KALEIDOSCOPIC PERCEPTION
THE MULTIPLICATION OF SURFACES AND SCREENS
IN MEDIA AND CULTURE[1]

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The following essay is exploratory and geared towards investigating a phenomenon tentatively labelled a "multiplication of surfaces and screens" in different media, and also, in the culture at large. This tendency towards the fragmented and multiplied surface can be found in many cultural fields: the return of the split-screen in contemporary films, both mainstream and experimental, the proliferation of multi-channel installations in video art as well as the ubiquity of the fragmented screen space in television, music videos, videogames and computer graphic interfaces. Even mediatised urban spaces, architectural ensembles and entertainment areas such as sports arenas, shopping malls and theme parks exhibit similar tendencies.[2] There are different ways to analyse this multiplicity of screens, this *mise-en-abyme* of frames within frames, this proliferation of the split-screen: one could try to find cultural, economic or technological reasons for this appearance across different fields. One could emphasise the differences between, to give one example, the poetics of installation art and the functional use of split-screen in a TV news show. Alternatively, one could stress the convergence of different media in the digital which results in a shift from the photographic image indexically bound up with the pro-filmic to the graphic image indexically independent from the pro-filmic.[3] In order to delineate this wide field I will provide here a historical flashback, a sort of genealogy of the multiplied screen, and some remarks towards the poetics of the split-screen from which the title "kaleidoscopic perception" is borrowed. I will also be touching upon issues of installation and video art, TV and music videos, and yet the focus of this essay is the cinematic employment of the split screen.[4]

Before starting an inquiry it is useful to circumscribe and define the field of examination. So, what is the split-screen technique? Most dictionary entries identify the central tenet as the screen being visibly divided into two or more frames instead of having a seamless overall filmic image.[5] Thus, in its most basic sense split-screen divides a whole (the screen or image) into parts while a multi-channel installation or a multi-media environment made up of several screens creates a whole out of parts. Yet again, the split-screen and multi-screen environments are related in several ways: they create similar effects in the viewer, they share the same genealogy in the archaeology of the multi-image environment, and they sometimes even appear as variations on the same topic.[6] The central question addressed in this paper then, is what happens when an apparently seamless image is broken up and divided into visibly different parts as in the structure of Russian dolls or Chinese boxes of frames within frames.

The Classical Split-screen and Its Genealogy

Let us start by recapitulating what film history has to say about the multiple image.7 The traditional conception of split-screen is that of an effect popular in upmarket thrillers, horror films and comedies from the late 1950s to the mid-1970s; cinephiles will add Brian de Palma as the only *auteur* who has constantly, from *Sisters* (1973) to *Femme Fatale* (2002), made use of this technique.[8] Yet, recent historiographical studies on the industrial and aesthetic development of Hollywood in the past couple of decades rarely mention split-screen.[9] Often, the technique is considered to be a deviation from the norm, a fancy technique used for experimental purposes which vanished in the mid-1970s, that is, very soon after it appeared around 1960 at a time when Hollywood was desperately searching for a new formula to entice audiences back into the movie theater. From this perspective of the self-organisation of the film industry, split-screen can be seen as part of Hollywood's attempt to master its crisis that had become obvious by the late 1960s. The reaction of the studios to dropping revenues was to allow young executives and filmmakers to experiment in order to recapture lost markets. The innovative wave of the New Hollywood, to which split-screen would be a rather freakish outgrowth in this model, is thus not seen as a creative outburst of a couple of individuals, but rather a controlled laboratory for finding a new success formula in which the artists functioned as the proverbial laboratory rats who had to find solutions to complicated problems.[10] Therefore, by the time that *Jaws* (S. Spielberg, 1975) and *Star Wars* (G. Lucas, 1977) were released, both with many technical tricks and special effects, albeit not always visible or obvious (like split-screen is), the time of the multiplied image was over. Or so it seemed until its unexpected return in the late 1990s. The resurgence of the split-screen in contemporary film refutes the assumption that this particular technique is tied to a specific experimental moment in film history. One either has to reconsider the reasons given for the earlier uses or to diagnose a similar moment of upheaval for today's film culture if one wants to stick to the crisis version of history.

Another approach would provide an archaeology of multi-screen experiments and locate a convergence of mainstream filmmaking with at least two different strands in the late 1960s: popular exhibition culture and the avant-garde impetus to depart from the traditional cinematic apparatus. Beatriz Colomina has traced the genealogy of the multiplied screen back into the history of large thematic exhibitions. In 1959 the "American National Exhibition" was staged in Moscow which – at the peak of the Cold War – was meant to showcase the "American way of life" to the people of the Soviet Union. A complementary exhibition presenting Soviet achievements to US citizens took place simultaneously at the New York Coliseum at Columbus Circle. In Moscow, the main attraction turned out to be a huge geodetic dome constructed by Buckminster Fuller which provided the workers and peasants of the Soviet Union with *Glimpses of the USA*. This title was taken from the seven-screen installation piece by the designer couple Charles and Ray Eames, which mixed still and moving images to condense a typical working day and a typical weekend day in twelve minutes. *Glimpses of the USA* was very much in the tradition of the city symphony of the 1920s and 1930s. Yet, the Eameses were also heavily influenced by information theory which had emerged out of military circles during the Second World War. The key question turned out to be how to transfer information economically from a sender to a receiver as prefigured in the

writings of Claude Shannon and Warren Weaver.[11] The Eameses followed up their Moscow presentation with a 14-screen film for IBM's "Think"-Pavilion at the 1964 New York World Fair. Whereas *Glimpses of the USA* in Moscow, in its conscious use of the city symphony, points back to the first cinematic avant-garde of the 1920s, the IBM pavilion already anticipates the 1990s convergence with the realm of the digital. Both these specifically designed spaces for multi-screen experiments proved to be immensely successful. On the basis of this success, the idea of the multiplied image was adopted by Hollywood, most notably in *Grand Prix* (J. Frankenheimer, 1966). Further multi-screen experiments took place at the International Exposition in Montreal in 1967, a moment that was, in retrospect, possibly the climax of this development.[12] The mainstream use of multi-screen can be traced to such innovative examples as *The Boston Strangler* (R. Fleischer, 1968), *The Thomas Crown Affair* (N. Jewison, 1968) or *Woodstock* (M. Wadleigh, 1970), all of which represent the first major wave of multi-frame experiments in mainstream filmmaking.[13]

This anchoring of split-screen in the genealogy of 1950s and 1960s exhibition culture opens up an avenue in film history that leads us back to the turn of the century. As historians of early cinema have reminded us, the world exhibitions, gigantic trade fairs and thematic exhibitions that showcased the positivist belief in progress and advances in science and technology around 1900 were a climate well-suited for novel entertainment media such as the cinema.[14] Along with the circus and the fairground, the vaudeville and the variety theatre the gigantic expositions gathered developments of different kinds into a format that was able to attract and fascinate a large audience. If we anchor the multi-screen installation and the split-screen in the history of this large thematic exposition, then this technique demonstrates its proximity to a cinema not rooted in narrative integration and rather inclined towards a poetics of spectacle, obviousness and self-reference, as it can be seen in the avant-garde as well as in popular entertainment forms.[15] The archaeology of the multi-screen environment then illustrates how the multiplied surface and screen never sought the contemplation and immersion in the diegesis typical of Classical Hollywood Cinema. The split-screen self-consciously displays the limit of the frame, it exhibits the finite nature of the medial image, the ultimately fragmentary and constructed character of the moving image.

The second important strand, besides the influence from thematic exhibitions, is the movement within the avant-garde known as "expanded cinema", to use a phrase coined by Gene Youngblood.[16] Not coincidentally, Youngblood's book boasts a preface by architectural guru Buckminster Fuller who in turn was instrumental in designing some of the geodetic domes in which multi-channel experiments were being exhibited. This strand can be followed back to earlier experiments of the Eameses, as well as to experiments within the first wave of the avant-garde, most famously of course Abel Gance's triptych projections for his *Napoléon* (1925-27). In addition, the phenomenon was apparent in various events realised within the framework of the Bauhaus. These experiments with alternative screening set-ups, were self-consciously designed to reconsider the cinematic apparatus as the basis of the spectator's involvement in the film. In fact, the thematic exhibitions and the avant-garde are intertwined in even more (complex) ways. Both these approaches, from the perspective of the self-contained logic of Hollywood and that of the historical context of modernity and avant-garde offer potential explanatory models for the proliferation of split-screen in mainstream films.

What can we learn from this brief archaeological sketch of the multi-screen image in the cinema? When seen from the perspective of the avant-garde, the influence of the "expanded cinema" of the 1960s, as well as of Andy Warhol's experiments with double-screen in *The Chelsea Girls* (1966), are crucial for the mainstream break-through of the split-screen. Since the avant-garde considered itself as a pathfinder and minesweeper, it seemed reasonable to assume that commercial filmmaking picked up on ideas from the fringes.[17] From the logic of technological rivalry, multiple screens answered to the cinema's inferiority complex vis-à-vis television. But the list of explanatory models can still be extended: when considering the ramifications of almost all media in military technology, the multiple screen could refer to the war control room with many monitors updating data (radar, interactive maps, control panels and so on) in real time. So maybe, instead of claiming the origin of this partic-ular technique to one historical incident one should acknowledge that – very much like the cinema itself with its roots in many different fields – the genealogy of the split-screen links it to very diverse backgrounds. Yet again, one feature seems to be characteristic of the split-screen: the explosion of a single viewpoint that offers a priv-ileged perspective on the film. A split-screen film, an experimental installation, or a multi-screen set-up used in an exhibition – all these instances require a reception stance different from classical cinema which is different from the classical cinema's provision of a seamless image which encourages a coherent viewing position, to smooth over the rupture of the cut.

Modulating the Classical Continuity System: *The Boston Strangler*

Let me turn to one paradigmatic example of multiple frames in mainstream fiction film, *The Boston Strangler*. The film tells the story of a serial killer, and is made thirty-seven years after *M* (F. Lang, 1931) and twenty-three years before *The Silence of the Lambs* (J. Demme, 1991). *The Boston Strangler* charts the history of the "Boston stran-gler", a serial killer who murdered thirteen women in Boston between June 1962 and January 1964. Tony Curtis plays the alleged serial killer Albert DeSalvo (he was self-con-fessed and never acquitted because he was killed in jail before he went on trial) and Henry Fonda performs the investigating detective, yet the most striking feature in the film is the numerous split-screen scenes. This is somewhat surprising since the film otherwise exhibits a rather rough, direct, realistic and documentary style of the detec-tive film. The film often dwells on scenes detailing the investigative work of the police. The divided screen is employed in an almost encyclopaedic fashion in this film, exper-imenting with different uses over the course of the film. Sometimes the film utilises split-screen to enhance suspense when it doubles perspectives: in one scene the film shows the dead body of a murder victim lying in the dark in one frame while the other frame shows two unsuspecting neighbours knocking to ask why their housemate is not picking up her mail. On opening the unlocked door the two shots partly overlap: in one frame, a wide shot, we see the corpse as well as the two shocked neighbours, in the other we have a close-up of the faces. The split-screen in this film is employed in the place of what would normally be a cut-in to a closer view. All through the film, split-screen is used as a substitute for traditional editing techniques such as montage sequences, shot-reverse-shots patterns, eyeline matches and others. Indeed, the film could be called a

manual for presenting how the split-screen can be fitted into the continuity and decoupage system of classical Hollywood cinema. Indeed, in a contemporary article director Richard Fleischer, visual designer Fred Harpman, cameraman Richard H. Kline, editor Marion Rothman, and visual effects specialist L.B. Abbott all stress how split-screen was used in order to enhance suspense or to create a more complete impression of the city being terrorised by the lurking murderer.[18]

Yet, in one memorable sequence the film also accomplishes something else with this technique: it brings the competition between cinema and television to the fore. The sequence illustrates in a quick succession of scenes presented in split-screen the frantic police search for the killer. The sequence is introduced by a multiplication of TV screens. Over the face of the strangler's last victim we hear a voice announcing the names of the murdered women until the appearance of a TV screen in a panel on the left of the screen locates the origin of the spoken words as the voice of a newscaster. The film foregrounds the viewing situation of television, showing the television set as a rather bulky and unwieldy piece of furniture decorated with flowers. In another frame, two women (potential victims?) intently observe the newscast over a meal. The TV images shown with some surroundings multiply and we see up to four images at the same time. Meanwhile, the TV shown without surroundings on the left-hand side of the screen functions as a kind of anchor. After the brief flashes of "ambient television"[19] the panels on the right of the screen disappear to disclose that the TV monitor on the left shown all through the scene is, in fact, located at the police headquarters, tucked in one far corner of the room. Self-consciously, the film contrasts the small black-and-white TV images with the large colourful canvas of the film that we are watching. The spectators now discover that, all the while, the TV on the left of the frame had been watched by policemen who are, in turn, subsequently briefed about detaining every sexual offender in the city. In the following montage, television, as a medium of multiplication, is contrasted with film which is able to encompass and contain these multiple screens and views in a single image. As if to offer a direct comparison, we see a cinematic image of a western projected on the big screen (is it John Ford's *Stagecoach*?) in which "normal" and "acceptable" viewing behaviour is confronted with "transgressive" and "deviant" conduct. A man directs his flashlight at the legs of a woman sitting next to him instead of watching the screen. Immediately, a policeman shows up and arrests the man: while TV is a medium that is watched at the side, the cinema demands undivided attention; any deviation will be punished immediately.

In conclusion we could say that the split screen of the 1970s partly answers to the challenge of television and the demographic shifts in Hollywood's audience. It is as if the film self-consciously stages a confrontation between the two media in such a way that the cinema emerges as the clear winner. This example from *The Boston Strangler* demonstrates, to use a term coined by Jay David Bolter and Richard Grusin, that not only new media remediate old media, but also that old media remediate new media;[20] in this case, cinema deliberately includes television as a frame within a frame to show off its superior size and dimensions. Moreover, by including split-screen the cinema requires the spectator to divide his/her attention between the different sub-images included within the overall frame. It is this interruption to concentration that I consider to be crucial to an understanding of the reception process that is not limited to the cinema but also encompasses other media.

The Spatialisation of Art and Media

If we turn to audiovisual culture and media in general, there are more instances of split-screen over the last couple of years than is possible to discuss here. Even when thinking about the uses in different media one ends up with an endless list. In TV, news shows with clocks, bars and other devices come to mind, as well as interview situation with the shot-reverse-shot pattern substituted by juxtaposed screens. More obviously divided screens are to be found in TV drama such as the critically acclaimed post 9-11 paranoia series 24 (2001); sport shows tend to use the split-screen format for action replays and alternative angles; economy with biz bars, exchange rates and share prices updated in real time; advertisements during a game show or car race are momentarily scaled down into a small frame in the corner of the screen; music television with SMS messages and flash forwards to the next clip while new models of large flat screen TVs often allow the spectator to watch at least two channels simultaneously. Moreover, architectural environments come to mind: shopping malls and theme parks, fairgrounds, train stations and airports, as well as the multi-channel installations in the gallery and in the museum all use split- or multi-screen images.[21] What could be the reason for this astounding convergence of different fields? If the phenomenon is noticed at all one standard explanation is that split-screen is easily created with today's computer technology. True, back in the late 1960s and early 1970s split screen was a complicated process which took weeks and months to create while today any college kid can do it on his/her laptop. The intricacies of masking the image and optical printing has given way to the AVID editing software which provides the same effect with a mouse click. Yet again, there are so many things easily done on a computer and not even a small fraction of these ever become successful. Thus, the argument of availability and access might be a necessary condition, but it is not sufficient to explain the popularity of the device in contemporary art and media.

First of all, what appears typical of multi-screen projections or multi-frame environments is the fundamentally non-linear structure of the formation. The traditional feature film, as well as the novel or the musical piece, are determined by temporally consecutive and successive images: one element follows another in a pre-determined order that the recipient has to follow. The multiple screens radically break with this concept as they give way to coexistence and simultaneity. This concomitance also shatters fundamental beliefs of film studies. In montage theory, the meaning of an image is determined by the preceding and the following shots, whereas in split-screen, an image also has an opposing image that enjoys a much stronger connection to the simultaneous image than consecutive images ever do. Harun Farocki, a filmmaker-cum-installation artist, has coined the phrase of "transversal influences" for this kind of interaction between images appearing simultaneous in different frames or on different screens. Yet, for Farocki transversal influences are not necessarily limited to the literal kind of montage that multiple frames allow, but these relations also extend to a kind of lateral or transversal thinking that tries to overcome traditional divisions and disciplines.[22] The multiple juxtapositions and diverse relationships offered by multiple frames lends itself to more open narrative and argumentative forms and thus also to repeat viewings and multiple meanings.

As a result of the simultaneity and transversality of split-screen devices and multi-screen environments one can observe a tendency towards the spatialisation of the rela-

tionship between the images in media traditionally based on temporal succession. The multi-channel installation in the gallery or in the museum underlines this point as they emphasise the category of space by downplaying the temporal dimension specta-tors can enter and leave whenever they want. Alternatively, they can also mill around in the installation space. The audiovisual material is often shown as a loop, any part of which might be watched by a spectator. Thus, unlike in the traditional cinematic appa-ratus with fixed starting time and a predetermined running time of a programme, the spectator can determine the length of reception, she can enter at any given moment as well as decide upon and change the distance and angle from which to view the work of art.[23] In constructed environments such as theme parks or shopping malls this is even more obvious because architectural ensembles are defined by variable paths, the possi-bility to stroll around, linger or turn back.

Installation art also explodes the notion of a privileged spectator position. Traditional image production was for a long time governed by the regime of the single point of view; all the way from Alberti, the Renaissance perspective provided a box-like space with a single vanishing point at which all lines converged. While modern art from Impressionism onwards eroded the privilege to a single viewpoint when representing reality,[24] the construction of photographic lenses tied the optomechanical media to this tradition. The split-screen and the multi-channel environment can be credited with offering an alternative to this construction because they offer two or more images at the same time in the same field of perception. This contributes to a spatialisation since the actual, that is, the spectator's physical position, which is regulated and fixed in the cin-ema, all of a sudden becomes flexible. These factors sketched require a different frame of perception for the spectator that one could label, following Scott Bukhatman, "kalei-doscopic perception".[25] This is the dialectic contrast of fragmented perception and immersion, of contemplation and distraction, of stasis and kinesis typical of the split-screen that has become a model of media spectatorship in the past decade.

The Return of Split-screen in the Cinema

Let me illustrate this diagnosis of the spatialisation and of the kaleidoscopic percep-tion with the example of Mike Figgis' experimental *Time Code* (1999), a film centred on a casting taking place at the fictive film production company "Red Mullet" (which shares the name with Figgis' own production company). The scene is filmed with four cameras in one unbroken take each in real time and presented as four simultaneous images on the four quarters of a screen split. A large part of the pleasure of watching the film derives from trying to figure out the intricate layout of the building and the com-plicated manoeuvres of the cameramen in overlapping shots while following the dif-ferent characters around. Over the course of the film the spectator gets acquainted with the office building, the reception area and toilets, the screening room and the cubicle offices; sometimes two cameras show the same action at the same time from different angles, so we can figure out the floor plan of the building. The basic idea of the film lit-eralises the multiplication of different perspectives and points of view because we, as spectators, always have to decide which of the four images we want to watch. Our atten-tion constantly wanders from one split-screen to another and the experience is at the same time immersive (in the story world) and fragmented (in the way the centre of

attention shifts). Despite the constant break-up of the image into four sub-frames *Time Code* nevertheless strongly guides the viewer's attention through the soundtrack. In *Time Code* sound creates its own world, an additional frame (to the four visual frames) that shifts the perception to relevant story information. Sound is not any longer subordinated to the image as in classical cinema because there is no longer a single image or action to which the sound could be subjugated. In the "master version" of *Time Code*, that is the version released theatrically, the elaborate sound design continually alternates the foreground and background noise, mixing the four different audio tracks from the four cameras with non-diegetic music, thus guiding the spectator through the experience of having to watch four frames at the same time without missing salient story information. Yet, the DVD opens up the idea of multiplied perspectives more widely since it allows free switching between the master version with strong sound cues, the four different soundtracks of the respective images, an "unbiased mix" (all at the same level) and a commentary track by the director. Mike Figgis has even performed several live mixes of the four separate soundtracks with his own music and effects at cinemas and film festivals.[26] With this film, the multiplicity of cameras translates into a multiplicity of versions of the same film that only really comes into its own with technology such as DVD because in cinema one is still presented with the master version.

Gilles Deleuze has diagnosed a multiplication of the image and a spatialisation of the time-based art cinema along similar lines in his concluding remarks of the second volume of the Cinema-book. Deleuze anticipates new electronic images that "can emerge from any point of the preceding image". The "organisation of space", he concedes, "loses its privileged direction" and it is transformed into a new "omnidirectional space" that constantly changes angles and coordinates. This new spatial relationship in the triangle screen, image and spectator is most radically realised in installation art to which the term "omnidirectional space" appears adequate. The screen which does not any longer refer to the position of the spectator, changes from an image or a frame into an opaque surface on which data are registered.[27] This transformation, as diagnosed by Deleuze, therefore, can be conceptualised as a shift from the screen as window or frame, a (semi)transparent membrane opening onto a world that the spectator can watch safely from a distance (as theorised by André Bazin),[28] to the screen as dashboard or information panel. The spectator no longer observes the unfolding of a coherent time and space within the frame of the screen from a privileged position.

The emergence of a new "omnidirectional space" is made abundantly clear in *Hulk* (A. Lee, 2002) which illustrates its story of a genetically modified body that grows and transforms in grotesque ways by images that in similar ways seem to grow organically out of each other. Frames appear, grow, shrink and disappear at any instance, sometimes they even turn literally as if the image we are watching were part of a dice that was turning. The idea of the control room and the screen as a surface for the registration of data plays on three levels in this film: first, the characters are diegetically more often than not in the control room as they watch an experiment unfold or as the military commander observes the flight of Hulk; second, the film inscribes a regime of surveillance, control and observation that is quite typical of split-screen technique (as can be found for instance in almost all of Brian de Palma's film, the specialist for split-screen). Split-screen scenes very often deal with instances of observation and expectation, so that the doubling of the visual material in the additional frame often refers to an observation of the second order.[29] Third, the film, not only foregrounds the split-screen as a

device, but also "images that turn" as if they were spatially arranged beyond the screen. These images move into and out of the traditional filmic space, which, in turn, itself becomes a three-dimensional structure, yet not one that opens up privileged access to a complete world beyond the screen. Rather, the space is generated from digital data on the (computer) screen. In a way, the film behaves like a three-dimensional database that we can access and with every viewing our attention shifts in different ways between the diverse split-screens. Unlike "classical split-screen" films such as *The Boston Strangler* or *The Thomas Crown Affair* where the fragmented screen space could be theoretically re-translated into a classical decoupage, the recent use of split-screen creates a spatial system that is not imaginable in any other way than as it is presented.

The Fold

If we follow Deleuze's diagnosis that the transformation of the traditional indexical image into the electronic and digital image results in a loosening of the rigid spatial structure of the cinema, in a movement towards "omnidirectional space", then the installation can be conceptualised as the logical successor to the cinema. In the installation space, the clear and stable relationship between spectator, screen and image breaks down and opens up towards a multiplicity of possible relations, it opens up to micro-relations of space and time. One could say that what distinguishes installation art from cinema, but also from other art forms is the simultaneity of the different frames for moving images, the coexistence of diverse regimes of time and space – the then and there of the images – within the same time and space – the here and now of the installation. I believe that a useful concept in theorising these phenomena is the fold as developed in Gilles Deleuze's book on Leibniz's philosophy and Baroque culture. The fold as the symbol and symptom of the Baroque is extended into infinity in spatial as well as temporal terms. One could imagine it as an endless ribbon or strip without beginning or end, without inside or outside, much like the paradoxical Moebius strip or the double helix holding the genetic code or, to turn to another example closer to home, similar to the film strip running through the projector from one reel to the other. The fold encloses space and time; this embedding of different temporal and spatial regimes is one of the hallmarks of today's media culture. The fascination of contemporary media-based entertainment such as the cinema and television, mobile appliances and internet games, and also sporting events and theme parks, relies to a good degree on this enfolding and unfolding of time and space. The spectator enjoys the pleasure of being able to watch, control or experience more than one place and time at once. This imaginary power of ubiquity can be found in many of today's media practices: the fascination of jumbled-time narratives in the wake of *Pulp Fiction* (Q. Tarantino, 1994), the constant play and replay of images in sports arenas, and also, on television, the loops and circuits of avant-garde film and cinematographic installations in the gallery, or the strange logic of media warfare.

Most installation pieces exhibit a similar tendency towards offering multiple perspectives and several time frames simultaneously. A rather arbitrarily chosen example would be Amos Gitai's reworking of his own 25-year project of a series of films charting the development of a house in West-Jerusalem. The house was abandoned by its Palestine owner in the 1948 war, then requisitioned by the Israeli government, rented

out to a Jewish-Algerian immigrant and sold to a university professor in 1980 who, in turn, transformed it into a three-storey house. The simultaneous presence of nineteen monitors in a half-darkened rooms offers the possibility, once one gets accustomed to this multiplication of images and sound, to catch glimpses of the same space at different times. Gitai's project *News from House/News from Home* charts the development of a house as a material witness to the political, social and cultural upheavals in one of the most conflict-ridden places of the world.[30] As a spectator one is sometimes capable of watching the same place – the staircase, the façade, a certain room – at the same time in two films shot years apart and playing on different monitors. Sometimes, construction work seen on one monitor is contrasted by destruction on another, sometimes the weather is consistent between the two monitors, sometimes it is in contrast. The possible combinations are endless. Different layers of time and different aspects of space converge in the installation on different monitors that provide glimpses of an omnidirectional time and space. Thus, the installation offers the virtual dimension of time up for consideration (the images from different films) condensed in a single time and in a single space (the installation). Similar observations could be made for many other instances such as the stark juxtaposition in Shirin Neshat's multi-channel installations as *Turbulent* (1998), *Rapture* (1999), and *Fervor* (2000)[31] or in Eija-Liisa Ahtila's tryptichs.

Conclusion

The split-screen appears to be a marginal instance when considering traditional film histories as a self-contained discipline. I have outlined several explanatory models that compete and can claim to give a coherent explanation for the appearance of this technique in the 1960s. Yet again, if viewed from today's media culture in which the multiplied frame has become a ubiquitous device, these forerunners have a higher significance. In conclusion, let me stress three crucial features of the multiplied surface. First, the multi-screen devices point towards a radical spatialisation of art and media.[32] The non-linear dimension of the split-screen and the spatial extension of the installation signals a shift towards an omnidirectional space which loses the single viewpoint logic of classical painting and classical cinema. At the same time, this spatiality often realises itself as a series of opaque surfaces instead of a single window filling the spectator's field of vision and opening up onto a vista towards a diegetic universe that can be observed from a safe distance. Second, the aesthetics of the phenomenon can be likened to the control room with the multiplication of screens reminiscent of multiple monitors, control panels and surveillance images in scientific laboratories, war rooms or airport towers. In this view, the frame is not any more a transparent and ultimately invisible division, but it becomes a surface on which data and information is inscribed. And third, these multiple frames realise Deleuzian folds as they enfold and unfold time and space, space as it is compressed in these new environments, art works and media artefacts. Here, I would argue, lies the pleasurable nature of contemporary media culture, from the event culture of sports arenas to the elitist high art of the installation piece: to experience multiple temporal and spatial dimensions at the same time, to be here and to be there, to be now and to be then. These folds require a kaleidoscopic perception, oscillating between immersion and distanciation, between contemplation and distraction, between movement and stillness, that is the hallmark of the multi-screen environment.

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2   For similar observation filed under the rubric of neo-baroque see A. Ndalianis, *Neo-Baroque Aesthetics and Contemporary Entertainment* (Cambridge, MA: MIT Press, 2005).

3   See L. Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2002).

4   As this is the launching pad of a larger project I will be re-visiting some of the issues mentioned in the introduction, but not explored in this text, at a later date.

5   "Split screen is the visible division of the screen, traditionally in half, but also in several simultaneous images", "Split screen", *Wikipedia. The Free Encyclopedia*, http://en.wikipedia.org/wiki/Split_screen_%28film%29 (February 22, 2006). "Schon während der Stummfilmzeit Mitte der 1910e Jahre wurde die Leinwand in verschiedene Sektoren aufgeteilt, um räumlich getrennte, aber gleichzeitig stattfindende Handlungen darzustellen", "Split screen", *Benderverlag Lexikon der Filmbegriffe*, http://lexikon.benderverlag.de/suche.php (November 8, 2005). James Monaco approaches the phenomenon wholly from the production side: "Mehrere Bilder werden in der optischen Bank gleichzeitig nebeneinander auf einen Filmstreifen kopiert, z.B. eine Aktion von mehreren Kamerastandpunkten aus gesehen", J. Monaco, "Entry Mehrfachbild", *Film und neue Medien. Lexikon der Fachbegriffe* (Reinbek bei Hamburg: Rowohlt, 2000), p. 105. "An effect shot in which two or more different images appear on the same frame", E. Katz, *The Film Encyclopedia. The Most Comprehensive Encyclopedia of World Cinema in a Single Volume* (New York: HarperCollins, 1994), p. 1285.

6   Harun Farocki for example provides of some of his art works single-channel (one monitor, similar to "traditional" video art) and multi-channel versions (more than one screen).

7   I am deliberately leaving out avant-garde and experimental filmmaking like Abel Gance's multivision and experiments conducted within the framework of the Bauhaus.

8   See for example the website devoted to "Brian de Palma's split world", http://members.fortunecity.it/gpuccio/depalmae.htm.

9   David A. Cook's overview of 1970s cinema, *Lost Illusions*, a voluminous contribution to the massive *History of the American Cinema*-project, lists only two references to this technique, both side remarks. The first one is predictably to de Palma (in a section on auteur cinema), the second one is to be found in a throw-away remark by director Randal Kleiser that "all the '70s film techniques [...], like split screen" were used on *Grease*. See D. A. Cook, *Lost Illusions. American Cinema in the Shadow of Watergate and Vietnam 1970-1979* (Berkeley: University of California Press, 2000), pp. 151 and 216.

10   For this perspective see some of the essays in Th. Elsaesser, A. Horwath, N. King, *The Last Great American Picture Show. New Hollywood in the 1970s* (Amsterdam: Amsterdam University Press 2004).

11   See B. Colomina, "Die Multimedia-Architektur der Eames," in G. Koch, R. Curtis, M. Glöde (eds.), *Umwidmungen. Architektonische und kinematographische Räume* (Berlin: Vorwerk 8, 2005), pp. 22-35 and B. Colomina, "Enclosed by Images. The Eameses Multimedia Architecture," *Grey Room*, no. 2 (Winter 2001), pp. 6-29. For a contemporary account tracing already similar outlines see B. Day, "Beyond the Frame," *Sight & Sound*, Vol. 37, no. 2 (Spring 1968), pp. 80-85.

12   For some contemporary reports from this crucial event see J. Shatnoff, "Expo 67: A Multiple

Vision," *Film Quarterly*, Vol. 31, no. 1 (Fall 1967), pp. 2-13 and E. Patalas, "Montreal oder Die Fülle von fünf Tagen," *Filmkritik*, no. 10 (1967), pp. 588-594.

13 I am leaving aside here some of the earlier Hollywood examples which were inspired by *Pillow Talk* (N. Jewison, 1959), but which were strictly limited to telephone situations when employing split-screen. For the specific bond between split-screen and the telephone conversation see H.-J. Wulff, "Ikonographie, Szenentransition, Narration: Zur Analyse der Beziehungen zwischen filmischer Form und filmischem Telefonat," in B. Debatin, H.-J. Wulff (eds.), *Telefon und Kultur: Das Telefon im Spielfilm* (Berlin: Spiess, 1991), pp. 127-165.

14 See for example the essays collected in L. Charney, V.R. Schwartz (eds.), *Cinema and the Invention of Modern Life* (Berkeley: University of California Press, 1996).

15 The classical (and obvious) example for this argument about the cross-relation between the avant-garde and early cinema is T. Gunning, "The Cinema of Attractions," *Wide Angle*, Vol. 8, n° 3-4 (1983), pp. 4-15. Reprinted in Th. Elsaesser (ed.), *Early Cinema. Space, Frame, Narrative* (London: BFI, 1990), pp. 56-60.

16 G. Youngblood, *Expanded Cinema* (New York: P. Dutto, 1970).

17 For these metaphors in relation to the avant-garde see my forthcoming *Moving Forward, Looking Back. The European Avant-garde and the Invention of Film Culture* (Amsterdam: Amsterdam University Press, 2006).

18 See Anon., "Multiple-Image Technique for 'The Boston Strangler'," *American Cinematographer*, Vol. 50, no. 2 (February 1969), pp. 202-205, 228, 238-241, 245.

19 A. MacCarthy, *Ambient Television. Visual Culture and Public Space* (Durham: Duke University Press, 2001).

20 J.D. Bolter, R. Grusin, *Remediation. Understanding New Media* (Cambridge: MIT Press, 2000).

21 See for a collection of examples the article by Julie Talen, "'24': Split screen's big comeback", http://www.salon.com/ent/tv/feature/2002/05/14/24_split/print.html (July 16, 2006). See also the website devoted to split screen across different media www.splitscreen.us.

22 See H. Farocki, "Influences transversales," *Trafic*, no. 43 (Automne 2002), pp. 19-24.

23 See J. Rebentisch, *Ästhetik der Installation* (Frankfurt/M: Suhrkamp, 2003), pp. 179-207.

24 See P. Francastel, "Die Zerstörung des plastischen Bildraums," in Peter Bürger (ed.), *Seminar: Literatur- und Kunstsoziologie* (Frankfurt/M: Suhrkamp, 1978), pp. 371-393.

25 S. Bukatman, "Zooming Out: The End of Offscreen Space," in J. Lewis (ed.), *The New American Cinema* (Durham: Duke University Press, 1998), pp. 248-272, especially 255f.

26 See for example http://www.splicedonline.com/oofeatures/figgis.html.

27 See G. Deleuze, *Kino II: Das Zeit-Bild* (Frankfurt/M: Suhrkamp, 1991), pp. 339-341.

28 See A. Bazin, "Kino und Malerei," in *Was ist Film?*, edited by R. Fischer (Berlin: Alexander, 2004), pp. 224-230.

29 "Observation of the second order" ["beobachtung zweiter Ordnung"], is a term theorised by Niklas Luhmann (who in turn adapted it from Charles Spencer Brown). It can be found across Luhmann's oeuvre, but see for example N. Luhmann, *Die Kunst der Gesellschaft* (Frankfurt/M: Suhrkamp, 1995), pp. 92-164.

30 See A. Franke, A. Ehmann, S. Schulte-Strathaus (eds.), *Amos Gitai. News from Home* (Berlin: Verlag der Buchhandlung König, 2006).

31 See B. Schmitz, B.E. Stammer (eds.), *Shirin Neshat* (Berlin: Steidl, 2005).

32 See also F. Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (London-New York: Verso, 1991).