in response to the seemingly endless and irreversible proliferation of media in everyday life and a subsequently complex ontology of the image; both exist in relation to a fluid and diffuse notion of the ‘cinematic’; and both are being practised currently by artists who were active in producing many of the earlier manifestations of expanded cinema. Guy Sherwin’s twenty-first-century practice is firmly located in the hands-on, artisanal approach to film that he and other filmmakers at the London Filmmakers Co-operative championed in the 1970s. By contrast, Chris Welsby (another key player in the Co-op’s connections with expanded cinema), VALIE EXPORT and Peter Weibel have transposed their original experiments with film, multi-screen projections and, in Weibel’s case, performance onto the shifting terrains of digital media and computer art. Yet this duality is not so clearly defined, especially as both strategies appear to account for many forms of expanded cinema present and past.

Technology
Film hasn’t gone away. While a vast array of moving-image technologies are available and threaten to eclipse the use of film, it remains a medium with special qualities still being utilised by artists today. Jonathan Walley identifies this youthful renewal of an increasingly abandoned medium as a
return to life for the specific aesthetic and political values attached to small-gauge filmmaking. In the UK, artists such as Karen Mirza and Brad Butler have not only maintained their commitment to the use of 16mm film in particular but have focused on the spatialising aspect of film and the expanded contexts of film production and reception. In Australia, Otherfilm and Abject Leader combine multiple film projection and performance to create events reminiscent of those organised by Arthur and Corinne Castrill in the 1970s, which expanded the cinema beyond the traditional arrangements of screen, beam, projector and viewer. At the same time a sense of presence and physicality seems to inspire American artist Bruce McClure’s rearrangement of the conditions of absence and distance in American cinema:

One of the things I like to do before I show something is to put myself in front of the audience to reassure them: I’m here, in the flesh, for better or for worse.

Presenting himself to the audience as someone ‘making a work in front of you’, McClure operates between three and six customised 16mm projectors at once, interfering with and manipulating the machines and the celluloid as part of the show. This ‘live’ performative element remains a key characteristic of current forms of expanded cinema. Traditionally, cinema presupposes a ready-made sensorial product and an absent creator. Production and distribution models mean that the global medium commonly understood to be ‘cinema’ tends to be produced at a not insignificant distance from its audiences. Expanded cinema, a live and participatory form, operates in terms of these distances critiquing the models of production and consumption common to filmmaking. By introducing his work and emphasising his presence, McClure develops a tension between what is planned and what is contingent, creating a formal coda that is cinematic and ‘live’.

This sense of liveness – combined, paradoxically, with the pastness of cinema – is particularly evident today in the kinds of ‘music-show’ performances identified in this final section by Steven Ball. Emma Hart and Benedict Drew are UK artists who recycle the waste sounds and visuals of old and new recording technologies. Untitled 5, performed at the ICA in London in 2008, employs an array of devices and media for recording and reproducing sound and images. The unconventional upending of domestic appliances, machines for playing back music and moving images, was combined with
musical instruments (drums, electric guitars, keyboards) played intermittently by the artists, creating a diverting cacophony of noise. Not unlike the ‘high low-tech’ creations of Perry Hoberman and his collaborations with Christian Marclay in the 1980s, each household device is made strange through its use. The set-up felt like the workings of a crazed clockwork slowly running down, deprogramming, as it were, the modern notion of the ‘automatic’ as strange and uncanny. The rock-music crossover owes something to the connections between punk, electronic media, trance and notions of personal identity among a ‘mediated generation’ identified by Dan Graham in his video essay Rock My Religion 1984. Indeed, new forms of expanded cinema – often taking their cue from the work of intergenerational artists such as Laurie Anderson, Mike Kelley and Tony Oursler – suggest a rethinking of the relationship between media technologies and everyday life among a new generation of artists who have come to know themselves and each other through various devices of media representation.

This may tell us something about expanded cinema in the ‘new-media age’. The generational shift is not necessarily expressed through fidelity to a particular medium. In their most recent work, The Autonomous Object 2008–ongoing (fig.67), Mirza and Butler subject the representational values of 16mm film to a playful system of interpretation and reappropriation. The piece consists of reels of 16mm film shot in various locations, including Karachi, Mumbai, London and New York. The direct inscription of a particular place onto celluloid, the physical sense of capturing and seeing, is played on by the use of mirrors by local protagonists who ‘perform’ for the camera. The authenticity of film-image production that records truthfully what it sees is underlined by a sense of durability or permanence, not only in terms of its lasting physical qualities, but also in terms of an assumed representational ‘timelessness’ irrespective of how the image was made, how it is seen and how it is used. Yet the flashes of mirror and colour that bounce light back at the viewer and show fleeting glimpses of the makers and the wider surroundings of the ‘shoot’ upset the sense of a film product located in its ‘mirroring of reality’. More to the point, the films are then boxed up in separate reels for presentation and it is up to the proprietors of the work to decide on the form of presentation most appropriate to their site of reception. Formally incomplete, the work’s final arrangement is the responsibility of someone else, ensuring each particular completion is subject to a particular place and time, thus replacing authorial
ownership with a contingent use value in which film as a medium is subject to the way in which it enters the world of finished products and consumable goods. Expanded cinema, as we have seen, is situated in these in-between conditions of image production and reception. It acts on what is within and beyond the frames of filmic representation and manufacture.

The alternative media strategies of expanded cinema and especially parallel strategies identified as ‘paracinema’ have gained new relevance in the digital age, not because of ideological distinctions between digital and analogue media but because of their similar forms of use. For Steina and Woody Vasulka, electronic image creation is the great liberating moment of the twentieth century. Rather than capturing ‘the world in its likeness’, their experiments with video and computer technologies meant that they could construct images out of ‘energy and time’. The self-generating structures of electronic media, Woody notes, ‘set me free from the confines of film and gave me the opportunity to look into a field that was completely undeveloped’.

But what makes his and Steina Vasulka’s experiments with media technology, performance and installation particularly relevant to contemporary forms of expanded cinema, such as Mirza and Butler’s, is their sense of process. Their imaging strategies are momentary and based on chance electronic procedures, deprogramming and breaking the codes of image production. As video technologies became digital, Steina, for instance, was able to set up live violin performances that manipulated the digital image in real time.

I begin with assigning the five strings to five MIDI channels, and then assigning certain functions to each string. The functions are image selection, directional control (fast, slow, freeze, backwards, forwards) and effects control (keying, colourising, displacement, warping). No matter how much I prepare, on stage it always turns into a ‘seat-of-the-pants’ event ... I look for lucky instances of sound/image events to combine with the sounds of my violin.

This is similar to the way Mirza and Butler redistribute the economy of their images and Drew and Hart build into their work an inevitable breakdown. Rather than dehumanising mechanisms of regulation and control, media (film or otherwise) is redefined by indeterminacy and chance. Their work makes a show of the tension between working and not working, of being contingent upon the processes and contexts of seeing.

A similar concern with the stability of the medium, patterns of reception and the unfixed (non-permanent and ephemeral) conditions of the image are part of what connects these apparently distinct strategies to the ‘interactive cinema’ of the 1980s and 1990s. Using early laserdisc technologies (similar to the Vasulkas), artists such as Lynn Hershman Leeson and Graham Weinbren have created complex multi-layered works in which the viewer is able to make active choices in order to navigate a network of narrative worlds (see Jackie Hatfield’s essay below). Weinbren’s Sonata is a cluster of psychologically interconnected possibilities over which the viewer has
a certain amount of control, although again the experience is characterised by chance and indeterminacy: 'Because of the large number of images stored on the videodiscs, it is unlikely that Sonata will ever “play” the same way twice. In effect, each viewer creates a unique version of the work.'

Lynn Hershman Leeson’s work is even more direct in the way it repositions the viewer as the author of the work. In Lorna 1984 and Deep Contact 1984–9 the viewer is addressed directly and interacts with the suggestive material. In America’s Finest 1992–5, gun, camera and projector are integrated as the viewer sees him/herself as the subject of war, memory and image-making. Incomplete until the point of contact, the works are subject to chance associations and exist only in the various ways they are interacted with.

The question of control, authorship and process and the integration of the viewer’s response into the structure of the work has its roots in the triggering devices of the performance happenings of Carolee Schneemann and Allan Kaprow, as well as the engineering experiments of Billy Kluser and EAT that looked to create new relationships between art and technology. Certainly Chris Welsby, as he himself suggests in this section of the book, draws on these connections in his own work. His recent multi-screen installations such as Tree Studies 2006 draw on the altered geography – the uncanny distances and time conditions – of web-based new media. With his earlier works on film such as the double-screen collaboration with William Raban, River Yar 1972, and the site-based work, Wind Vane 1972, it was not so much the representation of nature but a question of subjecting the devices of representation to the unpredictable ‘systems’ found in the natural world. The question of film or digital seems less important than this paracinematic engagement with what Ken Jacobs calls the ‘machine phenomena of film’. Common to the seemingly bifurcating forms of expanded cinema is an investigation of how the devices of representation affect the artist, the audience and the spaces between. ‘My own work is in the pull of a pair of forces that define the late twentieth century – the cinema and cybernetics, the projector and the computer.’

Paracinema and the digital have much in common. ‘Films’ made without film, projector, or screen – such as Anthony McCall’s Long Film for Ambient Light 1975, which consisted of an empty room illuminated during the day by diffuse natural light and at night by a single bulb – moved film away from an investigation of materials towards a sense of cinema as environment and process. ‘Re-conceiving cinema as essentially the modulation of light in space and time, McCall pried it loose from the material limits of the film medium without detaching it from the artistic tradition that ... had been “encoded” in that medium for decades.’ How different is the camera-less production of film images (whether they involve scratching, treating, cutting, splicing, cooking etc.) from modern forms of digital manipulation? In both cases the tools or devices of cinema are subject to renewed uses. The hands-on and direct manipulation of the film in works like Man with Mirror and Annabel Nicolson’s Reel Time 1973, the modulations and shifting of what Welsby calls a pictorial uncertainty are, in a sense, proto-digital in the way that they displace
the frame and destabilise the image. The digital mixed media of Caspar Stracke’s *Zuse Strip* 2004, which translates celluloid into an 8-bit digital image through a process of interactive puncturing, echoes the direct attacking of material in Nicolson’s *Reel Time* as well as Ian Kerr and Lis Rhodes’s *Cut A X* 1976. This in turn is echoed in Hart and Drew’s direct attack on the material in *Untitled* 5 2008, which included loops of black leader scratched under the needle of a record player before being passed through projectors. This sense of retransmitting, replaying and retranslating demonstrates that the direct use of material is not necessarily medium specific. Neither approach seeks to construct a finished product but emphasises a sense of process; works associated with expanded cinema exist as a set of fragile versions reconstructed according to the changing conditions in which they are received.

Indeed, what connects new and old and the current mixing of analogue and digital media is an emphasis on the ephemeral in contrast to permanence and durability; an unfixing of the image; a sense of incompleteness and an engagement with the uncertain locatedness associated with moving-image reproduction or what has come to be known as ‘cinema’.

**The Uncertain Locations of Cinema**

Take two seemingly very different works: Lis Rhodes’s *Light Music* 1975 and Tony Conrad’s *Bowed Film* 1974. In *Light Music* two films are projected at the same time onto opposite walls as if they are to be watched simultaneously. But ‘seeing’ is in some ways a secondary aspect of the work’s reception process. It is difficult, if not impossible, to watch the two screens at once. The film has been generated primarily in order to create sound. Printing onto the optical soundtrack produces a kind of musical inscription read by the projector as if it were a gramophone. Hearing, which is usually made subordinate to cinema’s primary logic of seeing, is called into play as, somewhat synaesthetically, light becomes an aural medium.

*Bowed Film* is similarly concerned with sound and music. Different versions of the work have been performed. It is not always silent (on occasion Conrad attaches electric pick-ups to the film strip, amplifying the sound of the bow passing over the film). But the film is always organised as if it were an instrument to be played. The film itself is a pan-shot of the violin bow. ‘Playing the film’ makes the frames vibrate in the intermittent light and creates a flicker film for one person. Taken together the two works demonstrate different models of participation and perception. Compared to the social or collective experience of *Light Music*, *Bowed Film* is a somewhat
private and sedentary piece: it almost excludes public participation, and yet it’s doubtful that it has ever been played in private to the same effect. Still, both works seem to deal with the location of film. Film reception is not just a question of space or the environment but of physiology and cognition, where the social and the physical limits of perception meet. In *Light Music*, it is in a room with other people; in *Bowed Film*, it is directly into the eyes of the viewer. Either way the film’s precise location is uncertain.

Expanded cinema seems to be explicitly concerned with this uncertain location of the moving image. It has already been observed how Werner Neke describes the basic optical illusion of cinema using the spinning disc of the thaumatrop. The spinning of the two images creates a third image not present except in the mind’s attempt to process visual stimuli. There remains some uncertainty as to whether the eye is fooling the brain or whether the brain is compensating for the eye’s slowness. Yet seeing movement in film involves some kind of nervous (as well as environmental) regulation. The historian of cinema Eric Rhode locates the biology, as it were, of cinema as much in the discovery of two kinds of nervous system – the motor and the sensory between 1811 and 1822 – as he does in the activities of ‘scientists, inventors and showmen’ at the end of the nineteenth century. Artists and filmmakers involved in expanded cinema have attempted to investigate this other cinematic location.

‘The flicker’, a means of reducing film to its basic stroboscopic elements, is an important part of expanded cinema’s investigation of the physicality and physiology of film and the environment of perception. To some extent *Light Music* and *Bowed Film* use stroboscopic effects, and Conrad has described his interest in flicker films and his creation of *The Flicker* in 1966 as centring on the way in which it can cause images to be seen that are not present or as a means of stimulating an otherwise absent content:

> There are a variety of effects that I am investigating, effects that can act on your eyes so as to produce the actual imagery directly within the observer rather than in the normal way of having the eye interpret the light patterns on the screen … Most of the details, most of the impact, most of what people find in it, what they take away with them from having watched the film, wasn’t there, was conjured up only when they watched this film: it didn’t exist before, it doesn’t exist on film, it wasn’t on the screen.

This uncertainty (where technology and physiology merge) over where the film is located can cause a very fundamental sense of displacement. In his neurological research, the physiologist W. Grey Walter, whose writing Conrad and Paul Sharits were both aware of, noted the ways in which stroboscopic effects could induce epileptic seizures. Due to an electrical disorder in the brain aroused by the stimulation of flickering light, motor and sensory regulation is lost, giving way to degrees of uncontrolled seizure. Walter is particularly frank about its relation to the cinematic environment:
In another case a man [suffering from epilepsy] found that when he went to the cinema he would suddenly feel an irresistible impulse to strangle the person next to him; he never did actually throttle anyone, but came to himself with his hands around his neighbour's throat …

It seems apt to mention in this context Peter Kubelka’s *Invisible Cinema*, not just in terms of any fears among audience members of potential strangling (Kubelka’s flicker film *Arnulf Rainer 1960* was part of Sitney’s *Anthology* programme) but because the ‘Invisible Cinema’ (as an ideal or ‘normative’ model for viewing conditions) is often seen as part of expanded cinema’s history. *Invisible Cinema* is in some ways an applied study of how cinema relates to the environment of perception and the uncertain locatedness of the cinematic image, part of the ongoing experiment with viewing conditions and the interest in spectator reception that expanded cinema has been involved in throughout the course of its development.

Yet Noam Elcott has noted that *Invisible Cinema* was in many ways a backlash against large-scale expanded cinema events such as the Vortex Concerts in California, Stan Vanderbeek’s *Movie-Drome*, the World’s Fair Exhibitions and the interest in utilising transmission technologies such as television and satellite. *Invisible Cinema*, Elcott remarks,

worked to shore up the conditions of reception taken for granted since the 1920s and now threatened by multimedia and expanded cinema within the ranks of the film avant-garde and by the increasingly dominant televisual distribution of movies in society at large. Indeed, the name ‘Invisible Cinema’ is something of a retronym: only in the half-light of television and multimedia must one champion the invisibility of classical cinema.¹¹

‘Victory Over the Sun’: Expanded Cinema and the Architectures of Seeing in the Twentieth Century

Reactionary or not, Kubelka’s architecture is perhaps a misreading of the way filmmakers were approaching the question of locatedness and perception in expanded cinema. *Invisible Cinema* was certainly symptomatic of an increased concern with the spaces of reception, media environments and the interconnected nature of visual technologies and physical perception in the 1960s and 1970s. By contrast, Stan Vanderbeek’s contemporaneous *Movie-Drome* 1965 was much more than a celebration of sensorial immersion. In a crude purpose-built aluminium dome erected in a forest near Stony Point, New York, ‘simultaneous images of all sorts would be projected onto an entire dome-screen … Thousands of images would be projected on this screen … [W]ithin a collision of facts and data … the visual material is to be presented and each individual makes his own conclusions … or realisations.’¹²

Vanderbeek’s performative architecture of reception was something of a failed prototype (perhaps the one thing it has in common with Kubelka’s
Invisible Cinema) rather than a finished monument to new media technologies. Vanderbeek describes 'the movie drome in which I plan to develop a sight and sound research centre' as

a prototype theatre of the future, exploring motion pictures, image transmission, and image storage, video graphics, electronic sound and music, drama and experimental cinema-theatre.\textsuperscript{15}

Vanderbeek, along with contemporaries such as Ken Dewey, Gene Youngblood and Robert Whitman, championed a much more open understanding of ideas such as 'cinema', 'movies' and 'expanded cinema'.\textsuperscript{14} They were precisely that: a set of ideas or possibilities combined to form a new 'aesthetics of anticipation' and participation instead of the older and fixed conditions of 'mediation', inscribed culturally, Vanderbeek claims, by 'art history'. Indeed the mixing of media is crucial. As the pastness of celluloid (reified by Kubelka) is combined with the grammars of the present associated with television, satellite and transmission technologies, Vanderbeek conceived of a cinema without boundaries, creating what he described as 'culture intercon', 'a new form of world communication'. Cinema was defined not by the consumption of film products but by the sense of environment and use. Here places were constructed rather than represented via a radical relation to technology.

Arguably Vanderbeek and his contemporaries were attempting to realise the unrealisable aspirations of an earlier generation. Vanderbeek's 'experimental cinema-theatre', for instance, is reminiscent of the ideas championed in the 1920s by Erwin Piscator, who called for a theatre that embraced the 'reality effect' of cinema in order to create a 'living film-scenery' that would radicalise the 'reality of the people's environment'.\textsuperscript{15} Piscator teamed up with George Grosz to combine 'grotesque animation film' with his production of The Good Soldier Schweik. Moholy-Nagy and Theo van Doesburg also conceived of radical viewing theatres as part of an architecture of light and movement. More ambitious perhaps, were El Lissitzky's unrealised interventions into the spectacle of urban space:

We intend to erect a scaffolding in a square, accessible and open from all directions. The scaffolding represents the stage machinery of the show designed to provide ... multitudinous possibilities of movement. At the flick of a switch the sound system is turned on and the whole place may suddenly reverberate with the din of a railroad station, or the roar of Niagara Falls, or the pounding of a steel-rolling mill ... Electrical sentences flash and dim. Light rays diffused by prisms and reflectors, follow the movements of the figurines in the play.\textsuperscript{16}

Lissitzky reconceived architecture as a combination of action, theory and event. 'I do not merely strive to reform an existing situation, but, quite the
contrary, I make it my goal to create a completely new way of looking at things.” As such, he fashioned an architecture of seeing that was particularly concerned with the spaces of exhibition, display and spectacle. In Vanderbeek’s time, these aspirations are most explicitly translated into the World’s Fairs and exhibitions culture of the mid- to late 1960s. The Fairs signalled a renewed interest in the technologies of seeing in which the Western world could reimage itself—not only its past but its future, or what Benjamin has called, its ‘future present’. ‘World expositions are places where new expectations and attitudes towards future technologies are stimulated.’

In some sense there was a struggle over the reappropriation of Lissitzky’s ideas. In 1969 Eric Dluhosch noted the contemporary relevance of Lissitzky’s impossible electromechanical show *Victory Over the Sun*. He claimed, ‘Most contemporary art movements have their roots in the twenties of this century’, and saw a lineage in terms of ideas and technology:

Lissitzky is to contemporary art production what Charles Babbage was to computer technology in 1819. Just as the then existing machine-tool technology was incapable of translating Babbage’s plans for the ‘analytical machine’ into reality, so were the means of the artist in 1920 insufficient to create stereophonic effects, light shows, holographs, and so on.

Yet by the late 1960s it was not only a question of artistic ‘movements’. Technologies of display and spectacle had not only reached new levels of sophistication but were coupled with a ‘machinic fantasy’ that Ben Highmore calls the ‘ideological drive of modern phantasmagoria’. Highmore’s historical and cultural account of twentieth-century exhibition space focuses on the IBM Pavilion at the 1964–5 New York World’s Fair, ‘a huge ovoid dome perched upon a canopy of steel trees’ in which was housed ‘the Information Machine’, a multimedia theatre that presented a film and slide-show, *Think*, designed by Charles and Ray Eames. The architecture of the IBM pavilion was designed for an audience sceptical about technological change. Most astounding in its attempt to win hearts and minds was the ‘people wall’, a ‘45 degree rack of seating’ for five hundred spectators that ‘hydraulically lifted some 53 feet into the belly of the Information Machine’:

Suspended above the water, the spectators were confronted with 15 irregular sized screens, projected onto by seven 35mm projectors and seven slide projectors. What followed was a barrage of visual information simultaneously spread across the various screens. Eight stereo speakers supplied the spectators with Glen Fleck’s narrative commentary and Elmer Bernstein’s musical score … This removal of the spectator from an earthly realm into another world is carried out so systematically that the IBM visitors are quite simply lifted out of the world.
This is perhaps closer to the type of hyper-technological cinematic spectacle that Kubelka was reacting against. Yet Highmore identifies something crucial about this approach that might distinguish it from the immersive environments associated with expanded cinema: the way in which it constructs a given relationship to technology. The brief for the Pavilion design was to inform and educate, to ‘normalise’ and ‘demystify’ computer technology as something that will ‘help solve the most complex problems of the simple principles of logic, similar to those we all use in making decisions every day’. But the architectural form of the display had the exact opposite effect of demystification. Despite the ‘rational and everyday content’, the ‘experiential form of the pavilion’ produced ‘awe and terror’, shocking the audience into believing in technology by thrusting it physically into the promise of a virtual future dominated by technological mediation.

This is a very different deviation from the work of Lissitzky (as Highmore suggests). Rather than ‘uploading’ its spectators as if they were an ‘informational component within a larger machine’, Victory over the Sun aimed to make spectacle strange by establishing a new sense of consciousness and objectivity: ‘No one seems to pay any attention to the magnificent spectacle of our cities, simply because “everyone” has become part and parcel of the spectacle himself.’ Lissitzky’s work questioned the passive position of spectatorship creating a participatory form of exhibition space in which ‘interactivity begins with interacting with the image’. Rather than overload or shock,

My space will be designed in such a way that the objects will not assault the visitor all at once. While walking along the picture studded walls of the conventional art exhibition setup, the viewer is lulled into a numb state of passivity. It is our intention to make man active by means of design. This is the purpose of space.

Lost in its translation to postwar America (Highmore suggests it was reinterpreted for the American context by Herbert Bayer for whom ‘the exhibitionary project wasn’t to provide the viewer with agency but to provide the viewer with a persuasive form closer to advertising in its pedagogic seductions’), Lissitzky’s ideas are perhaps most thoroughly taken up in the more marginal interactive experiments of artists such as Jeffrey Shaw. Shaw was active on the fringe of World’s Fairs, setting up Movie Movie 1967 in the foyer of the Montreal Expo in 1967. Combining giant inflatable structures with projections and performance, Shaw’s expanded cinema events created soft environments demonstrating the malleable boundaries between the perception and the experience of physical space. Shaw’s more recent work, such as Legible City 1991 and Place Ruhr 2000 have developed these ideas into experiments with virtual digital environments that are fully interactive. He and Peter Weibel are the directors of ZKM in Karlsruhe, an international media museum that champions new forms of digital cinema. In the 1990s Shaw saw the move from expanded cinema to virtual reality in clear terms,
but what connects the earlier interventions with the later interactive media is its prioritising of the viewer and the conditions or context of viewing. 

Legible City is an interactive tour through virtual space that makes the most of the then up-to-date technologies of computer simulation. Rather than employing tactics of shock and awe it prioritises the possible uses of space. Gary Hill’s Tall Ships 1992 responds directly to the viewer’s presence: it creates a simulated encounter in which computer-generated figures move out of the dark and appear to approach the viewer before disappearing just as they might make contact. It is a disorientating experience that plays on the personalised address of media technology and its direct impact on our senses of perception, selfhood and recognition. All of these artists employ an expanded cinema that uses the advanced technologies of the day to investigate the shifting locations of perception and participation. Arguably it would be possible to trace this expanded impulse back to the ‘immersive environments’ of the eighteenth century (if not further) to include new ‘architectures of seeing’ such as Robert Barker’s Panorama Rotunda at Leicester Square that opened in May 1793. Yet for Weibel, it is very much a question of exploring the way in which the advanced technologies of the day orientate the relationships between reality and representation, expanding into the broader conditions of reception. As he says, paraphrasing Jean-Louis Comolli: ‘The machine is always social before it is technical.’

Mirrors and Shadows
Yet, as I have tried to suggest, there is another story here. The history of expanded cinema is not necessarily a narrative of technological progress; the pursuit of an advanced technology that will eventually deliver a preconceived, coherent and all-encompassing historical objective or a secured location for the cinematic image. For many makers of expanded cinema, “technologically advanced means” refers in many cases to less sophisticated materials, less precision, less room for manoeuvre.

As with many of the crude designs and diagrams that illustrate the catalogue for the Festival of Expanded Cinema at the ICA in 1976, Lissitzky’s techniques were often simple in design but far reaching in concept. In the ‘Cabinet of the Abstractionists’, an exhibition room he designed for the 1926 International Art Exhibition in Dresden, ‘viewing surfaces could be manipulated by the visitors’ by rotating mobile showing cases. The control of light was similarly hands-on as ‘adjustable louvres could be opened or closed for different light effects’. The technique of using simple combinations of new and old media to create complex conceptual encounters is particularly evident in Lissitzky’s near-anticipation of video art and the way in which artists such as Dan Graham and Bruce Nauman play on the relationship between reflection and reality.

If one wants to produce the illusion of life in a closed room, one should proceed as follows: hang a sheet of glass on the wall and instead of putting canvas behind it, attach a periscope device.
which will at each instant reproduce real events in real colours and in real motion.\textsuperscript{50}

For many, video acted as a simple ‘mirroring machine’; yet it simultaneously acted as a device, as with Lissitzky’s periscope, for seeing around corners in space and time. Graham’s \textit{Present Continuous Past} 1974 combines video with mirrors.\textsuperscript{51} ‘On entering the constructed cube lined with mirrors, the viewers saw themselves first in the mirror and then, eight seconds later, saw those mirrored actions relayed on the video.’\textsuperscript{58} Combining mirrors and cameras – the temporal as well as spatial displacements of these ‘advanced’ technologies of seeing (the mirror perhaps being one of the oldest, while film and video cameras remain relatively new) – sets up a tension between the mirror image and its shadow. The accessibility and ease of use made video such a radical medium and so crucial to the history of expanded cinema. While cutting edge, it paradoxically became symptomatic of a more direct and hands-on approach to technology in an age where advanced technological progress was often perceived as the property of institutions, governments and other conduits of industrial power.

The temporal overlaps in Graham’s mirroring devices are reflected in what Nicky Hamlyn describes in this volume as the ‘mutable screens’ of works such as Steve Farrer’s \textit{Machine} 1978–88. A homemade device for capturing and projecting 35mm film in the round, the near-continuous phasing and circulating of the image combined with repeated breakdowns created a fleeting and ephemeral form of film production and projection. Guy Sherwin’s \textit{Man with Mirror} 1976–2009 (fig.69) combines camera, projector and mirror, again as a means of registering spatial and temporal overlaps; performed over a period spanning thirty years, the work is a moment moved – a study of time in different settings. David Dye also employed low-tech combinations of technology in order to create resonant images that elude capture in works such as \textit{Western Reversal} 1973–2009 (fig.70). Werner Nekes has maintained an influential interest in pre-cinematic devices, while in the 1990s, at the height of excitement about technologies of interaction and virtual reality in avant-garde and mainstream circles (culminating perhaps with the making of \textit{The Matrix} in 1999), Alfons Schilling, responsible for documenting many of the key expanded cinema happenings of the early 1960s, including those of Carolee Schneemann and Robert Whitman, developed fascinating devices for perception. These include \textit{Gazelle} 1993, a portable ‘viewing device’ constructed of prisms and
mirrors mounted on a wooden easel: 'the device inverts all spatial relations of the objects viewed through it: foreground becomes background, left switches to right, negative space is seen in relief. It is like being in a vanishing point and looking backwards through time.'

The bifurcating themes of the contemporary period are nothing new. Whether sophisticated or basic in approach, it is the complex relationships of technology, how they impact directly on the structures of consciousness and its environments, that are explored in the alternating forms of expanded cinema. Whether lo-fi live performances or high-tech interactive environments, works associated with expanded cinema explore an alternative relationship to technology lost in the translation to postwar mainstream media spectacle but regained through contemporaneous forms of an expanded cinema forever up to and including its limits.

1 Bruce McClure introducing Cross Fades at WKV in Stuttgart, 2006.
5 'Painted Air: The Joys and Sorrows of Evanscent Cinema', Millennium Film Journal, no.43/44, Summer/Fall 2005.
6 Graeme Weinbren, 'In the Ocean of Streams of Story', Millennium Film Journal, no.28, Spring 1995.

7 Jonathan Walley. 'An Interview with Anthony McCall (February/November, 2004)', in Christopher Eamon 2005, p.146.
8 Rhode 1976.
11 Elcott 2008, p.20. A version of this essay appears in section one of this book.
14 See for instance the transcript of ‘Expanded Cinema: A Symposium NY Film Festival 1966’, Film Culture, no.43, Winter 1966. The panel members were Ken Deyow, Henry Geldzahler, John Gruen, Stan Vanderbeek and Robert Whitman.
17 Ibid., p.138.
20 Ben Highmore, ‘Machine Magic: IBM at the 1964–1965 New York World’s Fair’, New Formations, no.51, 2003–4, p.128. According to Highmore, in the mid-1960s, ‘to be machinic... was a fantasy that tried to miraculously shrug off a body that was marked indelibly as a social and historical body. It is the fantastic (and phantasmagoric) overcoming of human social relations, through machinic displacement, that we can get to through close attention to the form of the information Machine. And it is this attention that will take us to the historical moment of the fair’ (p.132).
21 Ibid., p.153.
22 Ibid., p.158.
23 Ibid., p.154.
26 Highmore 2003–4, p.140.
30 All quotes from Lissitzky, 1986, p.40.
31 David Hall describes video as an ‘analogical mirror’, while Weibel, among others, has questioned the notion of video as a ‘mirroring machine’. Instead, Weibel saw video as ‘an opportunity for designing an artistic space that was fundamentally different from the space occupied by perceptual reality, and one that can only become a “real” artistic space through this process’. Dominika Szope, ‘Peter Weibel’, Weibel and Shaw 2004, p.187.
‘Not an Image of the Death of Film’: Contemporary Expanded Cinema and Experimental Film

Introduction: I come to praise film, not to bury it ...
In his 2004 projection performance Burn (Or, The Second Law of Thermodynamics), Bradley Eros pulls sections of an 8mm pornographic film by hand through the gate of a 16mm projector. The larger gate of the 16mm projector reveals multiple still frames of the smaller 8mm film at once, rather than isolating single frames and animating them into illusory movement as in normal projection. The film’s passage through the projector is hesitating, jerky, inconsistent; segments of the film are held in the gate for us to ponder, until they begin to bubble, melt, split and finally burn up in the heat of the projector lamp. Accompanying this imagery is Robert De Niro’s intense, brooding voiceover narration from the film Taxi Driver 1976; De Niro’s character speaks of cleansing and purification in brutal, violent terms appropriate to the spectacle unfolding on screen.

In Sandra Gibson and Luis Recoder’s 2006 film installation Light Spill (fig.71), a 16mm projector without a takeup reel spills thousands of feet of celluloid - films recently de-commissioned by local schools and libraries - onto the floor. The size of the pile depends on the duration of the installation, but it gets big quickly, unspooling in long, graceful loops around the legs of the table on which the projector sits. A member of the gallery staff must regularly reload the projector, and a helpful sign encourages viewers to notify someone if the projector has emptied itself and is in need of a new reel.

In subjecting film to ‘death by projection’, these two works might seem to be emblems of the so-called death of film - its obsolescence in the age of digital moving-image media. The idea that celluloid film is dead, or at least on its last legs, is certainly in the air now; the cause of much anxiety, speculation and far-reaching predictions about the future of cinema both in avant-garde and popular film culture.'
As tempting as it might be to interpret *Burn* and *Light Spill* as elegies for a dead or dying medium, I would take them instead as representative of a new form of expanded cinema that invests film with a new sense of significance. By amplifying certain central preoccupations of contemporary experimental film culture in general – ‘expanding’ upon them, so to speak – this new body of work participates in that culture’s ongoing self-definition and self-preservation in the landscape of ‘new media’. This essay is my initial attempt to explain how they do this, and why.

**Expanded Cinema Then and Now**

What the works I discuss here have in common is their emphasis on mechanical – that is, analogue – filmmaking: the stuff of celluloid and the mechanics of the camera and projector. While ‘expanded cinema’ originally referred to a practically unlimited field of materials and forms, contemporary work in that mode has narrowed its scope, returning the film medium to a privileged status. Eros writes that *Burn* enacts ‘a separation (or purification) of medium-specific elements to concentrate on a singular material or mechanical property. The elimination of superfluous or extraneous means. Precise focus.’  

Contrast this statement of constraint with one of the first accounts of expanded cinema, indeed an expansive one, offered by Sheldon Renan in 1967:

expanded cinema is not the name of a particular style of filmmaking. It is the name for a spirit of inquiry that is leading in many different directions … It is cinema expanded to include computer-generated images on television. It is cinema expanded to the point at which the effect of film may be produced without the use of film at all. Its work is more spectacular, more technological, and more diverse in form than that of the avant-garde/experimental film so far.  

This historical conception of expanded cinema entailed the assumption that celluloid film was just one means among many of producing cinema, moreover one that was likely being superseded by newer media. Renan began his account by claiming that all films, even those of the avant-garde, had been made and exhibited the same way since the days of Lumière, and that the limitations of this ‘time-honoured’ means of making cinema were being recognised by a new generation of artists who ‘attacked’ the assumption that cinema could only be made and experienced on specific machines and within a narrow range of technological specifications.  

Contemporary expanded work, by contrast, restores film to the centre of cinematic practice. What’s more, it draws much sharper distinctions between film and other, newer moving-image media. Admittedly, the forms this new work takes are familiar. Filmmakers perform with multiple film projectors, films and film loops, calling to mind a tradition of projection performance that flourished in the 1960s and 1970s (Malcolm Le Grice, Tony Conrad, Annabel Nicolson and Ken Jacobs come to mind). Alternatively, the celluloid strip is presented as a static object for direct contemplation: films,
cameras and projectors are displayed in installation format (not unlike the work of Paul Sharits, Anthony McCall or Takahiko Iimura). No matter how it is displayed, the celluloid strip is frequently handmade or hand-processed, often scratched, perforated or otherwise stressed; several of these works employ found footage.

But the new expanded cinema does not simply recapitulate the forms of the 1960s and 1970s, nor, in emphasizing the film medium, does it merely revive the medium-specific, materialist practices of structural and structural-materialist film. These recent works of expanded cinema suggest new meaning in film’s specificity, and new motivations for using the medium in non-traditional ways.

**Mistakes, Deficiencies and Failures**
The key to understanding these works is their preoccupation with the difficulties that the film medium presents: its clunky mechanical nature and resistance to ease of use. Also emphasized is the complex, component nature of film: the multiple chemical, mechanical and optical components and operations that require mastery, and the possibility of glitches inherent in each one. *Burn* comes from a 2004 programme of projection performances called *Mistakes*, in which Eros, Jeanne Liotta and Bryan Frye threaded projectors incorrectly (with the wrong gauge of footage, with the film upside-down, backwards, with sprocket holes reversed, etc.).

New expanded cinema works reimage these supposed liabilities of film as assets. More importantly, from these properties, contemporary experimental filmmakers, critics and programmers derive a broader set of values that define experimental film culture and set the agenda for ongoing film practice. The following description of Australia’s OtherFilm Collective, a group dedicated to experimental film in both expanded and non-expanded forms, exemplifies this conception of film and the values it entails:

The materiality of film is central to the curatorial mission of Brisbane’s Other Film Festival. Here, the imminent deficiencies of the medium – its bulk, its fragility, its increasingly antiquated technologies – are recast as positive advantages: whimsy, organicism, numinousness, historical context. Within a contemporary economics of digital superfluity, the very inconvenience of film requires, of necessity, a discipline of its creators. No other medium demands as much resort to complex formulae related to light, distance, time and chemistry: despite the evanescence of the projected image, no other medium can advance the conceit that it embodies the physical universe upon so complete a scale.\(^5\)

Along with the references to film’s ‘imminent deficiencies’ and the demands of its multiple physical components – the ‘complex formulae’ – this statement introduces another dimension in which film’s specificity takes shape: the ‘contemporary economics of digital superfluity’. Indeed, it is in comparisons...
of film with video that experimental film culture can most clearly be seen consolidating its position.

Consider, for instance, this statement by the San Francisco-based filmmaker Kerry Laitala, a self-proclaimed devotee of small-gauge film and practitioner of handmade, hand-processed filmmaking:

Cinema as a medium of reflection worthy of the same consideration that one would pay to the ‘plastic arts’ is in immediate danger as too many think that there is no difference between light sensitive mediums and digital or electronic mediums ... For those businessmen who wreak [sic] huge financial gain from supporting one over the other, they have very obvious economic motivations for trying to eradicate its presence ... They are the enemy of this genre of art. Thus, the experience of working with the photochemical mediums of film is irrevocably intertwined with a process that cannot be destroyed unless the medium of film is no longer available or accessible to those who use it as a vehicle for personal expression.

Here, the historical marginalisation of avant-garde cinema is connected with an economic assault against film in the digital age – the financial imperative to replace film with digital media. The distinctions between film and video evident in this passage are representative of ones made by numerous other avant-garde filmmakers and critics. The obvious point of distinction – between the mechanical, chemical medium of film and the electronic medium of video – organises several other qualities attributed to one or the other, imbuing them with positive or negative aesthetic and political value.

Around the concept of ‘the mechanical’ is a constellation of related concepts: film is manual, tactile, even inconvenient. As a machine, it can be taken apart and studied in an atomised fashion; its component nature is of a different order than video’s. Filmmaker Zoe Beloff has spoken about this quality of film in a recent interview. The parts of computers or video cameras, she states, are not of interest to users of these contemporary media. Students used to video’s instantaneous, automatic focus, exposure, and sound are frustrated to find that in film these features are all distinct mechanical operations that can be mastered only with an understanding of lens optics, the inner workings of the camera, the chemical composition of film stock, etc. The implications of Beloff’s comments are clear: video ‘does it for you’; with film, you must ‘do it yourself’. And each facet of the process presents the possibility of failure, or, cast another way, of the discovery of unexpected possibilities that lie outside the norm.

The Medium on Display 1: Projection Performance
I think the emphasis in current experimental film culture on film’s stubbornly mechanical, analogue nature, specifically in contrast to digital video, accounts for the predilection for live projection performances among practitioners
of expanded cinema. These performances put film’s mechanical nature on display, and cast the filmmaker as a kind of artisan/inventor/ do-it-yourself-er who has mastered all of film’s mechanical, optical, and chemical facets. This is something recent expanded cinema has in common with more traditional film work: the proliferation of optically printed, hand-processed, camera-less, stressed emulsion films in the past two decades. Projection performance brings the artisanal production processes and mechanical tinkering characteristic of such films into the projection event itself. The ‘one-person show’ that is all avant-garde filmmaking, figuratively speaking, becomes a literal one-person show, a showcase of the independent small-gauge filmmaker’s wide range of technical skills and inventiveness.

In another projection performance by Eros, Subverted Horseplay (performed with Jeanne Liotta between 1994 and 1997), various gauges of film were manipulated in the gates of different projectors, projector lenses were switched out or simply removed, and alternative lens materials like glasses of water were placed in the path of the projector beam. In addition to raising mechanical error to an artistic value, Subverted Horseplay stresses film’s almost endless atomisability. Film’s component nature is imagined by Eros and Liotta as an enticing field of possibilities, an inexhaustible permutational set with no real equivalent in electronic media.

Abject Leader, a projection-performance duo affiliated with the OtherFilm Collective, performs, in their own words, ‘live expanded cinema pieces which emphasize the analogue, the handmade, the photo-chemical and the acoustical’ (see fig. 72). Filmmaker Sally Golding and sound artist Joel Stern produce all-analogue multiple projector performances. Golding inserts herself into some of these performances, while in others the entire audience is immersed in a field of multiple projectors, dangling film loops, screens, and light beams. Describing their work, fellow filmmaker and programmer Danni Zuvela invokes the same rhetoric of medium-specificity, obsolescence, and ‘digital superfluity’: ‘Abject Leader’s deeply materialist aesthetic sets them at an angle to the mainstream of contemporary moving image work. In the era of digital proliferation, their emphasis on the analogue, the handmade, the photo-chemical and the acoustical, is pleasingly defiant, and a little perverse.’

The performances of Eros, Liotta, and Golding and Stern embody the values of experimental film by celebrating the materials, practices and perceptual effects that have been at its centre so long. But, as Laitala remarks, these values are threatened by the impending obsolescence of these materials.
The projection performances of Bruce McClure are also based on the mechanical specificities of film projection and the unique qualities of experience they produce. McClure’s performances utilise a bank of 16mm projectors, each running film loops (usually made out of only clear or black leader) projected through filters, including coloured gels and metal plates with shapes cut out of them, which McClure makes and installs in the projectors himself. A final element is an amplified electronic metronome patched through multiple guitar pedals. The pulse of the metronome mutates into furiously paced and massively amplified rhythms.

In the program notes for one of his characteristically deafening performances, McClure writes:

This presentation will consist of works that articulate the wilful glow of the projector bulb while shunning the cozening effect of cinema. The camera is now off our backs and film, typically an intermediate agent, takes on a new identity. Here the projector will be our dutiful companion perched over our shoulders motoring through time with the beat of intermittent light. Film, once criticized as out of focus, becomes recognizable. The projector, whose machinery, optics, and sound system have been shunted to the wayside, re-enter the theater not as cinema’s silent and faithful servant, but as a star.  

Though McClure’s emphasis is the mechanical projector and its tactile qualities (‘motoring through time with the beat of intermittent light’), he seems to see his work in terms similar to Eros’s – as a reduction, the ‘elimination of superfluous or extraneous means. Precise focus.’ Again, the unique physical characteristics of the film medium generate the metaphors the artists use to describe the experiences produced by their work. McClure has specifically acknowledged this uniqueness elsewhere: ‘The intermittent light of the projector has a certain quality that shouldn’t be completely forgotten. One of the things I like is that the mechanisms of the machine create opportunities for intervention that don’t exist in video projection.’

Gibson and Recoder have produced a series of acclaimed projection performances, in which the artists manipulate two side-by-side 16mm projectors loaded with abstract, handmade film loops. Simple acts such as slow and subtle changes in focus, slight movements of the projectors, and manual interference with the projector beams, produce a surprising array of visual effects. Indeed, many of the performances I have described here partake of a kind of illusionism and an indulgence in visual pleasure that distinguishes them from many earlier works of expanded cinema (in this respect they are closely related to the projection performances of Ken Jacobs, who began his pioneering Nervous System performances in the 1970s). No matter how firmly rooted this work is in the materiality of film, it still produces a sense of wonder in viewers, who frequently ask the artists how various visual effects were achieved. This is a point to which I will return.

‘Not an Image of the Death of Film’
I have focused on a younger generation of artists, but it should be noted that several filmmakers who did projection performances in the 1960s and 1970s have revived their work in recent years. Beginning in 2000, Guy Sherwin adapted several of his handmade optical sound films from the 1970s into live performances. His films, like many that came out of the London Filmmakers Cooperative (LFMC) at the time, aimed to demystify filmmaking labour, which meant an emphasis on film grain, sprocket holes, the screen, and chemical processing. Sherwin has described the abandoning of film for digital media as an opportunity for independent filmmakers to produce new work, and, moreover, to mount a resistance to the ‘economics of digital superfluity’ that extends the avant-garde’s long time oppositional stance to mainstream media. This includes collaborative efforts at constructing experimental film culture, characteristic of the LFMC:

With my recent works I am returning to the ideas of the 70s, but now with an emphasis on live performance and multi-projection. 16mm projectors are cheap, having been abandoned in favor of digital technologies, and this has increased possibilities for film projection as live event. The mass migration into digital media have benefited artists working with film who have been able to consolidate their equipment resources and/or work co-operatively, as in the early days of the LFMC. 12

The Medium on Display 2: Film Installations and Objects
The display of celluloid cinema takes even more direct forms in the work of filmmakers who produce film installations and objects. Of course, moving-image installation is a broad category, and is more prevalent in the art world than in the experimental film world. What makes the works I have in mind distinct is that they present the stuff of celluloid cinema directly rather than mediating it through projection (see fig.73).

Jennifer Reeves’s Light Work Mood Disorder 2007, which can either be performed as a live multiple-screen performance or displayed as an object, is made from bits of found educational footage sewn together, decorated with pharmaceuticals, and otherwise hand-altered. In her work and writings—which can be found on her blog Not Dead Yet (I love 16mm) – Reeves draws an analogy between film and the organic world, a connection common among contemporary filmmakers who hand-make and process their work. 15 ‘I think it actually has this connection to the human body,’ she writes, ‘the skin, the aging, the imperfection, the color, the beauty. It’s more surprising, organic, imperfect.’ 16 The analogy rests, again, on the distinction between the tactile quality of film and ephemerality of digital media; film’s inner workings can be externalised in ways those of digital video cannot, a variation on the theme
of the component nature of film we find in Eros, Liotta, Beloff and the OtherFilm Collective.

Joel Schlemowitz has mounted a series of installations based on arcane cinematic technology, including the Filmscrolls series, 2000–ongoing, which is playfully suggestive of film’s origins in art, science and mysticism, and the Grand Magic Lantern Exhibition 2003 in which cycling serial imagery from zetropes and phenakistoscopes are projected on the walls. In similar spirit, Kerry Laitala’s Retrospectroscope (constructed in 1996) is a giant phenakistoscope made from transparent photographs mounted between large sheets of plexiglass (fig.74). It was designed, according to Laitala, to intervene in film’s obsolescence by rediscovering the scientific discoveries and mechanical principles that gave birth to film and that were, briefly, the chief source of film’s pleasure before its narrativisation. Such references to early cinema and pre-cinema represent another strategy in recent experimental film, in both expanded and non-expanded form, to signify those qualities of the medium that filmmakers have embraced: its machinery, component nature, its tactility, and its relationship to the industrial-age artisan, inventor, tinkerer.

Gibson and Recoder have also produced ‘object-based’ cinema, including a series of works in which 35mm film strips are stretched across vertical racks or wound through room-sized loops. And, of course, this brings us back to Light Spill, which presents projector and film, normally out of view of the spectator, as objects for contemplation in their own right. Gibson and Recoder address this in a statement that accompanied one iteration of Light Spill:

Film projectors and celluloid are the material base of our constructions in light and shadow, the elemental properties of cinema. These things are deeply imbued with a history of viewership in the dark of the theater. To remove it from darkness is to flood this history and cast a certain illumination upon it. A certain exposure. Light spills in the shifting of film from its native darkness in enclosed chambers (camera obscura) to the uncanny openness and defamiliarized illumination of installation. We are exploring the shift, elaborating the displacement, recasting the light mechanics of a peculiar estrangement of the medium. The art of cinema, yes. But more timely: the becoming cinema of art.
I find this statement to be most telling. For one thing, it suggests yet another way in which contemporary experimental film culture defines itself – within and against the phenomenon of moving-image art in galleries and museums. Though I do not have space to address this here, I would at least point out that the gallery represents a very different set of ideals and practices, including economic ones, from those of experimental film. This distinction, like the one between film and digital media, opens up a new range of issues in the historical definition of that thing we call ‘avant-garde film’.17

Gibson and Recoder’s statement also speaks of an uncomfortable encounter between the stuff of film and the space of the gallery, painting a picture of an unwieldy, messy medium in a clean, slick space that does not quite know what to do with it.18 The unspooling of film onto the floor takes on new connotations in the context of this interpretation, and may be what prompted Recoder to say, in conversation, that Light Spill was ‘not an image of the death of film’.

**Conclusion: The Meaning of the Medium**

I have claimed that newer works of expanded cinema call to mind earlier ones, but I have stressed the differences because of what I think they tell us about the significance of film for contemporary filmmakers. In closing, I’d like to indicate – just briefly – one final, crucial point of difference.

While emphasising film’s material in ways that are reminiscent of structural film and certain strains of expanded cinema (that of the LFMC, for example), recent expanded cinema opens up a wider range of possible meanings of work made in a ‘materialist’ vein. Indeed, meaning itself (that is, reference to anything beyond film itself) was something regarded with suspicion among materialist filmmakers and theorists of the 1960s and 1970s, as it seemed inextricably bound up with all those things that mystified filmmaking labour: representation, illusionism, narrative, spectacle. But as the 1970s wore on, many filmmakers and critics began to question the jettisoning of meaning by the programme of pure film-specific research. The implication was that the materialist resistance to meaning produced an overly narrow, easily exhaustible style doomed to repeat what critic Deke Dusinberre referred to as the ‘tautology’ of ‘film about film’.19 The associational territory that current expanded cinema explores – analogies with nature, the organic, the body, references to film history, politically charged distinctions between film and video, even illusionism and visual pleasure – restores the meaning to a highly material cinema. This new field of meaning attests to the film medium’s ongoing validity and vitality in the digital age.

It also underwrites works that do not employ the film medium itself but that manifest the unique qualities associated with it. From film’s rock-bottom material characteristics, filmmakers have developed a nexus of ideas, concepts, metaphors, analogies and values that ‘paracinematic’ works – those that self-identify as filmic without employing the medium itself – can reference. In doing so, they reassert the value of the film medium even as they take other forms, such as Laitala’s *Retrospectroscope*, Eros’s filmless projection
performances with Liotta, Gibson and Recoder's work with empty projectors, and Schlemowitz's arcane film-related objects. As practised by these artists, paracinema, though freed from the immediate material constraints of film 'proper', nonetheless references what film has come to mean.  

But one meaning is absent from this work - the symbolisation of the end of film. Contemporary expanded cinema, in other words, is not an image of the death of film.

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1. For a few of many examples, see Tess Takahashi, 'After the Death of Film: Writing the Natural World in the Digital Age', Visible Language, 2008, n.p.; the online journal of experimental media Incite!, no.1, http://www.incite-online.net/issueone.html; and, In Focus: The Death of 16mm, Cinema Journal, vol.45, no.3, Spring 2006, pp.109-40. These essays and journal issues, among many others, address such questions as whether or not film (especially small-gauge film) is obsolete, why film is worth preserving, differences between film and digital, etc. For mainstream practitioners' perspective on these issues see John Bailey, ASC, 'The DI Dilemma, or, Why I Still Love Celluloid', American Cinematographer, no.69, no.6, June 2008, pp.92-7; Roger Deakins, ASC and BSC, 'Filmmakers' Forum: The DI, Luddites, and Other Musings', American Cinematographer, vol.88, no.10, Oct. 2008, pp.78-83; and John Toll, ASC, 'Letters: Another Grumpy Cinematographer Speaks Out', American Cinematographer, vol.88, no.11, Nov. 2008, p.12. See also The Digital Dilemma: Strategic Issues in Archiving and Accessing Digital Motion Picture Materials, a 2007 publication of the Science and Technology Council of the Academy of Motion Picture Arts and Sciences.


4. Ibid.


9. Ibid.


15. Kerry Lahtala, from the 'Film and Video Art' section of the Western Connecticut State College website: http://people.wcsu.edu/mccorney/vfwa/L Retrospectoscope.html.


17. For an extended consideration of this point - one that includes a discussion of film's specificity - see my essay 'Modes of Film Practice in the Avant-Garde', in Leighton 2008, pp.182-96.

18. Gibson and Recoder also employ metaphors of the organic in descriptions of Light Spill: The organic nature of film is the long intestines (umbilical/spinal chord) unwinding and slithering silently behind our backs (our spines); wrapping its infinite coil (or noose?) ever so slowly around our necks! The death of film is not the death of cinema. Disembodied/disenmeshed from an apparen(though not transparent) darkness, film is cut loose from its immaterial bond (its false disappearance, its fake death) and made to roam the world for the first time.' From Cinema/Film, in World Picture, no.2, Autumn 2008, the online journal of the Oklahoma State University English Department. See http://english.okstate.edu/worldpicture/WP/2_Gibson_Recoder.html.


20. Lahtala, Eros, and McClure have all referred to their work at one time or another as 'paracinema' or 'paracinematic'; see, for example, Eros 2005. For further definition and discussion of paracinema, see my essay 'The Material of Film and the Idea of Cinema', October, no.105, Winter 2003, pp.15-50: The 'Paracinema' of Anthony McCall and Tony Conrad, Dietrich Schuememann and Alexander Graf (eds), Avant-Garde Film. Amsterdam: Rodopi, 2007, pp.555-92; and Esperanza Collado, 'Paracinema: Film Beyond its Limits', a text delivered at a masterclass at the 2008 Darklight Festival in Dublin, Ireland. See http://alectogdn.history.com/entry/ParacinemaFilm-Beyond-its-Limits.
Interview by Duncan White (London, May 2008)

Duncan White: In your work the projector seems to be as important as the camera. Would you say that this was true?

Guy Sherwin: Definitely, particularly in recent works – like the projector performances that I’ve been doing with Lynn [Loo], which we call ‘Live Cinema’.

DW: There’s quite a tradition of that type of filmmaking isn’t there?

GS: I think there are various traditions, but the one that means most to me, of course, is the work that came out of the London Filmmakers Co-operative in the early 1970s, starting with Malcolm [Le Grice], William [Raban], Annabel [Nicolson], and Gill Eatherley – and a few others, people like Fred Drummond and David Dye. I was slightly later. I picked up on that stuff and started to do it myself. I really liked the work they were doing in ‘expanded’ cinema (and still do) because it’s not too spectacular, it’s not trying to impress. And the processes aren’t hidden, the work comes out of the materials that are being used, you can see how the work is made – it’s all laid out. It’s also very visually interesting and engaging, and surprising too. But it’s not like a magic show, there’s always an interest in perception and trying to get to the root of how we see and how we process information. It’s not narrative either – narrative doesn’t come into it. It’s partly about trying to find the forms that aren’t narrative. [laughs]

Lynn Loo: I watched Guy develop Mobius Loops ... I thought it was a form of narrative, because there’s a development, isn’t there? But you are also consciously thinking how do you introduce one thing to another. You know, you say, ‘OK, I’ll start slow with this, then I’ll introduce this, and then you get to this ...’

GS: But that’s just like music, isn’t it? I mean, there are so many ways that music is organised, but if you take, for example, a classical sonata form you have theme A, which might be a strong theme. And then you have theme B, which might be a lyrical theme, and then you bring in some kind of conflict and it comes to a climax, you know, and it resolves. Is the sonata a narrative form? I don’t know if it is.

DW: So, why is the mobility of the projectors important to you? Was it always?
**GS:** No, it's something I've introduced since working with Lynn. She started moving the projectors in her own work. It looks good. [laughs] I have to use this art school phrase – 'it works'.

**DW:** I think it's the liveness, isn't it?

**GS:** Yes. It's important to me to still be working with analogue equipment, such as the 16mm projector, and really make use of its live capabilities. In some ways the production of the work is in the performance itself. It's very different from using those image-moving functions on your computer or whatever. It's about asserting the strengths (of film) as a live event – and somehow that's always a bit surprising. I've always enjoyed the cinematic event. You're in a room with other people, there's a darkened space, we're all looking at the screen – concentration is complete. There is something about the engagement of people around you that's really interesting.

As part of these programmes that we've been doing I often show the mirror piece [*Man with Mirror* performance, 1976*] and people are always really enthusiastic about it. It's to do with ageing, I know it is. It's become something different from when I first made it. We always have to put it at the end of the show, because you can't do anything else after it.

**DW:** How did you conceive of that piece? How did it come about?

**GS:** I'd seen other performances where people were projecting themselves, as it were. The one I think of is Annabel Nicolson's *Reel Time* 1973. She had made a film loop of herself at a sewing machine. The loop was going through the projector and into the sewing machine, and she was sitting at the sewing machine punching holes into the image of herself (which was a weird thing to do anyway – I was intrigued by that). At that point I was interested in the screen and different ways of using the screen as an active surface. And the simplest thing I could think of was to pick up the screen and move it. I'm not sure where the mirror idea came from but I guess it came out of the idea that the screen could be transparent – *Paper Landscape* 1975*(made a year earlier) does have a transparent screen. There's the idea of light, and what happens to light when it falls onto a transparent surface – it'll pass through. If you use white paper it will stop it; if there's a mirror it will reflect it. These were the kind of formal considerations about light and the surface it hits. How much is retained or reflected or passes through? And after having got that basic idea, there was the idea about projecting it back onto myself [repeating the same actions] – these kind of ideas were around a lot. I think it came out of a minimalist aesthetic of 'Don't introduce too many elements, just try and do it with the very simplest thing you can.' At that time it was nothing to do with my getting older of course, because I would have been almost the same age when I first performed it in 1976. It was more to do with taking an outside space – a landscape, some trees on Hampstead Heath – and then projecting it
into an interior closed space. So, it was a dialogue between what you know to be on the outside and its projection on the walls inside. There are elements of choreography that come into it. Once you had the basic idea that you’re going to move the mirror, how do you move it? I was thinking about rectangular shapes and their different sorts of orientation, so then it becomes a question of programming its movement. I could have started by having the mirror facing forward. But it seemed best to reveal it gradually. Things like that.

**DW:** So, you scripted all the movements in a way.

**GS:** I didn’t script them. But I sort of went from this movement, to this movement. You have three dimensions. You’ve got the frontal plane and those movements. Then you’ve got the left/right angling. Then you’ve got the up/down angling. Those make up the three sections at the beginning, and then after that I improvise how they relate to each other – also adapting it to the space around. When I’m projecting it I’m also watching what’s happening in the mirror. People are always a bit surprised that I can keep it more or less in sync [with my filmed self] but it’s actually very easy. [laughs] Because I’m seeing little glimpses off the mirror of the image on the wall behind – so I can time it exactly.

**DW:** It’s almost like you’re performing it as you’re watching it, you’re part of the audience. This act of watching your own work.

**GS:** I’m not watching much. Just the very edges. I can see a hand coming at a certain rate and say, it’s going up, so then I’ll do the opposite movement. So, if it’s going that way then I’ll go the opposite way. I could follow it exactly if I wanted to – I could have my filmed hand moving the mirror in one direction and I could do exactly the same with my own hand but then it wouldn’t be very interesting – because you need the slight confusion, or delay. Then you get the squeezing and expanding of the white shape, which I didn’t properly realise was happening until I saw it on video much later (in 1985 I saw a video recording of it for the first time). That’s one of the nicest things about making work. Things happen that you don’t anticipate.

**DW:** But with the mirror piece – the mirror being a kind of device of mimesis – by holding the mirror up there’s a copy of what there is, or a reflection of what there is.

**GS:** That’s something that hasn’t really been mentioned. Men looking into mirrors is a bit of an odd one anyway, isn’t it? [laughs] I guess it’s not a very manly thing to do.

**DW:** Maybe it’s just the idea of reflection. Reflection has that kind of existential heritage to its work. ‘Male’ writing or a ‘male’ kind of self-examination maybe.
GS: Reflection in that sense. I see what you mean. But if you said: ‘Woman with mirror’ – that’s quite a clichéd image, in a way. ‘Man with a mirror’ is not a clichéd image. It breaks the stereotype.

DW: Traditionally in art, the ‘female’ is an object of male looking, something to be looked at. ‘Man’ as such wouldn’t necessarily be equipped with the mirror because ‘man’ is not the object. He’s the one that does the looking. That’s how the relationship is defined, traditionally. It relates I guess to filmmaking, in that the filmmaker is typically involved in some sort of observation of the world, or some sort of watching or looking (particularly at women). But through that piece you subvert that relation, and the watching becomes ... you don’t know who’s watching who, or where the watching is.

GS: That’s true.

DW: So, *Paper Landscape* came first? How did that come about?

GS: Well, as I mentioned, I was interested in the screen and the screen materials. I was trained as a painter so I was used to stretching canvases, painting. I wanted the kind of feeling in the performance that the paint was actually ‘painting-in’ the landscape. Sometimes when I apply the (white) paint from behind the polythene screen, if the image is already on the screen, it might appear that the brushstrokes are painting with green paint. The other elements to that piece are the cutting through of the screen: walking up to the
camera, running into the distance – creating an illusion of depth. You know, film is an illusionistic device par excellence. For me the material aspect of film is only interesting in relation to the fact that the film is an illusion as well. It’s both things at once – it’s an illusion and it’s material. That’s what’s really interesting about it. So, rather than deny the illusionary aspect of the film, which I think is Peter’s [Gidal] idea, it’s presented in all its illusionary-ness – I’m both making the illusion and destroying it. There’s a dialogue between image and material. In Paper Landscape it’s done in quite a literal way, but in other ways I think all my work has that interest – a flicking between illusion and material. The attention flips from one to the other.

**DW:** I’m always intrigued by the way you cut at the horizon line. [In performance, Sherwin cuts the screen when the filmed figure disappears; Sherwin himself then climbs through the screen.]

**GS:** I don’t always do that. I never found the right way to cut the screen. Sometimes I’ve tried to cut around the shapes, and sometimes I just slash it through quite quickly. It’s partly trying to cut it in such a way that I can get through the screen and not get covered in paint. [laughs] That’s one of the problems. It’s got to be fairly quick because I don’t have much film left at the end of the roll. I think I start the cut at the point where I’ve run off and disappeared into the distance and that’s where the knife goes in. I move from that position.

**DW:** Were you interested, or have you been interested in early filmmaking; the Cinema of Attractions? Like Lumière and Méliès? Was that an influence?

**GS:** I’m sure there’s quite a lot of connection there. It’s partly the fascination with movement and the simplicity of the technology that they used – the idea of using the same instrument to record as to project, as the Lumières did – that was even simpler than it is nowadays. And having the projectionist in the room, cranking the projector, the whole performance element. There’s probably a lot in common there.

**DW:** Were you thinking about that at the time?

**GS:** With the Short Film Series 1975–ongoing, probably. I started it around the same time. The Short Film Series is very important to all of my work – it’s like a thread running through it. I think the fact that I confined myself to one reel was probably a conscious influence of that early period. But I didn’t know as much then as I know now about how those films would have been presented – that understanding came a bit later. As far as I was concerned, they did one-reelers and that’s what I did. Warhol did one-reelers too. Again it’s that material thing – you stick the film in the camera and that’s the amount of time you’ve got, three minutes. You work with that constraint, which is actually quite a decent amount of time.
1 A typical programme would include works for anything up to six projectors, and involve live manipulation of the projectors. Several of the works are made without a camera. To view extracts see Guy Sherwin, Optical Sound Films 1971–2007, book and DVD, London: LUX Publications, 2008.

2 *Man with Mirror*, extract from Lux 2000: www.youtube.com/watch?v=VXD7UMIAixg

3 *Paper Landscape* at Les Voutes Paris 2006: www.youtube.com/watch?v=r6RZ1_Nzyho

4 Instructions on how to make and perform your own version of *Man with Mirror* have been put together by Sydney-based group Teaching and Learning Cinema, and can be found at http://teachingandlearningcinema.org/media/documents/TLC_sherwin_poster_4_by_3_version_5.pdf

5 There is another related performance, *Configuration* 1975, which uses one fixed projector and one hand-held projector.
On Expanded Cinema

Karen Mirza and Brad Butler

London, May 2008

Karen Mirza: For me, expanded cinema is the spatial aspect of the moving image. I’m interested in the relationship between time, tense and duration. I want to incorporate a past within a present moment – that kind of complex relationship with time that is within either conceptual or formal subject matter. Then there is the physical expansion, in that it expands outside of just one screen, taking on the specificity of its context, whether a neutral space, an underground car park, an auditorium, or a museum or gallery. The work becomes a reading of the work itself. It’s not simply a form of display. The spatial or architectural element is an integral part of the meaning that the work explores. It expands in relationship to a temporal, or filmic, cinematic moment.

Brad Butler: Expanded cinema can also really problematise spectatorship. We did a project called Instructions for Films based on the Yoko Ono piece, and one could argue it’s expanded cinema even though it’s in publication form, because it’s about the idea of what cinema is. So, I think of expanded cinema in those terms. It’s useful to keep it as open as possible rather than try to force through a definition, because I feel that as soon as we reduce it down to a single term we create certain creative limitations.

KM: I feel that my strongest connection to the avant-garde is through expanded cinema, because it explores and allows different kinds of performative action or ways of engaging with the body. Within the ‘cinematic’ single-screen format of cinema you have only one, relatively fixed, ocular experience. But you can also involve the maker’s body in relationship to the work, or you have pieces that are critically immersive, rather than immersive in the sense that ‘narrative cinema works as a window on the world taking you away from yourself’. I’m drawn to critical immersion, where you’re inside the cinematic moment, rather than standing outside looking in, or using it as a portal, as a window. My interest has always been in work that doesn’t situate itself neatly into the cinema or the theatrical space or the auditorium. It is removed from the cinematic context, still in dialogue in some way with cinema, but interrogating the exhibition space.

BB: Expanded cinema is also exciting because its parameters are still moving, and I’m interested in working out contemporary uses of this fluid language. I’m also really interested in picking up trajectories of thought. I study what
happened in the past, to work out where ideas were channelled, and why. And then I try and think very deeply about how I would want to engage with these ideas. A tension for me is trying to separate expanded cinema from ‘what it does’, to think about what it ‘is’. To look beyond the product, to embody the thinking, to amalgamate the process. I guess I like the idea that it is a way of thinking that questions where cinema begins and ends.

**KM:** Guy Sherwin’s practice is constantly mutable [in the way Sherwin returns to earlier works], whether it’s through two projectors or five projectors or with a live element or with performance. Every time that Gill Eatherley performs *Aperture Sweep*, it’s that absolute etherealism of the live event that is the most interesting and problematic question, in terms of archiving, collecting, conserving – all those things that come from object-based practices of sculpture, painting, photography, printmaking. And that’s why I’m intuitively drawn to it, because it’s still problematic, it’s not been fixed into regimented form.

**BB:** And it’s still a provocation whenever the audience experiences the illusion that they are producing a work ‘with’ the maker. Christian Metz argued that for the viewer – even in a very illusionistic film – there is this feeling that you’re actually producing the film itself. That is actually part of the experience, in the same way that I’m talking now and our reality is happening in time. Even though you don’t have control of it really, you actually have that feeling that you might.

**KM:** I think these issues are in *The Glass Stare*. It’s a three-screen installation with two back-projected film loops on two separate screens, and a third screen in front of them showing a composite image made up of the reflected light from the two back projections. It functions in the installation just as the optic system does in our heads, in the sense of projected and reflected light. In the two back-projection loops, one positive and one negative, images of a figure facing the camera are upside-down, but they are the right way round on the third screen. It’s almost an undoing of photography, of the photographic moments of fixing or embalming a moment in time. My interest in this got me excited about the dematerialised art object, how to fuck up the system of commodification by making a dematerialised art object. And that’s why expanded cinema is still in that awkward space and causes the same headache for museums, trusts, foundations, collectors. It’s a very ephemeral art practice.

**BB:** I think I’m not so interested in what it is. I’m interested in how our knowledge of it is imbued with meaning. Some things in expanded cinema are happening outside language because they’re almost sensorial impacts. They’re not something we can just transfer into words in that way.
**KM:** In the 1990s, videos were being shown on loops in galleries, without any relationship to the viewer. So if it was a narrative piece and you came in halfway through, you missed half of the content, but it didn’t matter. When we made *Non Places* 1999, we wanted it to be non-linear and linear at the same time. Also, it was made for a public space, not the auditorium. It was made to be projected back into the space [represented] in the middle of the film, the Marble Arch underpass, and for that reason it was projected onto the wall. People were arriving from different points, from up above, from different tunnels, and there was a kind of conflated sense of what was live and what was recorded – and it was stopping people in a space, arresting them to engage with or recount their own memories, and so it was an agent in transforming the space. It inverted the screen, inverted the stage, so this kind of everyday moment became quite a theatrical space, but in its banality.

**BB:** That’s why it was screened in the middle of the spaces where it was shot. But the cinematic experience in the cinema does that to you too, because inherent in the construction of film is that the actual experience in space is transferred into the cinematic experience of being in the auditorium. At the very end, picture and sound are—pphhp!—just ripped away from you, and you realise where you’ve been. It’s a mental space – experiencing film. It’s a journey from one point to another, but it’s the journey that’s crucial. You fall into it as you would into a non-place, you’re focused on where you’re going rather than where you are. But in the expanded cinema you’re actually asked to stop. I think the beauty of *Non Places* is that you are asked to stop dead in the space within the film, and the ambiguity of whether you’re in the film or not is right there.

**KM:** *The Space Between* 2005 is formally abstract, but it is located in real recording. There’s one roll that is the camera, my body, hurtling through space in a single frame, constructing a rhythm that is reworked in the studio on the optical printer, breaking three-dimensional space into a two-dimensional space. This produces spaces that couldn’t possibly exist, in the real or in the imaginary. But in *Where a Straight Line Meets a Curve* 2003, the two screens are about a process, not about a concept. We wanted to explore not just the process of filming the space, but how to reconstruct one almost homogenous space across two screens, a panoramic or super-scope type of cinematic. We had read *The Yellow Wallpaper* by Charlotte Perkins Gilman. A woman wants to write, but she lives in a time when that intention or desire is considered delusional and she is confined to a room. We were interested in the room and the film, the mental space and the actual space – the afternoon sun creates dramatic shadows and it looks like a set. A father and son come to mend the windows, and we just filmed it. These actions occur as they would happen, it’s just that we turn the camera onto ourselves. It was the first time that we had appeared in our work and we were having conversations about our collaboration, and the gender politics of collaboration, as we gazed into the camera.
BB: For our new work, *The Autonomous Object?*, we've shot forty rolls of film, each executing an idea that deals with space. The curators will decide where the screens will go in the space or the expanded format. Its expansion will depend upon their ability to read and interact with the instructions, so you'll have this constantly unfixed set of relationships between different spaces as the works get installed, so it unfolds. And it is ephemeral, never ending in that sense... which is one philosophy behind how we are currently approaching expanded cinema.

KM: Brad and I talk about these things differently because we have different entry points into our interests. This particular work is the closest I've got to thinking about objecthood, or film as object. Brad talked about the screens in the new work, but there are also props and objects, such as sheets of reflective surfaces that stand in for screens. Some use glass surfaces, and some plain colour. At its most collapsed articulation you'd have one screen, one standing screen and one prop, which would be a piece of card, a coloured card, a mirror, or glass, so the relationships with those elements are fluid.

BB: The project was very much to do with - this is my language maybe - to do with [degrees of] control. We filmed passers-by in London, isolated or in groups. We were in control of the camera, but not what happened in the image formation. One of the things we got interested in, in India and Pakistan, when filming people and scenes in the street, is how you collect people around the camera, outside the frame. It’s not so evident in the UK because passers-by tend to actively avoid each other’s gaze, but elsewhere you often collect a whole body of people who start to interact with the shoot in such a way that they take control of it. This issue over control and authority is leading us to whole new areas of work.

KM: Again, the everyday supplies the materials and resources, the tools. We use what's around us. We were living in that room in New York. We looked at a lot of places, but the space that we rented to live in finally became the location for the film. I don’t really think about narrative. For me, the narrative is a byproduct of the things that I think about. You can’t avoid narrative when you have one shot next to another. *Where a Straight Line Meets a Curve* started with a narrative text and then we threw it away, and went through more rigorous, conceptual, formal ways of thinking about the image and the sound. But by throwing it away you come closer to it, because the psychological content of the relationship between image and sound is really strong, and in terms of narrative cinema at that time we were thinking about how sound influences how you feel, your emotionality. Thinking about space in relationship to performance, I want to incorporate these different languages where the agency performed and staged before the camera, where the viewer is asked to experience the politics of representation for themselves.
Expanded Cinema: Proto-, Photo and Post-Photo Cinema

One must free the cinema as an expressive medium in order to make it the ideal instrument of a new art, immensely faster and lighter than all the existing arts. We are convinced that only in this way can one reach that poly-expressiveness toward which all the most modern artistic researches are moving.¹

I like to imagine a philosophy of experimental cinema, which emanates from expanded film and the cinema of attractions, but includes the electronic, the computer, the active spectator, sculpture, collage, dramaturgy and representation. I use the term ‘cinema’ not to describe film per se, but to signify a wide-ranging history and philosophical discourse. Importantly, the term is not yoked to the material conditions of a medium, and the cinematic experience can cross media boundaries or be achieved through a range of media combinations. A cinematic configuration could involve intermedia, performance, spectacle, video, art and technology in addition to film, and could be located within the ‘black space’ or the ‘white cube’ of the gallery.

Distinguishing film from video and emphasising ontological differences was particularly visible in the polemics of the 1970s – though since the late 1960s, and extending the scope of expanded film, it was artists working with video and the electronic who were pushing the boundaries of moving-image and cinematic spectacle, technological innovation, interactivity and performance. Furthermore, testing new paradigms of the then new media, many of these artists gravitated to video from film, including VALIE EXPORT, David Hall, David Larcher, Malcolm Le Grice, Tony Sinden and Peter Weibel among others. The then-polarising historical debates of ‘film’ and ‘video’ overlooked the fact that artists were free-flowing individuals experimenting with different kinds of media, and more often than not were working with and expanding both technologies.

With the advent of video in the mid-1960s, and later its incorporation with trigger devices, there was a technological means by which to control relatively basic audience interactive electronic closed-circuit events, and trigger-based feedback. For example, Stephen Partridge’s $8 \times 8 \times 8$ 1976, with its automatic video switcher, a programmable unit with a sixty-four-way matrix of inputs and outputs, or David Hall’s Vidicon Inscriptions – The Installation 1976.² Though this is not to suggest that triggers were anywhere
near as complex as the computer-based interfaces or matrices in current practice, they did enable the audience to be an agent of change. The technical flexibility of video made possible the stage-management of time and space, pioneering the way for subsequent developments in interactive media and participatory cinema. Video lent itself to delving inside its mechanisms, to looping and networking multiple channels, or to combining recording and playback technologies as gallery artefacts. It could be reviewed over and over, rewound and fast-forwarded, and the recorded image could be interrogated by the artist and viewer from both sides of the camera, to evaluate the authentic relative to mirror-image or recording, and the direct address of self relative to total artwork and context of viewing. In this sense, if film was a technology of the indexical, video gave artists the means to articulate a time-based language of the unseeable. Importantly, participatory CCTV work covered new ground in the relationships between context, spectator, screen and artist. Play was incorporated as a dynamic aspect of the viewing experience, and the audience could inhabit the artwork and actively engage with the representation. Furthermore, broadcast into the private space of the viewer, the video artworks networked and streamed through the televishual conduit had ambitions to exist beyond the gallery space. Inherent in many of these works, was the interruption of the public broadcast, challenging the assumption of the televishual flow and exposing the mechanism of the one-way channelling of information.

The purest of television interventions played knowingly with the assumptions of mass entertainment and the popular display of the ‘telly’. These works have a direct descendent in interventionist internet art. Monitor-based works, which were more widespread than projection until the late 1980s, resembled the characteristics of optical devices such as the kinetoscope, praxinoscope theatre or kinora, whereby the audience looked *in* on the image. Similarly, the monitor and playback as an enclosed system both generated and displayed the image. Key to this premise is also the monitor’s location *outside* the cinema theatre and its temporary exhibition within the gallery space, where the audience would walk around the work – i.e., the ‘cinema of attractions’. Therefore, unlike ‘front-facing’ configurations, in the closed-circuit environment or monitor-based installation, the audience’s physical engagement could be actively orchestrated and the act of viewing integrated as process, beyond the boundaries of the screen. For example, Ira Schneider’s *Wipe Cycle* 1969 consisted of a camera and nine monitors with displays controlled by live and delayed feedback, which, as Schneider described, ‘was to integrate the audience into the information’. David Hall’s *Progressive Recession* 1975 incorporated nine monitors and nine cameras, playing with the perception of the viewer in time as their image was fed back and juxtaposed within the sculptural alignment of monitors in the space. Dan Graham’s *Opposing Mirrors and Video Monitors on Time Delay* 1974 involved two monitors, two mirrors, two video cameras and a time delay to switch the viewer’s image unexpectedly from one monitor to the next – the monitors were placed at either end of the gallery space facing mirrored walls and the
viewer would walk from one end of the gallery to the other to see his/her image finally appear on the monitors. Many artists were exploring video as a sculptural material at this time, expanding the artwork beyond the screen into the gallery, as evident from the vast number of works in the exhibitions of expanded video Video Skulptur Retrospektiv und Aktuell 1963–1989 at Cologne, Berlin and Zurich in 1989. When video projection was combined with time-delay devices to interrupt real time or prerecorded images, or switchers to mix between channels, it was approaching a technologically active and semi-immersive cinematic environment. Lynn Hershman Leeson’s Lorna 1984 was notably one of the earliest interactive video laserdisc works by an artist, and enabled the audience to navigate multiple and non-linear strands of narrative via a remote-control unit. With America’s Finest 1992–5, Hershman included an M16 rifle as a camera/trigger, triggering a projection of the audience holding the gun, fed back into the gun’s sights, and mixed with horrific situations where the rifle was used. Gary Hill’s Tall Ships 1992 (fig.76), used sixteen channels of video, sixteen monitors and projection lenses, sixteen laserdisc players and a computer-controlled interactive system to create a projected environment whereby the audience’s physical activity directly affected the images. In a dark corridor the audience could move towards the projections of individually interactive characters: ‘as the viewer walks through the space, electronic switches are triggered, and the figures walk forward until they are approximately life size’. Tall Ships placed the audience in a central position both metaphorically and physically, so that the image movement was related specifically to the audience movement. The audience was an inherent component of the work, as much a part of the visuals as the projected image, the projected subjects meeting with the real subjects. As Hill explains, ‘I wanted interactivity to be virtually transparent to the point that some people would not even figure it out.’

Drawing from the practices of expanded film and video, and current participatory and semi-immersive cinema that the viewer can inhabit, is the technological reinvention of pre-film forms of cinematic display, such as the panorama, camera obscura, phantasmagoria. Digital and computer-based systems and interface development have widened the sensory and tactile possibilities for audience participation with the moving-image artwork. The corporeal body can be central and the subject – as an active becoming rather than a passive given – can be both participant and accomplice in the composition of images. Having a tactile relationship with the images and physically intervening with the screen space, the structure of the montage is ultimately theirs. By this dynamic intervention,
the audience discontinues linear narration and extends the artwork beyond the boundaries of the screen. As such, these works continue the tradition of the avant-garde, which has played with narrativity, cause and effect and notions of dramaturgy.

In Grahame Weinbren’s Frames 1999 – a three-channel computer-controlled interactive cinema installation – audience members effect a structural change in the montage sequences by their physical interaction with picture ‘frames’ suspended in front of each projection. By passing their hands through the frames and their invisible matrix, the audience triggers the layers in the projected sequences, their own bodies central to the mechanism. Tactility was also crucial to Chris Hales’s The Twelve Loveliest Things I Know 1991.8 This interaction was oriented around the small screen and the projection, a frameless painting that the viewer could get close to and dip in and out of. The audience were required to touch brightly coloured objects on the screen to navigate the structure and to traverse a series of stories. Masaki Fujihata’s Beyond Pages 1995 was a minimally beautiful sculptural installation comprising a small table and chair and a projection of a door. The audience stroked the image of the book illuminated in the table, turning each page to reveal an animation and Japanese text with a voice speaking the word.10 Thecla Schiphorst’s Bodymaps: Artifacts of Touch 1995–7, consisted of a life-sized projection, onto a velvet-covered table, of a woman curled up as if asleep; the audience stroking the image caused gradual and almost imperceptible changes in her movement.11 The work set up a quasi-intimate relationship between the physical intervening subjects and the projected body, and was sensual and intense, since the touch produced an apparent response. With each of these works the audience is absorbed into a synaesthetic and physical space and affects the montage or the structuring of the images – the collage – by intervention.

The process is both in its making and reception; the technology and the subject are its material. I describe these works as cinematic, and locate expanded digital moving-image firmly within the avant-garde film and video traditions, a trajectory centred on the established and unambiguous histories of artists’ experiments with the moving image, spectacle, cinema and technology that continued throughout the twentieth century. There are subtle specificities embodied by the term expanded cinema that distinguishes digital (and usually computer-augmented or -controlled) participatory cinema from graphics-oriented puppetry within ‘new’ media. Loosely speaking, experimental cinema in the digital domain centres on the moving image, and focuses attention away from the individual frame or the still image. It plays with illusion transference, and the sensory, tactile and experiential (often on both sides of the camera or in exhibition), often questioning the physicality of viewing. This is not necessarily a cinema of film (although it could be), but it continues the tradition of experimental film and video, and its critical context stems specifically from a philosophy of cinema.

The ways in which artists engage with the practices and philosophies of cinema – film, video or digital media – exist beyond any prevailing
technocracy, and articulate the discourses and evolving 'languages' of the emergent moving-image technologies. They also acknowledge the historical continuities of experimentation with proto- and post-photo cinema.

A version of this text was first published in Filmwaves (Art In-Sight), vol.27, no.1, 2006, and is reprinted here in a revised version with a new title.


2 Designed by Howard Veitch, a technical engineer at the Royal College of Art, ‘A camera registers the passage of time by continuously monitoring the observer through a Polaroid shutter. At intervals the shutter is momentarily released – triggered by the observer’s movement across a photoelectric switch. The comparatively brightly lit images are burnt, or inscribed, on to the camera’s vidicon signal plate. Both the time continuum reflex and the retained (subsequently fading) “static punctuations” of that continuum are exhibited as one on a video monitor.’ Text for David Hall, Vidicon Inscriptions – The Installation, The Tate Gallery Video Show, 18 May – 6 June 1976.

3 Peter Campus (in, for example, dor 1975, Mem 1974, Interface 1972) was one of the first artists to incorporate video projection with feedback in the early 1970s, confronting the viewer with his or her own image in the gallery space.

4 Schneider continued: ‘It was a live feedback system which enabled the viewer standing within its environment to see himself not only now in time and space, but also eight seconds ago and sixteen seconds ago. In addition he saw standard broadcast images alternating with his own delayed/live image. Also two collage-type programmed tapes, ranging from a shot of the earth, to outer space, to cows grazing, and a “skin flick” bathtub scene.’ Youngblood 1970, p.342.


6 Hill has used computer-controlled switchers in other works such as Suspension of Disbelief (for Marine) 1992.

7 Gary Hill: In Light of the Other 1993.


9 European Media Art Festival, Osnabruck, 6–10 September 1995.


11 Video Positive, Liverpool, 1996.
In contemporary moving-image culture expanded cinema is a far from uncontested term. A number of practices beyond those concerned with the physical specificity of film might reasonably lay claim to it, from those involving multi-screen installation, to online video, to telematic performance, and so on. There is however also a constellation of currently active UK-based artists whose work can be characterised as descending directly, by affiliation or by orientation, from the practice that went by the name of expanded cinema around the 1970s, and which has developed from a film-specific practice aiming to activate the space of reception. What these contemporary artists have in common with that ‘first generation’ of expanded-cinema makers goes beyond a technological link to the use of 16mm film and its apparatuses, towards a shared concern with, variously, form, light, material, live-ness, and a Fluxus-like marriage of the conceptual and the event of the work. It is a practice in which, as Annabel Nicolson characterised it, ‘the content of the work is the process of its realization’, and to list these concerns is therefore to suggest a historical continuity of context, material and practical basis. However, this contemporary practice follows a trajectory that takes it beyond many of its ancestral practices and positions and, as a spatial performance, has as much in common with the production and reception of forms of music as it does with the cinematic.

Walter Pater’s famous late Romantic adage that ‘all art constantly aspires towards the condition of music’ describes a will to the intensity of direct communication as distinct from didactic intent. In the late nineteenth century, Pater was unprepared for coming practices like Dada and later Fluxus, where the impetus of artistic and musical practice started to embrace conceptual, polemical and contextual process. Pater might well have recognised some of the more formalist interpretations of musicality, those
that attend to notions of synaesthesia and the musical analogies that abound around the historical experimental film practices of artists such as Oskar Fischinger, theorised by William Moritz, and which the work of the Centre for Visual Music continues.3 These formulations of the conditions of music usually rely on formal metaphor, drawing an analogous relationship between sonic and visual tone, rhythm, and other factors, at a solely perceptual and symbolic pictorial level. The condition of musical practice, however, is not simply expressed as affective reaction alone; it is also relational, spatial, contextual, generally constitutional as much as about form: which is to say where, through what means, and by whom produced and received.

The use of film projection apparatus to produce sound has become central to much of Guy Sherwin’s work. Sherwin recently explained how he conceived of the relationship between image and the production of sound when describing the effect of the oscillator used in the EMS VCS3, the early classic sound synthesiser.4 At its lowest setting the synthesiser’s oscillator produces little more than a dull thud; as the frequency is increased this becomes a rhythm; at higher frequencies the thuds merge into tones; and the higher the frequency the higher the note. Of course this is basic physics, but Sherwin draws an interesting parallel with the familiar theory of ‘persistence of vision’, a phenomenon often assumed to produce the appearance of seamless movement in film projection. Sherwin uses this ‘persistence of hearing’ to great effect in a number of optical sound films such as Newsprint 1972, Musical Stair 1977, and Railings 1977, but perhaps most interestingly where the image as producer of sound becomes more thoroughly integrated through the simple device of black and white discs.5 In the various works in the Cycles series 1972–2003, and in their multiple projection, image-creating sound produces new rhythmic patterns and phasing effects, comparable to the music of Steve Reich and Alvin Lucier, which can be varied and controlled, in other words ‘played’ at the time of performance. While the projected superimposition of the image of the discs can mesmerise with stroboscopic flicker, it is the sonic intensity of polyrhythm that drives the experience. In the time and space of the projection performance, the work becomes as much a sound performance as a cinematic one as Sherwin, in effect, transforms the 16mm projector into a musical instrument.

Sherwin’s practice began in the 1970s, so its 16mm gauge specificity is easily affiliated with that ‘first generation’ of British expanded cinema as practised and theorised by the likes of Malcolm Le Grice, William Raban and others, and as manifested in, for example, Filmaktion performances. Sherwin has recently, in collaboration with Lynn Loo, returned to performing these and new 16mm projector works, firmly establishing their practice as contemporary and distinct from historical revivalism. Together Loo and Sherwin have
embarked on what seems to be an extended and continuous international tour. Their collaborative work *Vowels and Consonants 2005 – ongoing* (fig.77) consists of six projected loops in which individual letters appear intermittently crawling up and across the surface of the screen, occasionally intruding into the optical sound area, thus emitting gentle plops of sound that seem to emulate the sound of the letters. As in other optical sound works the relationship between image and sound is integral: while the use of letters suggests a literal ‘reading’, it also resembles ‘concrete’ text such as Bob Cobbing used with Konkrete Kanticle, used as much to prompt vocal sounds in performance as to be read as conventional poetic text. As such the work becomes, like concrete or performance poetry, a score for itself. In fact, Loo and Sherwin have regularly extended the work with the addition of live sound and musical accompaniment, often local to the place of performance and, in this context, the projectors become instruments, part of an ensemble.

In Emma Hart and Benedict Drew’s *Untitled Five 2008*, performed at the *Nought to Sixty* performance series at the ICA in London, equipment usually associated with the projection of images becomes a participant in producing a kind of live *musique concrète*. Through ingenious hacking and marvellously inventive equipment modification, a slide projector plays wind chimes, 16mm projectors play cymbals and a drum, opening and closing DVD player trays strike the keys of an organ, a lamp plays a guitar. In the midst of this, Hart and Drew play high-hat and kick-drum with projection from attached video cameras. Moving-image exhibition equipment has become integral to their instrumentation but it hardly ever displays a moving image, rather it plays ‘a gleeful cacophony of noise coupled with extremely delicate light effects’.

In another Hart and Drew performance, *Untitled Two 2007* (fig.78), different lengths of black and clear 16mm film leader are spliced together and threaded through the strings of an electric guitar. The splices in the loop ‘strum’ the guitar strings while the alternating light and dark film is projected onto guitarist Drew and silhouettes him on the screen beyond, synchronised with the amplified sound from the guitar. By employing the 16mm film projector as an agent in a sound production system, Hart and Drew go further in transforming it into a musical instrument. Transcending the function of its internal technology, film becomes a kind of prosthetic to performance in space.

This repurposing of moving-image exhibition equipment has a parallel in the practice of ‘circuit bending’, where electrical equipment is rewired for mutant sound generation, or other
experimental music practices such as Onkyokei and Toshimaru Nakamura’s ‘no input’ mixing desk. If the sonic is of equal consideration to the visual in the film performance work of Loo and Sherwin, with Hart and Drew the visual has become relocated, an afterthought or a smaller constituent part of a larger complex situational system.

Greg Pope’s Light Trap, performed at Kill Your Timid Notion in 2008 (fig.79), places a 16mm projector at each corner of a room full of the haze of dry ice. Each projector is operated by a player-projectionist, who projects black leader while applying sandpaper and jewellers’ tools to scratch and abrade the film. At first this sends small flecks of light shooting through the haze accompanied by glitchy clicks of optical sound. Gradually, over the thirty minutes of performance, the glitches and flecks merge to form four cones of light converging across the room with a solid drone of sound. A gathering storm becomes an immersive rush as the audience explores the gradual formation of solid light. The performance updates Anthony McCall and Takahiko Iimura, while also recalling Jürgen Reble’s 1980s auto-destructive film performance with Schmelzdahin where, for example, the Super-8 film material would be burned by candles on its way to the projector gate and spooled out into a working food blender.

At either end of a railway arch in London’s Vauxhall two screens face each other. A guitarist sits to one side, more or less halfway between the screens, producing layers of sustained looping sounds. Fluctuating looped images of tall apartment blocks glimpsed through spaces are projected on each screen. Performed as part of the Chronic Epoch series of events at Beaconsfield Gallery in 2005, this is The Space Between, Karen Mirza and Brad Butler’s collaboration with musician David Cunningham (fig.80). The work is structured spatially, as befits its title, in a configuration making it difficult, if not impossible, to view both screens simultaneously, so that one is positioned inside the work. The audience gathers between the screens, but without an optimum viewing position many of them hug the walls. While embodying a representation of architecturally defined space, the work produces an architectonic condition in relation to the interior, as the eponymous space in between is literalised in three dimensions.

In these works, which I have described with an emphasis on their ‘musical’ qualities, it is this spatiality that is perhaps most significant. One might, starting with Guy Sherwin, trace the chronological trajectory of a significant and progressive de-emphasis of the image, as the screen as locus of attention is left behind and the dynamics of the works spill out and occupy space, rather than demand that attention be placed on any single image, or combination of multiple images, on screen. This is as much the case with work containing the most ostensibly representational image as it is with the more
'abstract', for Mirza and Butler's *The Space Between*, an *in situ* performance demands that the representational image becomes but one element among several as it adopts a negotiation with its context. In the configuration described above it is a work of and within architecture.7

This collection of practices can be distinguished from the work of many of their international contemporaries, in particular the work of US practitioners like Bruce McClure or Sandra Gibson and Luis Recoder who present expanded cinematic performances where sonic expansion is often a dominating, insistent rhythmic sound as neo-psychedelic hypnotic, filling the space in a way that can be as oppressive as it is exhilarating, employing a visceral level of volume, with either little variation in the sonic and visual dynamics, or employing a structure that favours a linearly increasing density and climax. In musical terms it approaches the extremes of drone and noise music such as that produced by Sunn O))), Merzbow or Whitehouse, sound that overfills space while the visual locus remains the screen.

A performance-based practice in the UK has of course existed since the days of Filmaktion et al in the 1970s, through Tony Sinden's 1974 *Cinema of Projection* and into other collaborative, performative audiovisual spectacles organised in the 1980s and 1990s by Housewatch and the International Symposium of Shadows (which included in its number Greg Pope), as well as the multi-screen and expanded works of Anna Thew. Additionally, contemporary practice has no doubt benefited greatly from the increase in the historical revival of the British avant-garde through such high-profile events as *Live in Your Head 2000* and *Shoot Shoot Shoot 2002*.

Yet it should be remembered that 1970s British expanded cinema was complemented by the specular anti-narrative polemics of Malcolm Le Grice and Peter Gidal's theorisation of structural materialism The crux of these positions was an opposition to 'dominant cinema', its employment of illusion in narrative relying on identification with the image and the production of a passive viewer.8 Avant-garde practice intended to activate the space of reception in order to mitigate against this perceived passivity, therefore producing a more active participation in the cinematic event. Deke Dusinberre suggests that the role of expanded cinema was didactic, to 'render visible those formal aspects of the medium normally employed “transparently” [and to] demand of the spectator that s/he reflect on the means of image-making'.9 Foregrounding the material and technology of 16mm film in the black box of the cinema or a performance space might produce a spatial awareness of context, but it does not follow that this will necessarily produce a more active viewer any less likely to identify with illusionistic narrative. Positing the material apparatus of cinema as an unproblematic dialectical binary in opposition to illusionistic narrative relies on an assumption that the construction of illusion in a conventional cinema-viewing relationship occurs passively and individually in the moment of reception. These positions rather overlook the vast matrix of relationships to pictorial representations, social codes and cognitive expectations that extends far beyond the walls of the cinema building.
In the intervening thirty or so years since this ‘first wave’ of British expanded cinema and the heyday of structural materialism, much has changed. Cinema now has little to do with film-material technologies beyond those effects embedded through remediation. It has become more illusionistically spatialised through new generations of cinema technologies of surround sound and 3D. In a contemporary culture, where screens displaying moving images have proliferated, cinematic space has become dispersed and activated in the ubiquitous forms of media existing in public, domestic and personal space: from city-screen and interactive broadcast video on demand, to the internet and personal handheld devices. The notion of the passive subjective solo viewer has also become anachronistic, not least because it is no longer possible to determine exactly who or what a viewer is. Furthermore, a contemporary critique of ‘dominant media’ in media-art practice must recognise that contemporary art operates both inside and outside the global mainstream circulation of images, and a critical practice necessarily engages in the appropriation of the forms, technologies and context of media to avoid risking ineffectualness.¹⁰

The experience of music in performance is a process of realisation for both listener and performer. Networks of spatial relationships are expressed in terms of proximity, distance, and mobility while screens literally fix a viewpoint. In eschewing the frontal mode of presentation associated with cinema auditoria and approaching the conditions of the practices of music, audio-visual spatial performance practice has come closer both to the activation of complex space as immersive, relational, denying the dominance of the screen.

Organisationally, contemporary audio-visual spatial performance practice has moved away from a model typified by the London Filmmakers Co-operative (i.e. a pseudo-governmental constitutional model that developed in parallel with a pseudo-politics of progressive avant-garde polemics) towards a structure more in common with the music scene, as the individual artists and their performances have become necessarily more entrepreneurial. Events are as likely to occur in cafés, bars, theatres, and music venues as they are in galleries or conventional cinema spaces.¹¹ Kill Your Timid Notion (KYTN) is an interesting case. Established in Dundee in 2003, KYTN combines experimental music and moving image in equal measure and as such is perhaps a tantalising glimpse of what might have happened had the LFMC and the London Musicians’ Collective had a closer artistic relationship back in the 1970s. Indeed KYTN specifically works towards a breaking down of the formal and institutional barriers against a ‘hegemony of the visual [as] the overriding primary sense’.¹² While the LFMC and the London Musicians’ Collective shared a building and there was an occasional collaboration between individuals, there was never any formal convergence of praxis.¹³ While there have been other subsequent connections made between sound practices and expanded moving image – for example collaborations between Housewatch and Bow Gamelan in the 1980s – contemporary practice has become more catholic.
While the works and contexts discussed thus far have concentrated on a performative practice, the activation of space in ways materially but not metaphorically analogous to music (using moving-image media technology but not yielding to the specificity of the dimensions of the screen space) has been achieved by taking advantage of the possibility of the continuous and uninterrupted potential of digital video projection. *Primary Phases 2006* (fig.81) by Simon Payne was exhibited as part of the British Artists’ Film and Video Study Collection’s *Colour Fields* exhibition in 2006. This four-channel digital video projection consists of a looping series of red, green and blue vertical and horizontal ‘wipes’, which at their full extent momentarily form solid blocks of colour filling the frame. The four projectors are arranged in pairs, each pair projecting onto opposite walls. One pair is arranged so that the frames are adjacent to each other, while on the other wall they are projected onto the same area. The colours overlap, producing new RGB colour combinations and, as the video sequences are not synchronised or of the same duration, bars and blocks of colour expand and contract as they travel up, down and across the area. With phasing processes similar to those seen in Sherwin’s work, *Primary Phases* is comparable in form to systems music, putting in train a shifting phase loop of relationships, but in this case between colours, as a system determines a structure over time. But this is not a simple analogy, for there is a relationship with the behaviour of sound in space. When installed in the white cube of the gallery, *Primary Phases* throws its colours out into the room onto the surrounding walls, reflecting in the polished wooden floor. One of the characteristics of music and sound is its ability to fill space; it has, as it were, ‘volume’. In the way that music fills space, *Primary Phases* is not constrained by the screen. Its blocks of colour cannot be considered as images, they are coloured light that, like music, inhabits the volume of space through ambience and reverberation.

Audio-visual spatial performance practice post-expanded cinema has seemingly abandoned the strategy of dialectical problematisation: neither cinema as a ‘language’ nor identification and illusion is being opposed. Rather, the practice has become an ongoing set of proposals, a construction of exemplars, a progression that does not conform to a modernist progressive project. It is a post-cinematic practice with its roots in non-narrative spatial formalism, but it is not a recuperation of modernism or nostalgia for the avant-garde. The old structuralist critique of cinema resists an illusionism that relies on the screen as locus for illusion, the representation of space and narrative progression. As projection in spatial audio-visual performance moves away
from an emphasis on the image, away from the screen and into the room – leaving behind it cinema and the conflation of narrative, the identification with visual representation, and the signifying image – it finds itself involved in spatial relationships and closer to the conditions of a music practice. As such it can best be considered as a ‘post-expanded cinema’ practice.

Mapping geographer Doreen Massey’s formulation of post-colonial spatial practice onto post-expanded cinema audio-visual performance practice provides a model for how it can be situated beyond questions of a critique of cinema and representation. Massey suggests that ‘entities and identities … are collectively produced through practices which form relations … space as the sphere of relations, of contemporaneous multiplicity, and as always under construction. This is a change in the angle of vision away from a modernist version (one temporality, no space) but not towards a postmodern one (all space, no time), rather towards the entanglements and configurations of multiple trajectories, multiple histories’. “The ‘angle of vision’ of contemporary audio-visual performance has turned away from the modernist characteristics of this ‘one temporality, no space’ of the cinema screen and its critique, while the conditions of music produce more promiscuous forms. In performance these forms are always under construction, creating a sphere of relations through collaboration and realisation in space. It is these spaces, as both physical place and metaphorical discursive territory, that the works discussed here by Sherwin and Loo, Hart and Drew, Mirza and Butler, Greg Pope and Simon Payne create and inhabit.
Cybernetics, Expanded Cinema and New Media: From Representation to Performative Practice

Initially trained as a painter, I begun making landscape films and installations in the early 1970s, and was heavily influenced by the structural materialist film theory at the London Filmmakers Co-operative (LFMC) and by cybernetic and systems theory at the Slade, where I came into contact with some of the pioneers of interactive technology and computer-driven art forms. This essay reflects my renewed interest in expanded cinema that developed with the transition to digital technology, after 1993.

I am interested in using the computer's capacity to respond in real time to inputs from its immediate or remote environment. Unlike my early weather-driven films, which are recordings of retrospective interactions between the camera and the weather, my current practice uses live weather data and video feeds to create the work in the real-time space of the gallery or site-specific location.

My new-media installations, like my early films, are based on a non-dualist cybernetic model in which the relationship between technology and nature is articulated as a collaboration between two interrelated systems. My original premise was primarily philosophical, grounded by a deeply felt love of landscape and motivated by my rejection of dualism and of the technological domination and "enframing" of nature, as Heidegger called it, characteristic of the enlightenment project. However, as the socioeconomic costs of climate change escalate, and the effects become part of everyday experience, the ideas that have informed my practice for the last forty years have become charged with a renewed sense of practical urgency and a fundamental change in the way we exist in the world is no longer regarded as a matter of abstract speculation.

In 2008, the physicist and philosopher of science Andrew Pickering identified the beginnings of a much needed shift from the 'representational'
models of the late nineteenth and early twentieth century to the computer-driven 'performative' models of systems and chaos theory and the new cross-disciplinary sciences that followed. In a parallel process, twentieth-century art history can be seen as a loss of pictorial certainty, as the static representational frame of nineteenth-century arts and science gave way first to abstract painting and then to the performative, time-based practices of the twentieth. This changes has stemmed from the realisation that representation is problematic: it is always selective and always incomplete.

This essay traces the trajectory of these changes in understanding, and examines how expanded cinema can be seen as part of a paradigm shift away from the enlightenment project with its vision of a deterministic universe and its mandate of control and domination of nature.

**Relativity and Cubism**

The technological developments of the late nineteenth and early twentieth century left artists and scientists scrambling to make sense of the rapidly changing world around them. The introduction of rail travel in Europe transformed landscape into a series of moving viewpoints, and the introduction of photography and film suggested ways in which this visual montage of space and time could be represented.

Albert Einstein's Special Theory of Relativity introduced an observer with multiple viewpoints into his representation of space and time. Picasso's *Les Demoiselles d'Avignon* was painted in 1907, just two years after the publication of Einstein's theory. In both works, the pictorial frame remained intact but the space beyond the frame was fractured by introducing time as an additional dimension, transforming the static viewpoint of Renaissance perspective into a multipositional dialectic of space and time. Picasso’s Cubist works anticipated the abstract painting and experimental film and video works to come, while Einstein’s 1905 paper on the photoelectric effect anticipated the similarly abstract world of quantum mechanics.

**The Collapsing Frame in the Sciences:**

**Quantum Mechanics and the Problem of Measurement**

By the early 1920s, the idea that nature could be reduced to a finite number of deterministic principles was already running into a number of fundamental problems. In quantum mechanics, the chance-like behaviour of subatomic matter proved extremely resistant to reductionist methodology.

In the Claus Jonsson 'two slits' experiment, an electron fired at a perforated metal plate behaves both as a particle and as a wave (fig.82). Furthermore, determining an accurate position of the electron in time affects its position in space and obtaining its position in space affects its position in time: so, at a quantum level, the very act of taking a measurement alters the system that is being measured. Decoherence, as it is known, challenges the notion of the objective viewpoint that lies at the core of classical physics. In this seminal experiment, the window separating the experimenter from the experiment collapses along with the collapsing wave fronts of subatomic matter.
The Collapsing Frame in the Arts: Abstract Painting, Experimental Film and Video, Performance Art and Gallery Installations

In the 1950s, the arts again mirrored the sciences, as Abstract Expressionism and colour field painting dispensed with pictorial representation in favour of the material trace or recording of a previous reality. Performance art, happenings and environments took this further by blurring the lines between the making of the work, its presentation, and its reception. Within a few decades, theatre, dance, literature and music had all re-examined their own versions of the frame and, although mainstream cinema remained resistant to these ontological 'rethinks', experimental filmmakers and structural filmmakers, in particular, responded to the changes that were taking place across the rest of the arts.

Structural film shifted the emphasis away from unproblematised pictorial representations towards a materialist practice where sprocket holes, frame lines, grain and emulsion became the equivalents of the brushstrokes and raw canvas of Abstract Expressionism and colour field painting. Expanded cinema extended these parameters by moving the medium away from the proscenium window with its nineteenth-century representational ideology, and into the arena of twentieth-century art.

In the early 1970s, expanded cinema reconnected with its 1920s European roots and was given a more radical expression in the UK, Austria and Germany. In London, a small group of students from Saint Martin's School of Art formed around Malcolm Le Grice, a founding member of the LFMC and a leading proponent of structural film. Performing together as Filmaktion, they used the printing and processing facilities at the LFMC to created a material-based and more rigorously theorised form of expanded cinema. Their projections liberated the image from the single screen and foregrounded the machinery of cinema, with the artist physically present, the space between projector and screen part of the mise-en-scène, and the narrative of making and exhibiting the work taking place in real time to disrupt or replace altogether the primacy of any prerecorded narrative events.

In a Filmaktion performance the viewer is encouraged to move about the space and change viewpoints, rather like the viewer of a Cubist work or the observer in Einstein's model of the subatomic world. In this way, they engage directly with the creative aspect of viewing, and of cocreating the work.
In a later UK work, Guy Sherwin’s *Man with Mirror* 1976, the filmmaker is physically present together with his pre-recorded image. In another, William Raban’s *245* 1973, the film’s production is not separated from its post-production, which in turn is not separated from its public presentation. The viewer experiences every step in the making of the work, from loading the camera to shooting, processing the film stock, editing and projection. The creative process is not hidden but shared.

As happened in the ‘quantum sciences’, the authority of a single, objective window on the world is no longer assured. Multi-screen projections, panning projectors and hand-held mirrors render the proscenium of the conventional cinema redundant. In Anthony McCall’s *Line Describing a Cone* 1973 there is no projection screen at all and the viewer is invited to interact with the projector beam. Prerecorded images are often no more than equal, or secondary, to the projection event. In the work of Robert Whitman in the USA and Marilyn Halford in the UK, the filmmaker mimics prerecorded on-screen actions, and thereby crosses the Cartesian divide, forging a link between observer and observed, viewer and viewed that parallels the relationship between experimenter and experiment in quantum science.
Chaos Theory: The Founding of a New Non-dualist Science
During World War II, mathematician and meteorologist Edward Lorenz was employed by the US military to figure out ways to forecast and even control the weather. Fortunately, he concluded that although it was possible to affect the weather, it was not possible to control it nor to predict the outcome that any intervention might have. The reasoning behind this conclusion had an enormous effect on a generation of forward-thinking scientists. In 1968, using newly available computer technology, Lorenz discovered a series of mathematical equations that seemed to approximate the way that the weather remains unpredictable within a set of parameters like seasonal cycles:

\[
\frac{dx}{dt} = 10(y-x); \quad \frac{dy}{dt} = 28x - y - xz; \quad \frac{dz}{dt} = xy - \frac{8}{3}z
\]

Although these three differential equations are individually deterministic, when run in sequence they give rise to what Lorenz called 'deterministic non-periodic flow'. In other words, when the equations are mapped in three-dimensional space, the abstract image they generate repeats itself— but with slight variations. This is not a representation of anything that exists in nature, but a mathematical model that behaves in a manner similar to the behaviour of complex systems, such as weather, electrical grids or traffic jams. The mapping of those equations produces an endless set of permutations known as the Lorenz Attractor (fig. 85). The point where the two shapes intersect corresponds to an instant of spontaneous change, such as the moment when a cloud begins to dissipate in the upper atmosphere or the moment when a freely spinning wheel on the cinema screen pauses momentarily, and then begins to rotate in the reverse direction. Chaos theory makes it possible to predict the occurrence of these bifurcation points and when to expect chaotic behaviour in complex system such as the cardio-vascular system or the electricity grid.
Loops and Repetition: Generative Systems in the Arts

Movie projectors do not run at a constant speed. Consequently, multiple projectors never truly run ‘in sync’ with one another, and there are numerous examples of moving image installations and expanded cinema performances that make use of this lack of predictability. One could argue that the three equations of the Lorenz Attractor operate like a multiple screen projection: multiple loops of film—unchanging when viewed in isolation—can create an almost infinite number of image combinations when projected side by side.

![Image]

During the period immediately preceding Lorenz’s discovery, there had been widespread interest in using machines as generative systems, in areas ranging from mathematics to computer programming, from music to performance art and expanded cinema. Works such as Shutter Interface 1975 by Paul Sharits, Steve Reich’s Composition for Six Pianos 1973 and my Shore Line 1977 (fig.86) and Shore Line Two 1979 assume the premise first formulated by Lorenz: that small differences in initial input can generate an unlimited number of complex permutations over time. More than thirty years later this strategy remains part of the contemporary repertoire, as evidenced in works such as Tim Head’s computer-driven Treacherous Light 2008, Anthony McCall’s Between You and I 2006, and the recent installation version of Light Music by Lis Rhodes shown at Tate Modern in April 2009 (see fig.62).

Cybernetics and Homeostasis

Norbert Wiener’s Theory of Cybernetics, published in 1948, coincided with the early days of mass communication systems and computer technology. Wiener’s ideas about the relationship between people and machines passed into the art world through his colleague, engineer Billy Klüver, whose 9 Evenings of Theatre and Engineering in New York City re-established the
link between the sciences and arts. Klüver provided technical resources to composer John Cage (himself the son of an engineer and inventor), filmmaker Robert Whitman (one of the pioneers of expanded cinema), choreographer Yvonne Rainer, and artists like Robert Rauschenberg. During the 9 Evenings event, Klüver and Cage used photoelectric sensing devices triggered by the audience as an element of composition for Cage’s Variations #7.

Klüver also participated in the Cybernetic Serendipity exhibition at the ICA in London in 1968. Another major contributor to this important event was British cyberneticist Gordon Pask, whose ideas also bridged the arts and sciences. For instance, his Aesthetically Potent Environments* were based on the idea that a work of art could evolve either independently or in interaction with a participant – an idea that is essentially cybernetic but has obvious parallels in the arts, both then and now.

The group also proposed a number of socially engaged projects such as a design for a factory run using homeostatic principles to balance input and output. In the late 1960s, cyberneticist Stafford Beer became an advisor to the government of Chile and, at the invitation of Socialist president Salvador Allende, redesigned the ‘nervous system’ of the Chilean economy using a homeostatic model (a project that came to an untimely end with the Pinochet coup of 1973). The connection between cybernetic theory and the mysterious workings of the economy are now a well-established field of mathematics and, as we shall see, have provided a subject for a new-media installation by Lise Autogena and Joshua Portway.

Cybernetic theory and expanded cinema change our ideas about the use of technology. Working together, Pask and Beer used simple electrochemical devices to model the complex homeostatic processes of natural systems. Their version of cybernetics was anti-dualist and anti-representational, and their models did not differentiate between biological and manufactured systems. Expanded cinema is also anti-representational and the relationship between the artist, the work and the viewer is not split along dualist lines, as it is in the cinema. Instead, it is inclusive and open-ended, responding to changes in the immediate environment in a manner that is analogous to the homeostatic systems of the early cyberneticists.

The ideas and work of Pask and Beer, as well as the work of Filmaktion, were exhibited at the ICA in the 1960s, and although these events were largely ignored by the British art establishment at the time, it is now widely recognized that Cybernetic Serendipity played an important role in the history of new-media art in the UK.5

The Santiago Theory of Cognition
Gregory Bateson, whose 1972 Steps to an Ecology of Mind was widely read in art schools on both sides of the Atlantic, influenced both the arts and the sciences. His writings influenced diverse fields from anthropology and linguistics to ecology and systems theory, and he was closely connected with cybernetics groups on both sides of the Atlantic. His concept of homeostasis inspired the so-called Santiago Theory of Cognition in 1975, which may be
the most fundamental challenge to dualism to date. It proposes that consciousness is a highly complex form of cognition and that evolution itself is the result of a web of cognitive processes that connect every level of organic life. The theory was developed in the early-to-mid-1970s by the Chilean neuroscientist Humberto Maturana, and is based on the idea of autopoiesis. Proposing that ‘living systems are cognitive systems, and living is a process of cognition’, it asserts that ‘this statement is valid for all organisms, with or without a nervous system’. In cybernetic terms, the description of such a system bears a striking resemblance to today’s interactive media projects, in that ‘an autopoietic system is, at the same time, the producer and the product of its own production. It uses inputs from its environment to maintain itself, but also transform some of these inputs to produce specific outputs.’

By the end of the century, the various threads of time-based media converged under the umbrella of new media. The availability of high-speed computers and internet technology gave rise to a resurgence of interest in the generative and interactive ideas pioneered by the expanded cinema and installation artists of the 1970s. Software programming environments like Max/MSP and Jitter encouraged further exploration of the relationship between artist, viewer and screen, and opened up a range of possibilities for making works that would interact with both the manufactured and biological environment.

**Interface as Content: Expanded Cinema and New Media**

Expanded cinema operates in many ways like an analogue version of today’s user interfaces, creating an open-ended connection between the artist, the mechanics of production and the viewer that links it to contemporary new-media practices. While the entertainment industry, in step with the dominant ideology of reductive science, struggles to produce ever more convincing and seamless representations of the world, the more promising developments in new media practice – like the Filmaktion performances of the past – explore the question of how the interface shapes our experience of content, and thus itself becomes content.

**Materialising the Body in Digital Media**

Twenty-five years after Le Grice performed his *Horror Film: 1971* these ideas are resurfacing in the work of a younger generation of artists, such as Canadian artist David Rokeby, who introduced his VNS (Very Nervous System) artwork at the 2002 Venice Biennale thus:

Because the computer is purely logical, the language of interaction should strive to be intuitive. Because the computer removes you from your body the body should be strongly engaged. Because the computer’s activity takes place on the tiny playing fields of integrated circuits, the encounter with the computer should take place on a human-scaled physical space. Because the computer is objective and disinterested, the experience should be intimate.
The Body as Part of a Larger System

The emphasis on the human body is an important part of contemporary media work and, an essential antidote to virtual reality, whose quintessentially Christian vision is of a non-corporeal world, free from the anxieties of the body and its life-supporting connection to the larger body of the planet. Yet I am concerned that the emphasis placed on the human body in contemporary theory and practice may, by privileging human beings, once again set us apart from nature and perpetuate the dualist ideology of 'human exceptionalism'./

This essentially pre-Darwinian position is a justification for the exploitation of 'brute matter' by technology, and for the kind of industrial development that has caused the escalation of environmental problems that now threaten to plunge us into an era of unprecedented social and economic inequalities.

The early cyberneticists had a different way of thinking about our position in the world, and their ideas about the relationship between people and machines are a much needed respite from the dualist-inspired mandate of control. In 1974, in an essay on the effects of technology on post–formalist sculpture, the American writer and art historian Jack Burnham wrote of Robert Smithson’s *Spiral Jetty* 1970:

Systems-oriented art ... will deal less with artifacts contrived from their formal value, and increasingly with men enmeshed with and within purposeful responsive systems. Such a change should gradually diminish the distinction between biological and non-
biological systems, i.e. man and the system as similarly functioning but organizationally separate entities.8

This kind of cybernetic thinking has since become very influential across a range of disciplines, including psychiatry, architecture and anthropology, and these ideas continue to resonate in the work and writings of contemporary new-media artists such as Simon Biggs, David Rokeby and Lise Autogena.

The internet now makes it possible to create works that place human activity within the context of the planet as a whole. Two examples of this are my installation Tree Studies 2006 (Gwangju Biennial; fig.87), and Lise Autogena and Joshua Portway’s Black Shoals Stock Market Planetarium 2001 (featured in Tate Britain’s Art Now exhibition; fig.88). Both works foreground the body of the planet, but in strikingly different ways.

Tree Studies is a three-screen wind-driven gallery installation that uses live weather data, relayed in real time via the internet from weather stations around the planet, to edit a series of prerecorded sound and moving image files of a tree.

By using the web as a quasi-planetary nervous system, the installation operates like a wind-actuated editing suite, harnessing the thermal energy of the rotating planet to generate new and unexpected combinations of image and sound. The flickering, ephemeral nature of the projected image, in combination with the changing winter light, creates an uneasy equilibrium between the power and presence of the tree, the transitory nature of the light and the clouds, and the fleeting human presence in the winter landscape.

In the wonderfully ironic Black Shoals, the body of the planet is also engaged. However – in the spirit of Pask and Beer – it is not the climate but the international money market that gets to play the nervous system. The Black-Scholes formula is usually used to model the financial markets. Based on Chaos Theory, it uses partial differential equations to minimise risk by predicting possible future scenarios:

In the art installation, the name ‘Scholes’ becomes the noun ‘Shoals’ and the formula is put to a different use:

[A]n animated night sky … is also a live representation of the world’s stock markets, with each star representing a traded company. Fed by massive streams of live financial information, the stars glimmer and pulse, immediately flickering brighter whenever their stock is traded anywhere in the world. The stars slowly move across the sky, clustering together or drifting apart in response to the shifting affinities of their respective companies, growing or shrinking as the company’s fortunes change …9
Recent Developments: 2001 and Beyond

In the field of new media, the internet takes the place of the projector and geographical space the place of the gallery. The concept of working in real time is revisited as geographical space collapses on the internet, where sound and image is transmitted at nearly the speed of the light. Just as expanded-cinema screenings took experimental film to a new audience by taking the work out of the movie theatre and into the art gallery, or into disused industrial spaces, so the internet opens up opportunities to reach a new public and to invite their participation.

The interest in duration characteristic of William Raban’s 245” or Cage’s ASAP 1968 is finding new expression in a range of contemporary new-media projects, such as Susan Collins’s Seascape 2009 (fig.89), in which webcam imagery of the south coast of England is transmitted, pixel by pixel, over the internet, recording the slowly changing effect of light and tide. Further examples include Jon Thomson and Alison Craighead’s Light From Tomorrow 2006, in which tomorrow’s light is transmitted by data cable from the Kingdom of Tonga, across the international date line to the San José Museum of Art in California, and Adrian Stellingwerff’s Eternal Sunset 2006, which uses a global network of webcams to transmit local sunsets to a website where they can be seen in real time, from anywhere on the planet.

In the twin-screen time-lapse River Yar 1972, by William Raban and myself, as in the work of Richard Long or Andy Goldsworthy, the slowly changing face of the landscape is made visible by the laborious, real-time labour of making the work. Since then, a new kind of time-lapse device has emerged in the form of the digital computer, with its limitless patience and superhuman memory. The prodigious capacity of the computer to accurately perform repetitive functions over time, and to sample images, sounds and raw data, has given rise to new kinds of time-lapse projects that blur the differences between biological and non-biological forms. Simon Biggs’s Babel (fig.90), for example, offers a highly dynamic interaction between sampled information and online viewers. When they log on to the site, viewers are confronted with a 3D visualization of an abstract data space mapped as arrays and grids of Dewey Decimal numbers. As they move the mouse around the screen, they are able to navigate this 3D environment. All the viewers are able to see what all the other viewers, who are simultaneously logged onto the site, are seeing. The multiple 3D views of the data space are montaged together into a single shared image, where the actions of any one viewer affect what all the other viewers see.
logged on together the information displayed becomes so complex and dense that it breaks down into a ‘meaningless’ abstract space.10

The sampling of found footage as practised by film makers was another form of time-lapse. In recent years, this approach has resurfaced in the work of new-media artists such as Thomson and Craighead. Their work Horizon, for example, uses a kind of time-lapse sampling that is combined with real-time sources on a global scale. They describe it as:

a narrative clock made out of images from webcams in every time zone around the world. The result is a constantly updating array of images that read like a series of movie storyboards, but also as an idiosyncratic global electronic sundial.11

Returning to the representation of time passing in the landscape, Susan Collins’s Fenlandia 2006 and, Seascape 2009 and my own digital seascape Taking Time 2008, or my proposed Doomsday Clock project, use the power of the computer to relay tiny increments of pictorial information over extended periods of time, making it possible to record the long-term changes of the natural world indexically within a continuously evolving image.

The image in these works is neither a still photograph nor a movie image, but a new hybrid form, capable of recording the very gradual changes that take place in the natural world. The image is never complete and updates itself continuously in response to the changing conditions in the landscape. Consciously referencing the immediacy of digital technology, the image in these works is as transitory and ephemeral as the light reflected on the surface of the ocean.12

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3 Cybernetic Serendipity was an exhibition of computer art by Jasja Reichardt, shown at the ICA, London, in 1968. It subsequently toured the United States.
4 Andrew Pickering, from a forthcoming book on early British cybernetics. This excerpt from Chapter 5, ‘ Bateson and Laing: Symmetry, Psychiatry and the 60s’.
5 Maturana and Varela 1980.
7 Andrew Pickering, ‘Against Human Exceptionalism’, written for the workshop, ‘What Does It Mean to be Human’ at the Department of Sociology and Philosophy, Exeter University. See also Andrew Pickering, ‘Brains, Selves and Spirituality in the History of Cybernetics’ for the Max Planck Institute for the History of Science, Berlin 2007, https://eric.exeter.ac.uk/repository/handle/10055/18375
8 Burnham, 1974.
9 Lise Autogena and Joshua Portway, Black Shoals planetarium official website. See http://www.blackshoals.net/description.html
10 See http://hosted.simonbiggs.easynet.co.uk/webmenu.htm
11 See http://www.thomson-craighed.net/docs/lndoc.html
12 With special thanks to Andreas Kahre, curator and media artist, Canada, and Professor Andrew Pickering, historian and philosopher of science, for his expertise and ideas and for the critical dialogue, which inspired and encouraged me to venture outside my own discipline.
Expanded cinema, i.e. the expansion of the commonplace form of film on the open stage or within a space, through which the commercial-conventional sequence of filmmaking – shooting, editing (montage) and projection – is broken up, was the artform that I chose in the mid-1960s when I realised that the course of my life would lead me through the history of art. During this period I had already completed a course of study in painting, and it was clear to me that I would turn towards the image, but this lineage would be the living, expanded one. I had been particularly impressed during my student years by cubism, Constructivism and Futurism, and thus with the form and extension of artistic expression in(to) space, and the related element, time; the interconnection between light and movement, processes that irritated my educated way of seeing; and above all the image, and an ‘actionist’ method for dealing with the image. Later I made feature films, to the extent that the situation – and by this I mean the financial situation – allowed it, but in all of my films there occur elements of the film medium that I have won through my own experiences with, and deliberations on, expanded cinema. I always see film as a sculpture that, for me, has varying levels of ways of observing it.

I have found a way to continue expanded cinema in my physical performances in which I, as the centrepoint for the performance, position the human body as a sign, as a code for social and artistic expression (fig.91).

Today, expanded cinema is the electronic, digital cinema, the simulation of space and time, the simulation of reality. The expanded cinema of the 1960s, as part of the alternative or independent cinema, was an analysis carried out in order to discover and realise new forms of communication, the deconstruction of a dominant reality. Expanded cinema must also be seen within the context of the development of the political situation in the 1950s and 1960s – on the one hand, in the revolts of the student movement that waged an attack against dominant oppressive state power, and, on the other, in the artistic developments of this period that sought a new definition of the concept of art. Its aesthetic was aimed at making people aware of refinements
and shifts of sensibility, the structures and conditions of visual and emotional communication, so as to render our amputated sense of perception capable of perception again. It was a matter of abolishing old, outdated aesthetic values.

The bankruptcy of European culture in 1945, the attempt to jump over the graves of twenty-five years of political darkness and to find a connection with the avant-garde movements of the 1920s and the avant-garde that had been exiled—all left their imprint on the efforts of the artistic groups of the postwar period. While the majority of the European population turned blithely toward a purely economic project of restoration, groups of artists and intellectuals attempted to uncover the foundations of European crisis and culture, and to find new constellations by connecting with oppressed and forgotten movements in art and thought, from Dada to Surrealism, from linguistic philosophy to Constructivism. This mood also redefined concepts of cinema and film.

In 1916, F.T. Marinetti, Arnaldo Ginna, Giacomo Balla, Bruno Corra, Emilio Settimelli and Remo Chiti wrote, in the manifesto Futurist Cinema, that cinema is an autonomous art; one must face the cinema as an expressive medium in order to make it the ideal instrument of a new art, immensely faster and lighter than all existing arts. It must become deforming, impressionistic, synthetic, dynamic, free-thinking. We are convinced that only in this way can one reach the poly-expressiveness toward which all the most modern artistic research is moving.

The rediscovery and incorporation of modern linguistic philosophy, psychoanalysis, modern music, etc., served as nourishment for (re)building a culture that had been destroyed. The period of the 1950s and 1960s was marked by artistic innovation and political provocation. Young artists ransacked antique shops and archives to find spiritual nourishment beyond the groundwork that had been laid waste. The purpose of these innovations and provocations was to break out of traditional artistic representations, the inclusion of reality as a means of expression, and to overstep the limits of individual artistic categories vis-à-vis one another such as language, painting, film and theatre. Art is brought radically into question so as to bring artistic thought and intention to new forms for communication. In 1966, Stan Vanderbeek wrote in Film Culture’s ‘Expanded Arts’ edition: ‘Everything expands, in all directions, there is a interconnection between all of the arts, literally between them all, and this is what it is about. I mean, let’s say that art and life really should be one, and let’s see what happens if we really make them one.’
Expanded cinema is, as Birgit Hein writes, 'not a stylistic concept, but rather a general indicator for all works that go beyond the individual film projection'. It means multiple projections, mixed media, film projects, and action films, including the utopia of 'pil' films and cloud films. 'Expanded cinema' also refers to any attempts that activate, in addition to sight and hearing, the senses of smell, taste and touch. Nicolaus Beudin spoke in 1921 of a poly-level poetry which transmits the poetic synchronism of thoughts and sensations as a kind of film with images, smells, and sounds. In the mid-1920s, Moholy-Nagy had suggested rippling screens in the form of landscapes of hills and valleys, movable projectors, and apparatuses that made it possible 'to project illuminated visions into the air, to simultaneously create light sculptures on fog or clouds of gas or on giant screens'.

The concept of expanded cinema was established in Europe in the mid-1960s within the context of the far-reaching movement of Expanded Arts and is a part of the structural film inquiry which grappled above all with the foundations of the medium.

In expanded cinema, the film phenomenon is initially split up into its formal components, and then put back together again in a new way. The operations of the collective union which is film – such as the screen, the cinema theatre, the projector, light and celluloid – are partially replaced by reality in order to install new signs of the real. The cinematic image is freed from its traditional image character through the exchangeability and simulation of its signifiers. The filmic artwork was no longer understood only in its symbolic expression, but replaced by signs of the real; the media-technical separation of image and sound was transformed into reality. Sound was no longer a trace applied to the image material, but originated in the gasps in front of the microphone. The figures were not created on celluloid, but through holes in the celluloid; the breasts were no longer a sign on the screen, but were themselves the screen. The mission of the Futurists was fulfilled in the multimedia, intermedia activities of expanded cinema under the motto of the expanded concept of art. It made it possible to engage individually in every element of the collective form 'cinema', to re-form and reinterpret context in such a way that not only the apparative art is liberated from the confining mechanism; rather, it also frees image-connected thought from its constraints.

The expanded cinema, which can also be referred to as the liberated cinema, is part of the tradition of liberated sound whose project was initiated at the turn of the century. Expanded cinema is a collage expanded around time and several spatial and medial layers, which, as a formation in time and space, breaks free from the two-dimensionality of the surface.

The intermedia techniques, the destruction and abstraction of the material, as well as the film projection and participation of the audience, were among the prerequisites of the expanded cinema.

In 1967, Peter Weibel and I developed our expanded cinema in Vienna. We examined the relationship between reality and the apparatus that registered it. The media of expression and representation were themselves brought into this discourse. The expansion of our film work proceeded
initially from the material concept; thus the ‘illusion’ film was transformed into the material film, and in this way the foundations of the film medium were reflected. Film was brought back once again to its value as a medium, liberated from any linguistic character that it had taken on in the course of its development. The formal arrangement of the elements of film, whereby elements are exchanged or replaced by others – for example, electric light by fire, celluloid by reality, a beam of light by rockets – had an effect that was artistically liberating and yielded a wealth of new possibilities, such as film installations and the film-environment. In the production of the film medium, celluloid is only one aspect that could (also) be deleted. Instead of the projected image, the film strip itself can become a site for expanding the medium and, consequently, if the celluloid becomes a filmic image as material rather than through projection, a transparent PVC-foil held before one’s eyes can supply the desired image, since if the user projects his own image of the world onto the foil, he sees the world in accordance with his own image. This was the Instant Film that I invented together with Peter Weibel. We wrote the following about it in 1968:

‘INSTANT FILM’ is a meta-film that reflects the system of film and reality. After the development of instant coffee and instant milk, we have finally succeeded in inventing the INSTANT FILM, which is screen, projector, and camera in one. Assembling them is a matter for the viewer. He can hang the foil at home on his own four walls, on four screens, or on different coloured backgrounds, he can place the foil in front of an object and in such a way design his own collage. A foil which has been prepared with scissors, cigarettes, etc., supplies at any given moment ‘vistas’ or ‘insights’, ‘views’ directed inwards or outwards.

In any case, the axiom that ‘film requires celluloid’ was destroyed, just as the axiom ‘film is dependent on the screen’ was repudiated, since the represented object – such as furniture, a field, an animal or man – can itself become a projection surface, which is perceived by the subject, and the environment centred by the camera is projected onto the subject itself. The film itself can be completed by the life action of the filmmaker.

In my 1968 film Auj+Ab+An+zU (fig.92), not only was the celluloid painted on, but so was the screen. The materials used were a paper screen, drawing utensils, and the pattern film. Instead of technical reproduction into infinity and through celluloid, there was a shift in production to a new sense of time. Only portions of the projected image were visible on the screen; the remainder was painted over in black on the celluloid and was supplemented with drawings on the screen. In a circular movement, the inked-over part of the celluloid wanders over the screen; the portion which is thereby freed is again supplemented by the actor as he/she draws on the screen. Eventually the process again reached its initial starting point, and the completed drawing could now be seen as image. This film is a learning film, an excursion into
painting, a rejection of painting; it is an echo of the Cubist desertion of painting. Space is conceptualised as a moment of time. In that the camera circles around the reflected image and transfixes all sides of a body into one and the same place – namely, the screen – an overlapping of static images results. The emancipated viewer, who must take part in the production of the film in order for the film to be realised at all, uses the drawing pencil to supplement what has been painted over on the celluloid. The simultaneity of the projection and the montage which takes place on the screen rather than on the celluloid shows that montage is drawing. After the film is shot, montage; after the montage, the projection. So goes the rule. Any attack on this rule, on the continuity of the phases of production, robs the production companies of their conventional success. Here montage and projection take place simultaneously. The film is painted over, not glued together; in the end the strokes and lines of the reproduced reproduction remain within the projected square. Editing in film is the equivalent of painting; metric film editing that tries to capture time as music is an echo of painting.

The site of film is not the layer of emulsion on the celluloid, the screen, or the cinema screening room, but the system of signs. Peter Weibel reinforced this point through his theoretical statement: 'The ontological difference between the representation and the object becomes the point of departure and at the same time the identificatory transfer occurs again: the reflection and the object overlap one another in a newly arranged process – oriented presentation of the filmic media.' He demonstrated the identity of the representation and the object as the identity of the site in a performance in Vienna in 1967 in which he projected a film onto his own body. He said:

Whenever the site of the film is not the screen, houses can be projected again onto houses or bodies onto bodies, the representation and the object overlap one another, the representation and the celluloid become superfluous. Technical reproducibility is replaced by immediacy, and with this the objective character of the film is transcended; state-reality is not reproduced, but rather the subject and its experience predominate. The 'world' is no longer simulated; rather, the possibility of producing the 'world' is demonstrated.

My/our works were/are always intended to be seen within the context of a social struggle, as an attack on state reality so as to destroy the limits of state reality and the traditional concept of art, for expanded cinema also means expanded reality. Transformed media produce a transformed world, and a world pressing toward transformation presses toward transformed media. Expanded cinema was not only an expansion of the scale of the optic phenomenon, but also was intended, in this phase, to do away with reality and with the language that construes it.
In my film Ping Pong. Ein Film zum Spielen – Ein Spielfilm 1968 (fig. 93), a feature-length ‘Spielfilm’ or film to be played, points appear on the screen in an alternating rhythm. The actor who stands before the screen must hit these points with a ping-pong paddle and ball. I wrote the following about it in 1968:

Independently of semantics, the relationship between the viewer and the screen is clear: stimulus and response. The aesthetic of the conventional film is a physiology of behavior, its means of communicating a phenomenon of perception. Ping Pong makes explicit the dominant relationships between the producer/director/screen and the consumer/viewer. What the eye tells the brain in this case is a release of motor reflexes and reactions. Ping Pong renders visible ideological relationships of domination. The viewer and the screen are partners in a game whose rules are dictated by the director, whose demand is that of making screen and viewer into a single unit of trade. To this extent, the consumer reacts actively. Nothing illustrates the dominant character of the screen more clearly as a medium to be manipulated by the director than this; no matter how much the viewer also enters into the game and plays with the screen, his status as a consumer is altered very little. The screen only appears to be a partner of equal value; the one who reacts is only the viewer, not the screen. The emancipation of the screen, which emancipates the viewer to become a producer, has not yet occurred; the viewer deals with the screen, and yet it does not react.

Here a film projection developed out of the function of the screen; the apparatus shifts between the image of reality and the experience of reality. Without the action of the viewer, the film remains incomplete. The intention is not that of achieving a psychic condition, but rather a direct experience of codification.

If the material itself is the experience, one also arrives at the thesis that ‘film without film’ – i.e., without celluloid – also originates an image in the examination of the film medium, its laws, its prerequisites. In accepting this thesis, the Viennese filmmaker Hans Scheugl made his film ZZZ Hamburg Special 1968. The ‘film’ consists of a strand of thread, which is run through the projector instead of celluloid; its shadow wanders back and forth on the screen in the form of dark stripes on the white-beamed screen. Scheugl wrote: ‘In this way the viewer is forced to think about whether the thread is really on
film or whether it is really running through the projector. Thus an important requirement of intermedia is fulfilled: the creative input of the projectionist.’

A year earlier, in 1967, I created the image on the screen through simultaneous real procedures in Abstract Film No. 1. The materials for this expanded movie were a mirror, water, thick and thin liquids, flashlights, and the screen. I wrote this about it in 1968:

Here abstract patterns are created by concrete materials; there is no differentiation between nature and sign. Technological effects are achieved using simple means. A flashlight shines on a mirror, over which the various liquids are poured. This phenomenon is projected onto the screen through the reflection of the projector light; abstract moving patterns are created. The image on the screen is the result of the traveling of the light, for we only see what the light transports. This is of course true of every film. The recourse to natural means such as water, light, and mirroring, the reduction to elements, and the departure from technology creates above all unexpected and yet fundamentally illuminating connections with minimal art, land art, arte povera. The same phenomenon can also take place in nature; the projection surfaces here are nature’s screens.

After this came Das Magische Auge, also made in 1969 together with Peter Weibel. Das Magische Auge is an auto-generative screen that, through selenium cells, converts light and non-light into sound. The sound usually originates in the projector. In the light/sound process invented by Vogt and Engel between 1920 and 1930 – their optical sound film process, photographed sound – the sound frequency is transformed into corresponding light frequencies, which in their turn influence the light-sensitive layer of a film strip that is run at a constant speed. When it is replayed, a beam of light is modulated by the frequencies of brightness indicated on the edge of the film strip. A photographic cell accepts the light frequencies, which, after having been appropriately amplified, control the loudspeakers. In Das Magische Auge, the sound develops on the screen, since it is prepared with photo cells, relays, etc., so that the light creates the sound. As film, a film with abstract patterns is used: if it is dark, the sound is deep, if it is bright, the sound is high-pitched. Since, however, the gauging of the light value is not the composite of the entire surface, but rather an individual impulse of the diverse cells modified depending on the light that falls upon them, an intense sound collage develops. It is not the sound trace which supplies the fluctuations of brightness; rather, the projected film or the public itself or the lighting in the room, etc., create it themselves. To each film at each moment its own sound.

Emancipation from the industry is also possible through the subjectification of film, through the abandonment of the industrial standard of presentation. The human body becomes a skin screen. The modification of the projection surface tends to eradicate as much as possible the difference between the object and the sign, and to emphasise the reality of the medial
character of the film vis-à-vis the reality outside the movie theatre. It shows us a way of undertaking contextual changes and expansions through the subject of the artist himself and thus also of the concept of the sign.

In Tapp und Tastkino (‘Touch Cinema’), which I made in 1968, I examined the breasts as a central theme within the film industry. The Tapp und Tast film is a street film, a mobile film and the first real women’s film. The performance takes place as usual, in the dark. Only the movie theatre has become somewhat smaller, there is room in it only for two hands. In order, to see the film, which means in this case to sense and feel it, the ‘viewer’ must put both hands through the entranceway to the theatre. Thus the curtains which previously had been drawn up only for the eyes is also finally raised for the hands.

Tactile reception counteracts the fraud of voyeurism. In state-sanctioned cinema, audiences sit in the dark and see how two people make it with each other, and they themselves are not seen. In Tapp und Tastkino, social prescriptions are no longer obeyed, and the intimate sphere of what the state permits is forced open into public space. Since the consumer can be anyone—child, man, woman—it is an unveiled intrusion into the taboo of homosexuality. The morality of state prescriptions, the state, family, property, is exploded. For as long as the citizen remains satisfied with a reproduced copy of sexual freedom, the state will be spared a sexual revolution.

As Christian Metz writes, for classical film theory, ‘film is the product of photography and the phonograph, i.e., of both of the modern technologies of mechanical doubling’. In the conventional debates on film, the concept of similarity, of analogy, is defined not so much through the individual category of sensuous experience, but much more through abstract identification, through re-recognition as a necessary condition of communication—i.e., through a social category. If one consciousness wants to communicate with another, and this communication is filmically coded; if reference is made to a process of analogy, an analogy is required that does not produce the subjective experience that would be one of freedom and fantasy, but rather through a process that constitutes social communication: identification.

Identification means that, through the construction of a conceptual system that everyone can relate to equally, the reactions of the users of this system are predictable and controllable.

Identification is a process of the adaptation of consciousness to a concept that can be a concept for everyone. Sociological models are reinforced in the cinema. Yet film, photography and the phonograph are not mechanical replications, but extensions and expansions of our structures of time and space, of our experiential structures, of our interpersonal communication—they are expansions of our reality and our independent consciousness. Voices address different places at different times, the past is made visible, space and time can be transported, spaces and times, hierarchies and values disappear. In a total art, the boundaries between artificial and natural reality, between actual and possible reality, between the products and the producers, between man and object are transcended. As Gene Youngblood writes in his book on
expanded cinema: ‘Today when one speaks of cinema, one implies a metamorphosis in human perception. Just as the term “man” is coming to mean man/plant/machine, so the definition of cinema must be expanded to include videotronics, computer science, and atomic light.’ This was written in 1970.

The forms of strategy that were internationally and nationally dominant in the 1960s and 1970s continued into the 1980s in multimedia performances, expanding and adapting the electronic media. The electronic cinema bids farewell to the commercial fairy tale of film as mimesis, for in the electronic film, the image has no place: it occupies space.

In recent years, one of my most important artistic projects has been my engagement with – my interrogation of – the voice.

I have always worked around the topic of the voice; I have represented it with and through different possibilities. I have analysed the voice in various ways; this dialogue I see as an extension of my thinking about ‘expanded cinema’. I would like to quote a few lines from my performance The Voice as Performance, Act and Body, which was presented with my installation The Pain of Utopia at the 2007 Venice Biennale:

The unruly voice, the divided voice, the split voice. The voice as suture, the voice as seam, the voice as cut, the voice as tear (or crack), the voice as my identity.

While I was speaking, the image of my glottis, recorded via a laryngoscope (an instrument for viewing the throat), was transmitted on four video monitors grouped around me in a semi-circle.

In my work The Glottis, in which I refer to the origin or source of my voice, I refer to my glottis. The voice starts with the glottis – the anatomical
architecture of the body. The air, the breath, which exits and pushes out of the torso is formed by the instruments of the body’s architecture, the oral cavity, lips etc., and the architecture of the mind, the thinking, the consciousness, the speaking of language.

My engagement with the voice dates back to the 1960s, for example *Tonfilm 1969* (fig. 96). But in this recent work, a photo-electric amplifier is fixed into the glottis, and is then connected to a light-emitting object, located at the exterior skin below the ear. A lot of light generates a lot of electricity in the amplifier and the formation of the sound is very loud. The photo-electric amplifier controls the formation of the sound, the volume. In the case of little light, little electricity comes to the amplifier and the formation of the sound is minimal. This Life-Sound-Film was projected in such a way that the performer had to scream an awful lot in the afternoon, had to lose their voice in the evening and became completely silent at night. Near the voice-muscles are nerve fibres of the sympathetic and parasympathetic nervous system. The stress to these results in a high amount of perspiration, secretion, emptying of the bowel, blood circulation etc.: a sweating, feverish, dribbling, drooling, shitting individual screams in the environment.
Contributors' Biographies

Steven Ball (co-editor) is an artist, writer and research fellow attached to the British Artists' Film and Video Study Collection, Central Saint Martins College of Art and Design, University of the Arts London. He has worked in film, video, sound and installation since the early 1980s and his recent work with digital video concerns material process and spatial representation, including live video performance. Other projects include Figuring Landscapes, Artists' Landscape Moving Image from Australia and the UK (co-curated with Catherine Elwes), touring Australia and the UK 2008/10.

Mark Bartlett was formerly an independent scholar in Oakland California, and now lives works in London. He is a member of the Manipulated Moving Image Cluster at the University for the Creative Arts, UK, and an associate lecturer at the Open University. He is completing a book on Stan Vanderbeek, and has contributed to the catalogue of the exhibition Stan Vanderbeek: The Culture Intercom (MIT Visual Arts Center and Contemporary Arts Museum, Houston, 2011). He curated the special issue of Animation journal (UK) on Vanderbeek (2010), and has written on other aspects of Vanderbeek, including politics and media in his early work. Mark Bartlett's writing focuses on the intersections between technology, aesthetics, epistemology, and sociopolitical interpretation. He has played a central role in the new scholarly interpretation of Vanderbeek's crucial role as a creative innovator in the media arts.

David Curtis (co-editor) studied painting at the Slade School of Art, University College London. He was film programmer at the Arts Lab and the London Filmmakers Co-operative from 1967 to 1970, and from 1977 to 2000 he was Film Officer at the Arts Council of Great Britain. As a research fellow at Central Saint Martins College of Art and Design, University of the Arts London, he founded the British Artists' Film and Video Study Collection in 2001. He has curated extensive exhibitions of experimental film and video, including A Perspective on British Avant-Garde Film (1978), Film as Film (1979), Len Lye (Watershed, 1986), A Century of Artists' Film in Britain (Tate Britain, 2003–4) and many others through to Moving Portraits (De La Warr Pavilion, 2011). His major publications include A History of Artists Film & Video in Britain (BFI, 2007).

Noam M. Elcott is Assistant Professor of Modern Art History at Columbia University, having received his PhD from Princeton University in 2009. His scholarship and teaching span the histories of modern art, photography, and film, as well as critical and media theory, with a special focus on the interwar avant-garde. He has published in Grey Room, Aperture, and other journals and catalogues. He is currently at work on a book-length project on avant-garde photograms, cinema and media architecture.
Catherine Elwes is a video artist, writer and curator. Her recent work investigates masculinity and military conflict, now combined with an interest in land and seascape. In 2000, she published *Video Loupe* (KT Press) and in 2005 *Video Art: A Guided Tour* (I.B. Tauris). Elwes is currently writing *Landscape and the Moving Image* for Wallflower Press. She has curated many international screening series including (with Steven Ball) *Figuring Landscapes*, which toured the UK and Australia in 2008–10. Elwes is Professor of Moving Image Art at Camberwell College of Art and Design, University of the Arts London.

**VALIE EXPORT** is an artist, independent filmmaker and theorician who has created works in a variety of media, including documentary and narrative film, video, performance, photography, installation, sculpture, and drawing. She has been an influential and provocative figure on the international art scene since the 1960s. She was nominated as commissioner for the Austrian Pavilion of the Venice Biennale in 2009, and conceived and organised the prestigious lecture series *Digital Technologies, Perception and Design – An Interdisciplinary Dialogue Between Art and Science* for the Academy of Arts, Berlin (1992–5). Her numerous one-woman shows have included VALIE EXPORT: *Time and Countertime* (touring show 2010–11); VALIE EXPORT, The Israel Museum, Jerusalem, 2009; VALIE EXPORT, NCCA National Centre for Contemporary Art and Ekaterina Foundation, Moscow (2007) and VALIE EXPORT, Camden Arts Centre, London (2004). She has been the subject of many studies, including *Valie Export, Bild-Risse* (Passagen Verlag, 2002). Recent publications about her work include *VALIE EXPORT, Zeit und Gegengezeit/Time and Countertime* (Verlag Walther König 2011) and *Staging EXPORT/VALIE zu Ehren* (Peter Lang 2011).

Nicky Hamlyn is a professor at the University of the Creative Arts. His work has been shown at festivals around the world and he has had solo shows at San Francisco Cinematheque, Pacific Film Archives, Berkeley and Double Negative, Montreal (2007). His book *Film Art Phenomena* (2003) is published by the BFI. Recent writings include essays on the American filmmaker Stan Brakhage's *Roman Numeral* series (*Stan Brakhage: An American Filmmaker*, Temple University Press, 2004) and Peter Kubelka’s film *Arnulf Rainer (The Classic Avant Garde)*, Edinburgh University Press/Rodopi, 2007). He writes for the journal *Film Quarterly*.

Jackie Hatfield (1962–2007) was an artist and scholar. Editor of *Anthology of Experimental Film and Video* (John Libbey, 2005), she contributed essays and co-edited two critical books on women’s use of technology in art practice, *Desire by Design* and *Digital Desires*, and published articles concentrating on expanded cinema and other underexplored histories of experimental film and video. She curated *Experiments in Moving Image* with Stephen Littman at the University of Westminster’s Lumière Cinema, London (2004), was the lead researcher on the archival project *REWIND: Artists’ Video in the 1970s and 1980s* (University of Dundee), and initiated the AHRC research project Narrative Exploration in Expanded Cinema.

Birgit Hein is a filmmaker and performer, and author of numerous publications on avant-garde cinema. She worked with her partner Wilhelm from 1966 to 1988, together founding X-Screen and organising sub-cultural events and programmes of work for various cinemas. From 1990 she was Professor of Film and Video at the Hochschule für Bildende Künste, Braunschweig. With Wulf Herzogenrath, she curated the film and video section at Documenta 6 (1977) and the exhibition *Film als Film: 1910 bis heute*, Cologne (1977).
Malcolm Le Grice has shown in exhibitions since the 1960s, including *Documenta 6, X-Screen* at the Museum of Modern Art, Vienna, and *Behind the Facts* at the Fondacio Joan Miró, Barcelona. He has had screenings at MoMA, New York, the Louvre, Paris, and in 2008 exhibited installation and performance works at Tate Modern, London. He is represented in collections including the Centre Georges Pompidou, the Royal Belgian Film Archive and the National Film Library of Australia. *Sketches for a Sensual Philosophy, Chronos Fragmented* and other works have been transmitted on British television. He has published extensively – works include *Abstract Film and Beyond* (MIT Press, 1977) and *Experimental Cinema in the Digital Age* (BFI, 2001) – and is a Professor Emeritus of the University of the Arts London.

Lynn Loo was a music teacher before making her first 16mm experimental film in Singapore in 1997, and then studying at The School of the Art Institute of Chicago. Her films have shown in international festivals such as *Woman Make Waves Taipei, Cinematexas Short Film Festival, Austin, Filmfest Dresden* and *International Film Festival Rotterdam*. She has exhibited gallery installations at The Substation in Singapore and Blue Space Gallery, HCMC Vietnam. She was recently commissioned to curate a programme of expanded cinema for *EXiS Experimental Film and Video Festival*, Seoul. Her recent works explore qualities of celluloid in live performance with multiple 16mm projectors, often collaborating with UK artist Guy Sherwin. These works have shown in festivals including *Evolution*, Leeds, *Ocularis*, New York, *Starting from Scratch*, Amsterdam and *Guling Avant-Garde Festival*, Taipei. She currently works as a film archivist at the BFI National Film and Television Archive.

Chris Meigh-Andrews is an artist, writer and curator and Professor of Electronic and Digital Art at the University of Central Lancashire, where he established the Electronic and Digital Art Unit (EDAU) in 2004. Meigh-Andrews has been exhibiting his video and installation work internationally since 1978 and his site-specific works often feature renewable energy systems and are designed to interact with their environment. His most recently completed commissioned installation produces a live stream of panoramic time-lapse images from the top of the Monument in the City of London. Curatorial projects include *The Digital Aesthetic* (2001) and *Digital Aesthetic 2* (2007) with the Harris Museum, Preston; *Analogue: Pioneering Video from the UK, Poland and Canada* (with Catherine Elwes), an international touring exhibition (2006–9) and *Yes Snow Show*, (with Elisabetta Fabrizi) at the British Film Institute, London (2009). His book, *A History of Video Art: The Development of Form and Function* was published by Berg in 2006, and in Japan by Sangensha, Tokyo in 2011, and he is currently working on an enlarged and updated edition which will be published in 2012.

Karen Mirza and Brad Butler make film and video installations that question the filmic, sculptural and architectonic qualities of the moving image. They have exhibited in many group exhibitions. Recent shows include *Evolution*, Leeds City Art Gallery; *The Expanded Eye*, Kunsthau Zurich; *New Work UK*, Whitechapel Gallery, London; *Architecture and Film*, Biennale Graz; *Vertical and Horizontal*, Serpentine Pavilion, London, and *A Certain Tendency in Representation* at Thomas Dane Gallery, London.
Annabel Nicolson is an artist and filmmaker. Nicolson was cinema programmer at the London Filmmakers Co-operative in 1974, 1976–7 and 1992–3, a founder member of Circles – Women's Film in Distribution in 1979; editorial contributor to Musics magazine 1976–9; and co-editor and publisher of Readings magazine 1977. Her film works and performances have been seen in museums and galleries nationally and internationally. Her work is in the collections of the Belgian National Film Archive, the British Film Institute, Canterbury University, and the Women Artists’ Slide Library.

Michael O’Pray is Professor of Film at the University of East London. He founded the Film and Video Umbrella and championed the work of Derek Jarman and many new film and video artists in the 1980s. In addition to writing regularly for the art press, including Art Monthly, he is the author of Avant-Garde Film: Forms, Themes and Passions (Short Cuts) (Wallflower Press, 2003) and has written and edited books on Andy Warhol (Andy Warhol – Film Factory, 1986), Kenneth Anger (Into the Pleasure Dome, 1989), Derek Jarman (Dreams of England, 1996), and Adrian Stokes (Film, Form and Phantasy, 2004).

Stephen Partridge is a media artist and academic researcher. He was in the landmark shows of the 1970s including The Video Show at the Serpentine, London, in 1975, The Installation Show at the Tate Gallery, London, in 1976, The Paris Biennale in 1977 and The Kitchen in New York in 1979. During the 1980s and 1990s he exhibited widely and produced works for broadcast television commissioned by Channel 4 and BBC Television. He established the School of Television and Imaging at Duncan of Jordanstone College of Art and Design (University of Dundee). He is currently Professor of Media Art and Dean of Research and the principal investigator on the AHRC-funded research project REWIND: Artists’ Video in the 1970s and 1980s.

William Raban studied at Saint Martin’s and Reading University. He ran the London Filmmakers Co-operative workshop and wrote and published Filmmakers Europe, an international listings and review magazine. He also contributed to Filmwaves, Vertigo and other film and video journals. His work has included landscape film, expanded cinema, installations and work for television, much of it with a strong social/political undercurrent. He has taught at North East London Polytechnic, Goldsmiths’ College and Central Saint Martins, and is currently Reader in Film at London College of Communication, University of the Arts London. His most recent film, About Now MMX, was premiered at Tate Modern in 2010.

Lis Rhodes has been making film works since the early 1970s, and video works since the 1980s. Her expanded cinema practice, notably Light Music 1975, has been widely shown over three decades, most recently in Tate Modern’s ‘oil tank’ space during the expanded cinema conference of April 2009. Rhodes is regarded as one of the UK’s most innovative and independent filmmakers, and played a notable role in the debates around women’s cinema from the later 1970s onwards. She lives in London, and until her retirement in 2009 taught at the Slade School of Art, University College London.

A.L. Rees (co-editor) is a research tutor in the Department of Visual Communication at the Royal College of Art, London. He writes and teaches about artists’ film, video and digital media. His book A History of Experimental Film and Video was published by the BFI in 1999 (revised edition, 2011). Recent essays have appeared in Millennium Film Journal (USA), Iconics (Japan) and Sequence (UK). A former chair of the Artists’ Film and Video Committee at Arts Council England, he was also head of Time-Based Media at Maidstone College of Art (1989–96). He is currently working on a revised edition of A History of Experimental Film and Video due for publication in 2011.
Lucy Reynolds is a writer, artist and film programmer. Her PhD research at the University of East London explored the expanded cinema events of Gill Eatherley, Annabel Nicolson and Lis Rhodes. She teaches the history and theory of cinema and artists’ moving image at Birkbeck College, the University of Westminster, Goldsmiths’ College, and Bristol University in association with Picture This and the Arnolfini. Recent articles include ‘Filmaktion: New Directions in Film Art’ in Centre of the Creative Universe: Liverpool and the Avant-garde (Liverpool University Press, 2007), and she has presented talks on artists’ moving image at a number of arts venues including the Cubitt Gallery and the Serpentine Gallery. Recent curated film projects include An Arabesque for Marie Menken, Tate Modern (November 2008) and Time Unfolding, a DVD selection of artist commissions for Picture This. Her film Lake (Nocturne) was screened as part of The Nature of Our Looking, National Film Theatre, 2007 and at Parallax, Fieldgate Gallery, April 2008.

Carolee Schneemann is a multidisciplinary artist whose work is characterised by research into archaic visual traditions, suppressive taboos, and the body of the artist in dynamic relationship with the social body. Her work in many media has been shown internationally, most recently in a retrospective at the New Museum of Contemporary Art, New York, entitled Up To And Including Her Limits, and in film and video retrospectives at the Centre Georges Pompidou, Paris; MoMA, New York; National Film Theatre, London; Whitney Museum, New York; San Francisco Cinematheque; and Anthology Film Archives, New York. Her books include Cezanne, She Was A Great Painter (1976); Early and Recent Work (1983); More Than Meat Joy: Performance Works and Selected Writings (1997). Forthcoming publications include Imaging Her Erotics, from MIT Press. A selection of her letters edited by Kristine Stiles is also forthcoming.

Guy Sherwin is an artist-filmmaker whose works often include live elements and serial forms in their investigation of fundamental qualities of cinema such as light and time. He studied painting at Chelsea School of Art and taught film printing and processing at the London Filmmakers Co-operative (now LUX) during the mid-1970s. His films have been included in Film as Film (Hayward Gallery, 1979), Live in Your Head (Whitechapel Gallery, 2000), Shoot Shoot Shoot (Tate Modern, 2002) and A Century of Artists’ Film & Video (Tate Britain, 2003–4). Recent works, made in collaboration with artist Lynn Loo, include performances that use multiple projectors and optical sounds (sounds made from light) often in conjunction with improvised music. These have toured to venues in Europe, US, Asia, and Australia. Two DVD/books of his work have been published: Guy Sherwin: Optical Sound Films 1971–2007 (LUX 2008) and Messages (LUX 2010). The Train Films DVD will be published by LUX in 2011. He is a lecturer in film and fine art at the University of Wolverhampton and at Middlesex University, London.

Jonathan Walley is Assistant Professor of Cinema at Denison University in Ohio, where he teaches courses in film studies and production. He specialises in avant-garde film, and particularly expanded cinema. He has published essays on the subject in *October, The Velvet Light Trap*, and *The Journal of Aesthetics and Art Criticism*, as well as in several anthologies. He is currently writing a book on paracinema, works of expanded cinema that explore the aesthetics of film without the use of the film medium.

Peter Weibel is an artist, media theorist and curator. Since 1984, he has been a professor at the University of Applied Arts, Vienna, and was head of the digital arts laboratory at the Media Department of New York University in Buffalo from 1984 to 1989. He founded and led the Institute of New Media at the Städel Schule in Frankfurt from 1989 to 1995, and directed *Ars Electronica* in Linz from 1986 to 1995. He commissioned the Austrian pavilions at the Venice Biennale from 1993 to 1999. He was chief curator at the Neue Galerie Graz, Austria, from 1993 to 1998, and since 1999 he has been Chairman and CEO of the ZKM Center for Art and Media, Karlsruhe. In 2008 he was the Artistic Director of the Biennial of Sevilla (Biacs3). He was awarded an honorary doctorate by the University of Art and Design Helsinki (2007) and was made an Officer of the French Ordre des Arts et des Lettres (2008). In 2009 he was awarded the F.F. Runge Preis für Unkonventionelle Kunstvermittlung by the Stiftung Preußische Seehandlung, Berlin.

Chris Welsby is a graduate of Chelsea School of Art and the Slade School of Art. He was a co-founder of the Slade’s Media Department, where he taught from 1976–89. He is now a professor in film and digital media at Simon Fraser University, Vancouver. Welsby joined the London Filmmakers Co-operative in 1972. Since then his experimental landscape films and installations have been exhibited worldwide. Welsby has been making and exhibiting digital media installations since 1993 and is currently working on a hundred-year imaging system, *The Doomsday Clock*.

Duncan White (co-editor) was Post-Doctoral Research Fellow for the AHRC Narrative Exploration in Expanded Cinema project. He is now a research fellow based at the British Artists’ Film and Video Study Collection at Central Saint Martins College of Art and Design, University of the Arts London. He is also a lecturer in film at London College of Communication, University of the Arts London. Recent publications include: ‘From White Calligraphy to Video Semiotics: Takahiko Iimura’s Light Writing’, an Interview with Takahiko Iimura, *Afterall* (2010) and ‘British Expanded Cinema and the “Live Culture” 1969–1979’, *Journal of Visual Culture in Britain* (vol.11 no.1, 2010).

Maxa Zoller’s academic interest lies in uncovering overlooked film practices. Her PhD focused on the history of European experimental film; in her capacity as a film curator she organised a major screening of East and West German experimental film at Tate Modern in November 2009. She is a guest lecturer at Sotheby’s Institute and runs workshops at the Oslo Academy, FACT and now here.
‘Expanded Cinema’ includes some of the most innovative and challenging artworks of modern times. Experimental film, multi-screen projections, artists’ video and live performance inside and outside the gallery space, all explore cinema beyond the single screen.

Leading scholars from Europe and North America trace the field from its origins in early abstract film right up to the digital age. Insightful essays explore post-war happenings and live events in Europe and the US, the first experiments with video and multi-media, the fusion of multi-screen installations with dance, sonic art and music and current practices employing digital manipulation and the internet.

Featuring new interviews with key artists, the book also makes available previously unpublished artists’ texts and manifestos alongside extensive illustrations, making it an essential resource for all those interested in video, performance, film and media art.