

mixed reality, augmented reality & the question of liveness

Thursday, April 26, 12

Abstract

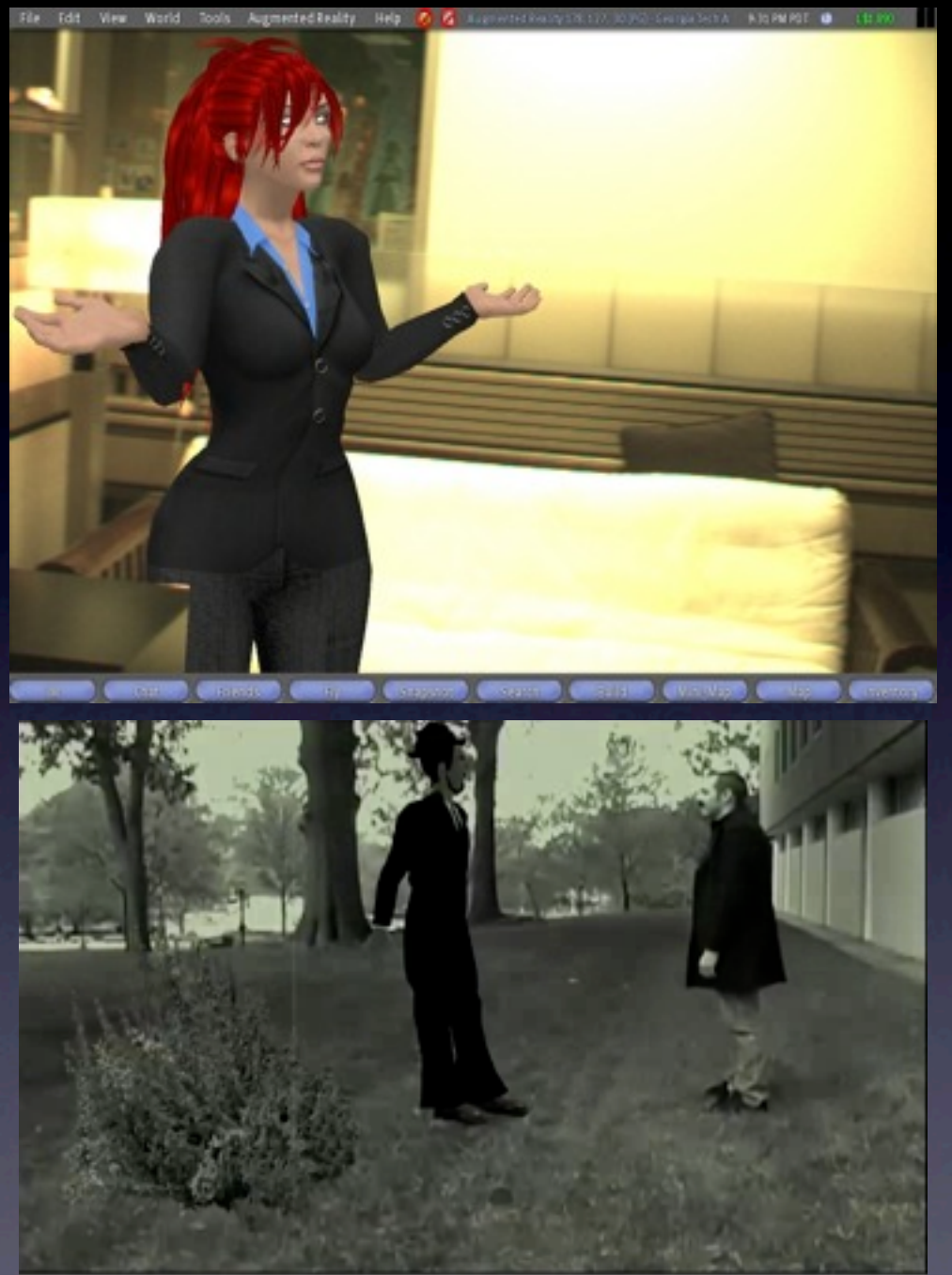
Performance and media studies have long discussed whether television has changed the cultural category of "liveness." We should now expand the field of inquiry to include digital media. Are MMO environments such as Second Life "live"? What is the status of Mixed Reality experiences, which combine human performers with avatars or situate human performers in virtual environments? How is the notion liveness related to presence in mixed reality and more generally in the performative situations of social computing? These questions are now available for cultural negotiation in an age of pervasive computing.

Role of media theory – to give you examples to think through. historical examples.

again why are we doing this? because history of media can give us a sense of the future of media. because you and your audience are carrying around assumptions about how media work from the history of media. eg. ontology, presence

Augmented Reality + Second Life

Performances in real-time
Machinima



Thursday, April 26, 12

We have taken a different approach to bringing SL into the world: Our experiments have been about combining the physical and the virtual together.

What you see in the top is an avatar from Second Life appearing to inhabit the physical world: an interior environment. In the image below: an avatar appears to be standing on the grass looking at a human figure. The avatars are not actually inserted in the world, of course, just into the video stream. The human cannot see the avatar in front of him. However, does happen in "real-time" not composited in postproduction.

The effect in the video stream is of a hybrid representational practice.

We are also experimenting with the reverse: putting the human into the SL world.

Façade

Michael Mateas
Andrew Stern

a step toward the holodeck?



Thursday, April 26, 12

Can see these as experiments in complicating the relationship of the physical and the virtual:
Which is the definition of Mixed Reality.

perhaps should be called mixed realities: since we are mixing levels of representation each of which makes its own claim to the real. Could say that this is becoming an important feature of digital culture today: the age of pervasive computing is in part about inserting virtual representation into the world. Major transition in the cultural construction of digital technology as a medium..

Let me illustrate that transition with work that from my colleagues at Georgia Tech. A project in two parts: the original piece, Façade, an interactive drama. Was interpreted as a step toward the holodeck. Pure virtuality.

AR Façade

Michael Mateas
Andrew Stern
Blair MacIntyre
Steven Dow

Hybrid representation
physical room
cartoon-like figures



Thursday, April 26, 12

This was the fully virtual Façade.

My colleagues (Mateas and MacIntyre) then transformed Façade into a piece of Augmented reality. Constructed a physical space as the set, equipped the player/user with headset and computer, and put you in the apartment of Trip and Grace. Although Trip and Grace remain cartoon characters.

AR Façade

Thursday, April 26, 12

I'll play this piece, for its media hyping and to give you an idea of how the experience has changed. AR Façade disrupts the unity of the space of the original Façade.. The characters are two dimensional cartoon figures, almost uncanny. The apartment is physically convincing, although that too comes to you through video. Two forms of video: animated and live action. what we see is the vision of the holodeck coming apart, even as the drama does. something more interesting is happening, I think, than what was apparently intended in the original piece, or at least the interpretation that that piece was given by many digital media writers.

AR Façade



Thursday, April 26, 12

I'll play this piece, for its media hyping and to give you an idea of how the experience has changed. AR Façade disrupts the unity of the space of the original Façade.. The characters are two dimensional cartoon figures, almost uncanny. The apartment is physically convincing, although that too comes to you through video. Two forms of video: animated and live action. what we see is the vision of the holodeck coming apart, even as the drama does. something more interesting is happening, I think, than what was apparently intended in the original piece, or at least the interpretation that that piece was given by many digital media writers.

MACHINIMA FUTURISTA

Based on VITA FUTURISTA, 1916

DIREZIONE TECNICA

J. VANDAGRIFF

RECITATO

J. DIAZ | G. KINSEY | J. LUPO | A. PERKERSON

J. MCCREE | B. SHRADER | T. TURNER

MARINETTI AEON | BALLA AEON | BOCCIONI AEON | ASHANG JINN

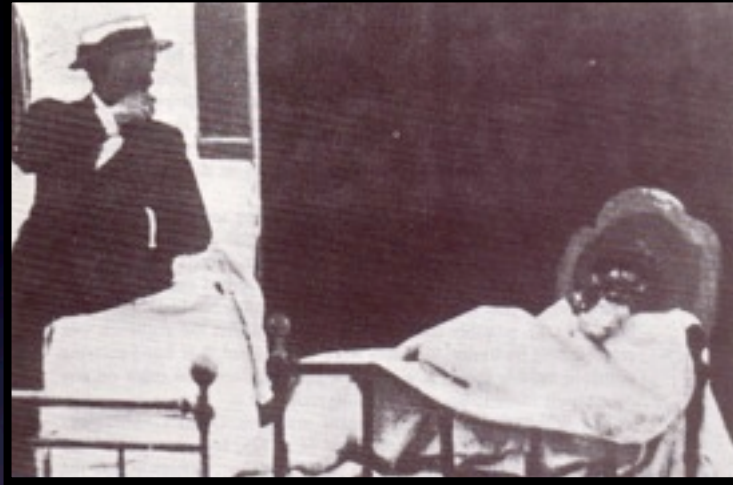
CURTESANDO di GVV | LCC | COC | SLAR | BuzzStudios

Vandagriff, Machinima Futurista, 2007

Thursday, April 26, 12

Let me turn to what I regard as a more sophisticated use of the similar technology: a piece called *Machinima Futurista*. More sophisticated because it sets out to explore the relationship between the physical and the virtual from the outset.

This lost film reimaged by Jenifer Vandagriff as an Augmented Reality piece using avatars from Second Life. stands in ironic yet also tolerant relation to its original.



futurist lunch

futurist sleeps

futurist fights



Thursday, April 26, 12

Futurists film from 1916: Vita Futurista by Arnaldo Ginna and others. One of the few futurists films and this one did not survive, represented by accounts and a few film stills. In original, there are approx. eight separate scenes, most of which depict conflict between the futurists and the passéists: Futurist lunch, Futurist falls in love with a chair, how a Futurist sleeps, etc.

Conscious remediation of the deliberate "absurdity" of the original: the use of the new media for an avantgarde gesture: the debunking of the autonomy of art and the envisioning of art as life praxis.

Vandagriff, Machinima Futurista, 2007

Thursday, April 26, 12

Vandagriff's piece imagines a world in which the two orders of representation have come together visually. technically different from AR Façade - back to using Second Life: this is recorded live performance. I noted our modified Second Life client. Special client that is to record the composite video stream which consists of live actors and the avatars.

Two representational regimes: I think they remain formally or perhaps symbolically are at war with each other. The passéists are by and large live-action characters, and the futurists are SL avatars. Making the futurists into avatars seems somehow appropriate, because it captures the playful sense of separation, of otherness that the futurists seem to represent – at least for us today. despite their glorification of power and war, they seem quite harmless. like the avatars.

there was postproduction work to make the video stream look old - like a silent film with uneven lighting. switched - actually recorded live in Second Life.

MACHINIMA FUTURISTA

Based on VITA FUTURISTA, 1916

DEREZIONE TECNICA

J. VANDAGRIFF

RECITATO

J. DIAZ | G. KINSEY | J. LUPO | A. PERKERSON

J. MCCREE | B. SHRADER | T. TURNER

MARINETTI AEON | BALLA AEON | BOCCIONI AEON | ASHANG JINN

CURTESANDO di GUV | LCC | COC | SLAR | BuzzStudios

Vandagriff, Machinima Futurista, 2007

Thursday, April 26, 12

Vandagriff's piece imagines a world in which the two orders of representation have come together visually. technically different from AR Façade - back to using Second Life: this is recorded live performance. I noted our modified Second Life client. Special client that is to record the composite video stream which consists of live actors and the avatars.

Two representational regimes: I think they remain formally or perhaps symbolically at war with each other. The passéists are by and large live-action characters, and the futurists are SL avatars. Making the futurists into avatars seems somehow appropriate, because it captures the playful sense of separation, of otherness that the futurists seem to represent - at least for us today. despite their glorification of power and war, they seem quite harmless. like the avatars.

there was postproduction work to make the video stream look old - like a silent film with uneven lighting. switched - actually recorded live in Second Life.

Thursday, April 26, 12

So we have seen a couple of experiments that blend representational modes and at the same time recall earlier media forms. (I'm going to show a couple more a bit later, but I want to begin to suggest some of the theoretical stakes.)

Already suggested two interrelated issues:

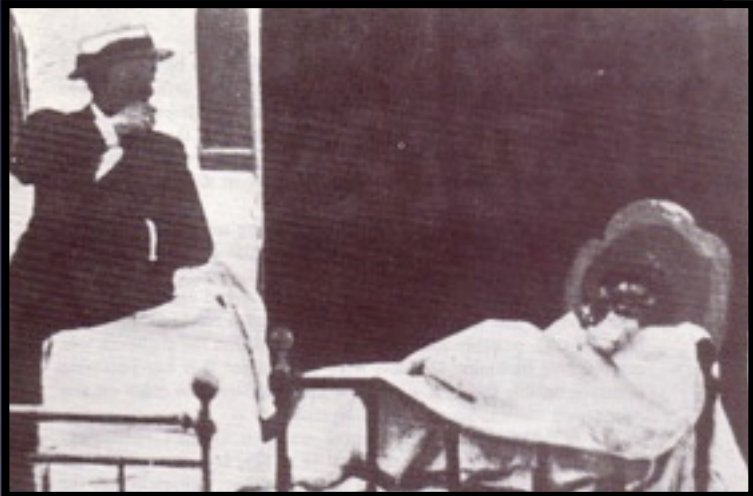
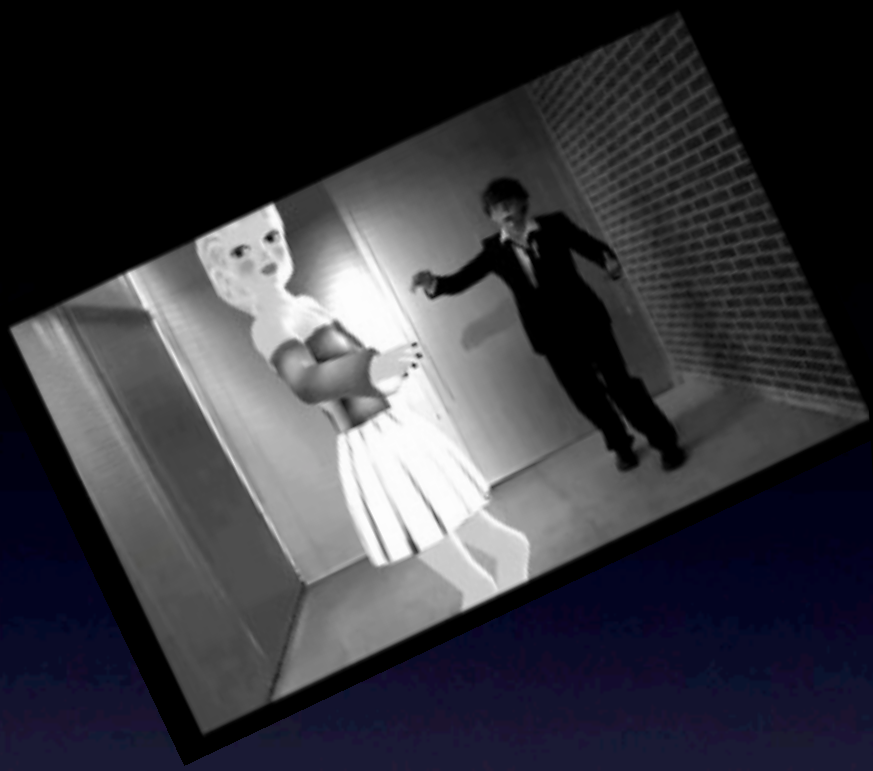
mixed reality as combining physical and virtual,

but also mixed as combining live and pre-recorded

The combination or juxtaposition of the virtual (computer graphic) representation and the physical. (the definition of mixed reality). *Machinima Futurista* is not per se mixed reality, it is instead a video recording of a mixed reality performance. In other cases, we have "true" mixed reality as in *AR Façade* where the user is physically present in a space where two representational modes are juxtaposed. Both emphasize their composite nature, neither is seamless.

In *AR Façade*, we saw a mixing of temporal regimes as well. The experience unfolds in "real-time", but Trip and Grace's voices are pre-recorded—segments of which get played at appropriate (or sometimes inappropriate moments). The cartoon characters feel pre-recorded (I think you get that sense even listening to the brief excerpt). Even if the AI were working perfectly, they would feel pre-recorded. Most players would have the sense that Trip and Grace are pulling their responses from pre-recorded files, which is of course what is happening. *AR Façade* is a performance in which two of the performers are not present. We are of course very used to these absent voices—whose timing is slightly off, whose inflections are slightly wrong for the moment: I mean voices on phones, subway trains etc. — which is truly pervasive today. So we have the sense of mixed temporal realms between the live experience of our responses and the pre-recorded. This is another aspect of "mixed realities."

Suggest an avenue to explore mixed reality experiences: liveness. Are the experiences live? Do we



Thursday, April 26, 12

So we have seen a couple of experiments that blend representational modes and at the same time recall earlier media forms. (I'm going to show a couple more a bit later, but I want to begin to suggest some of the theoretical stakes.)

Already suggested two interrelated issues:

mixed reality as combining physical and virtual,

but also mixed as combining live and pre-recorded

The combination or juxtaposition of the virtual (computer graphic) representation and the physical. (the definition of mixed reality). *Machinima Futurista* is not per se mixed reality, it is instead a video recording of a mixed reality performance. In other cases, we have "true" mixed reality as in *AR Façade* where the user is physically present in a space where two representational modes are juxtaposed. Both emphasize their composite nature, neither is seamless.

In *AR Façade*, we saw a mixing of temporal regimes as well. The experience unfolds in "real-time", but Trip and Grace's voices are pre-recorded—segments of which get played at appropriate (or sometimes inappropriate moments). The cartoon characters feel pre-recorded (I think you get that sense even listening to the brief excerpt). Even if the AI were working perfectly, they would feel pre-recorded. Most players would have the sense that Trip and Grace are pulling their responses from pre-recorded files, which is of course what is happening. *AR Façade* is a performance in which two of the performers are not present. We are of course very used to these absent voices—whose timing is slightly off, whose inflections are slightly wrong for the moment: I mean voices on phones, subway trains etc. — which is truly pervasive today. So we have the sense of mixed temporal realms between the live experience of our responses and the pre-recorded. This is another aspect of "mixed realities."

Suggest an avenue to explore mixed reality experiences: liveness. Are the experiences live? Do we

Performance Studies

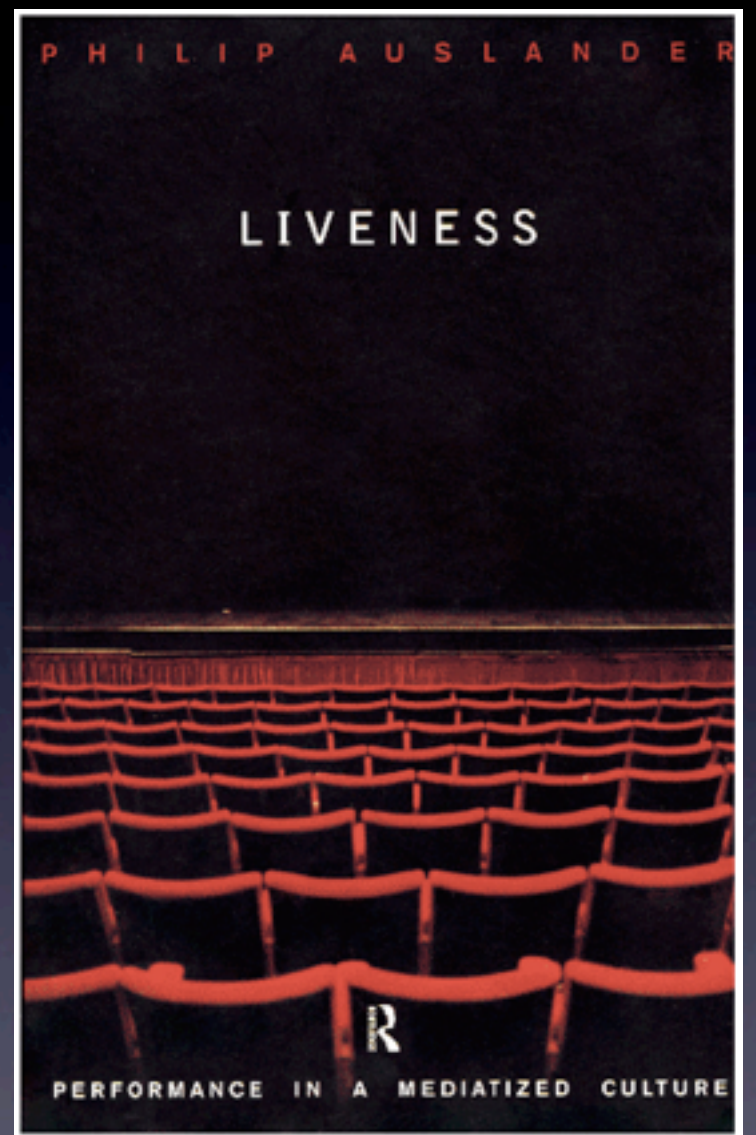
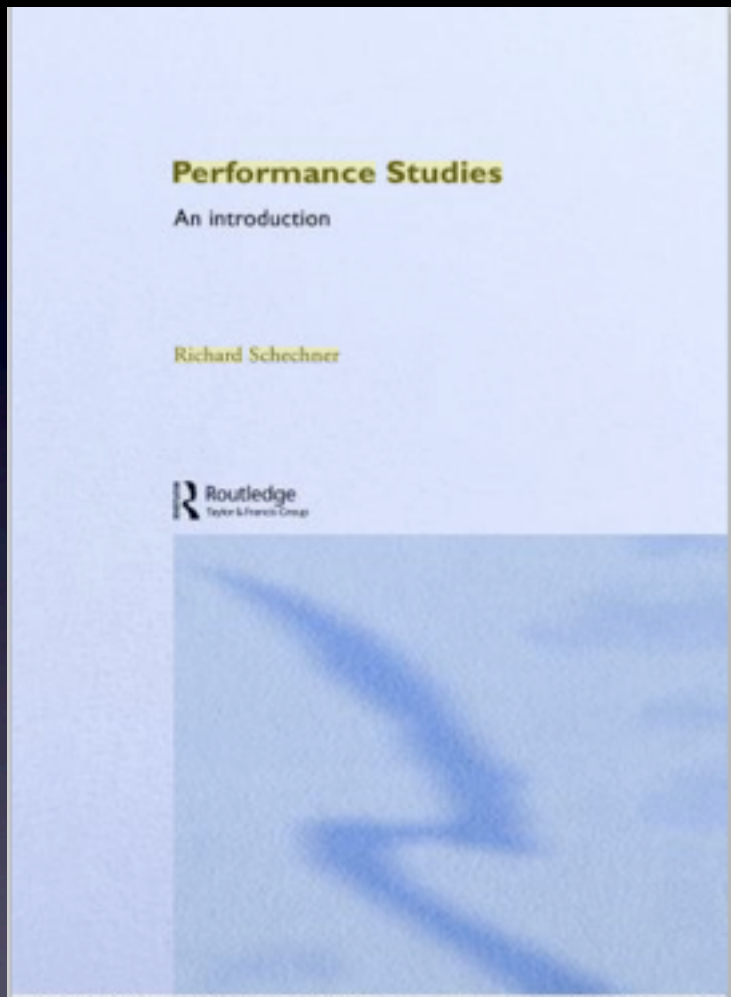
grows out of theater studies

looks at performances in general: theater, film, television, rock concerts and...

performance in everyday life

Thursday, April 26, 12

Performance studies is another way to think about media and everyday life.



Thursday, April 26, 12

Performance studies is another way to think about media and everyday life.

history of media: theatre, film, television

What is the essential character of theater?

What is the essential character of film? of television?

Thursday, April 26, 12

Go back in history of media to think about these issues of liveness and mediation

History of media to understand the present.

ontology of performance

“[The] only life of performance is in the present. Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representations of representations; once it does so, it becomes something other than performance.”

Peggy Phalen, *Unmarked, The Politics of Performance*, 1993

Thursday, April 26, 12

Just as we had ontology of photographic image. we have an ontology of performance.

Issue of liveness how been central to Performance Studies for well over a decade. For some in performance studies (and I think many in the theater itself), the quality of immediacy, presentness of live performance was what separates it from the contemporary mass and popular media: film and television, above all, because otherwise film and tv seem to have much in common with theater. Concerned to claim a special quality for theater. Hence Peggy Phalen: Peggy Phalen, *Unmarked, The politics of Performance*, 1993 p 146

“[The] only life of performance is in the present. Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representations of representations; once it does so, it becomes something other than performance.”

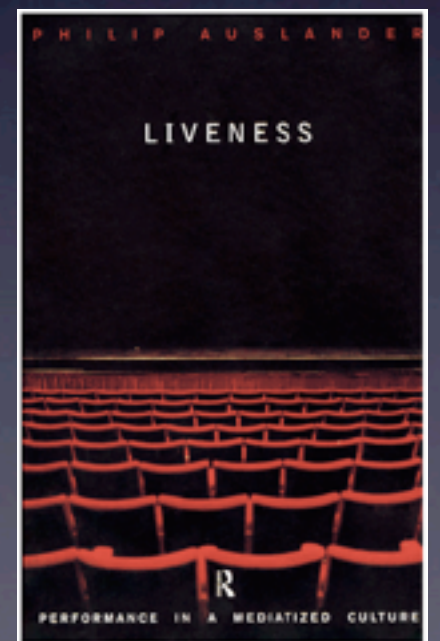
This leads even to a political claim about theater as freeing us from the commodifications of culture that pervade the Hollywood film industry and television.

television (Auslander, Chapter 2)

Television as live?

liveness did not exist until television (and film)

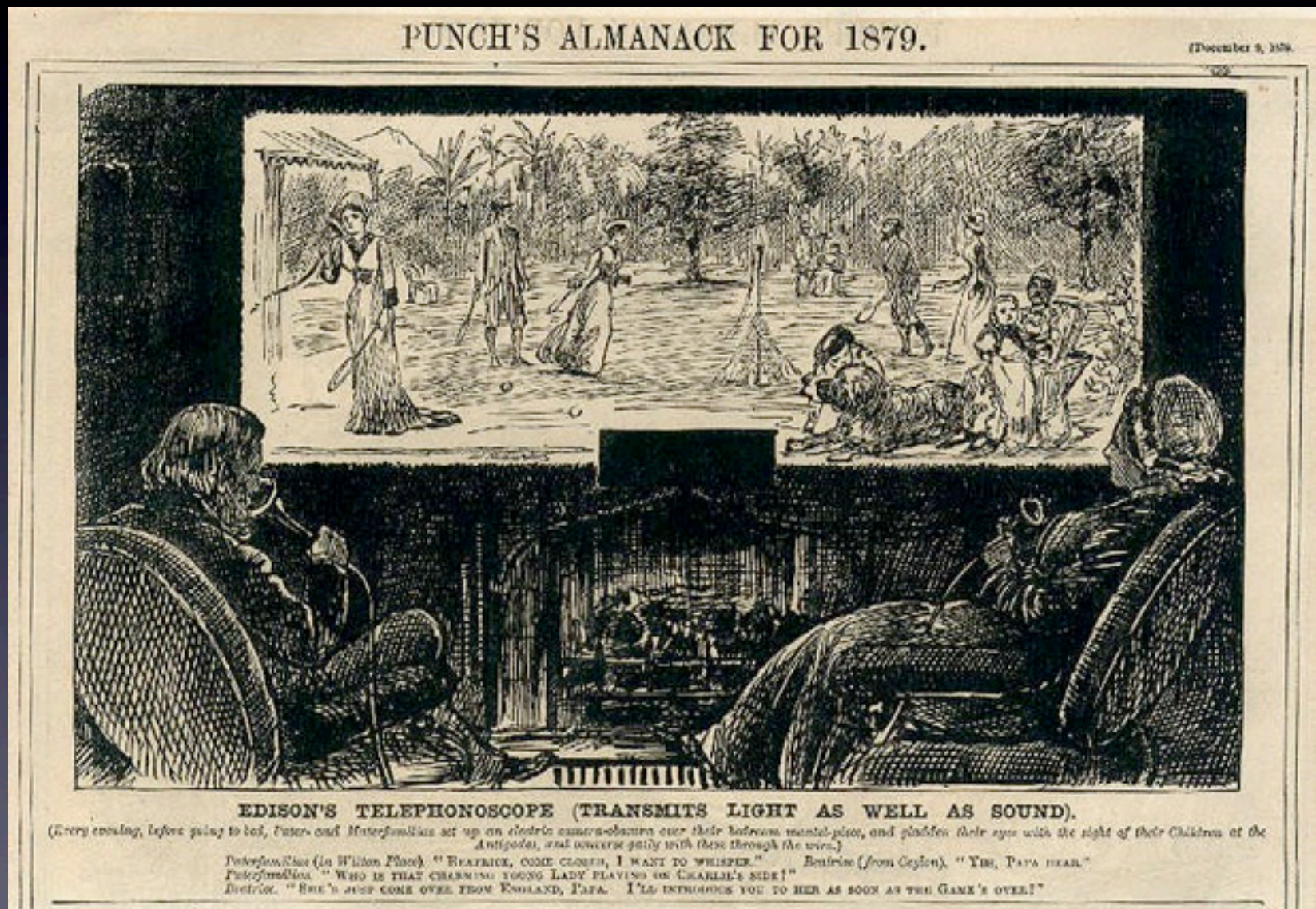
(theater was live but no one knew it)



Thursday, April 26, 12

theater was live but no one knew it.

television as telepresent communication



Thursday, April 26, 12

prototelevision fantasy: telepresent communication. amazingly modern. film as a "detour" from this form. that is from liveness.

development of television

“In 1884 Paul Gottlieb Nipkow, a 20-year old university student in Germany, patented the first electromechanical television system which employed a scanning disk.”

“In 1928, Philo Farnsworth made the world's first working television system with electronic scanning of both the pickup and display devices, which he first demonstrated to news media on 1 September 1928, televising a motion picture film.”

Wikipedia, television

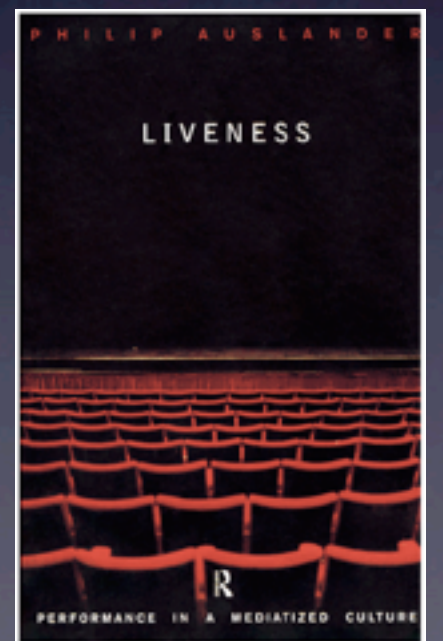
Thursday, April 26, 12

prototelevision fantasy

the ontology of television

“Although the question of authentic television form remained, unresolved, early writers on television agreed that television’s essential properties as a medium are *intimacy* and *immediacy*...”

Phil Auslander, *Liveness*, p. 15



Thursday, April 26, 12

But it is interesting to consider that liveness developed its current meaning as a cultural category with the advent of technologies that were not live - film and recorded music. things were “live” on television.

like aura - only developed meaning when it was decaying according to Benjamin

Auslander argues that theatre today cannot escape from the culture mass media. primarily making an argument about the ways in which live performance is as he puts it no longer ontologically pristine. looks at rock concerts and other forms of popular performance. and his interest in primarily in television and its relation to theatre as calling into question the ontologically purity of theatre.

let's follow a bit about television

Television: Germany, 1930s

Thursday, April 26, 12

German advanced television system in the 1930s for propaganda and entertainment.

Television: Germany, 1930s



Thursday, April 26, 12

German advanced television system in the 1930s for propaganda and entertainment.

Television: Germany, 1930s

Thursday, April 26, 12

German advanced television system in the 1930s for propaganda and entertainment.

Television: Germany, 1930s

Television: Germany, 1930s



Thursday, April 26, 12

German advanced television system in the 1930s for propaganda and entertainment.

American television and the news

Thursday, April 26, 12

American after the WWII. and particularly after 1950. news medium.

American television and the news

American television and the news



Thursday, April 26, 12

American after the WWII. and particularly after 1950. news medium.

American television 1950s: See it now

Thursday, April 26, 12

Edward R. Murrow

American television 1950s: See it now



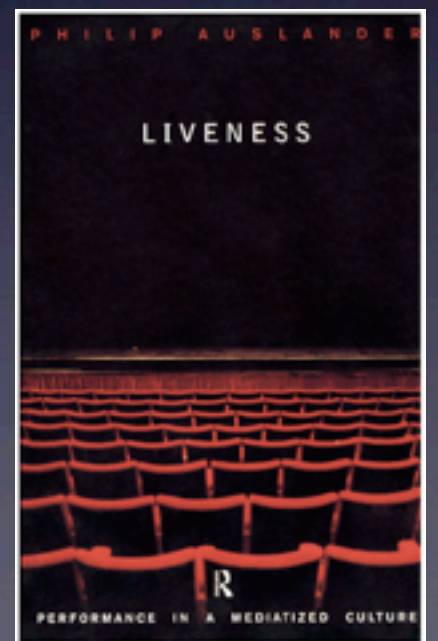
Thursday, April 26, 12

Edward R. Murrow

the ontology of television

“Television’s specific ability to position itself as theater’s replacement had its origins in the claims of immediacy made on behalf of television throughout its development”

Phil Auslander, *Liveness*, p. 23



Thursday, April 26, 12

But it is interesting to consider that liveness developed its current meaning as a cultural category with the advent of technologies that were not live - film and recorded music. things were “live” on television.

Auslander argues that theatre today cannot escape from the culture mass media. primarily making an argument about the ways in which live performance is as he puts it no longer ontologically pristine. looks at rock concerts and other forms of popular performance. and his interest in primarily in television and its relation to theatre as calling into question the ontologically purity of theatre.

But what about the digital? How does the issue of liveness apply here?

rethinking is taking place at the conference in fact:

but I would like to take it in another direction name - mixed mediation that juxtapose what is understood as theatrical liveness with the digital signal. but first let me start with purely digital works. and consider their theatricality.

American television and drama

Thursday, April 26, 12

takes another kind of liveness – the liveness of theater

American television and drama



Thursday, April 26, 12

takes another kind of liveness – the liveness of theater

questioning the ontology

“...live performance is becoming progressively less independent of media technology.”

“It is not realistic to propose that live performance can remain ontologically pristine or that it operates in a cultural economy separate from that of the mass media.”

Phil Auslander, *Liveness*



Thursday, April 26, 12

But it is interesting to consider that liveness developed its current meaning as a cultural category with the advent of technologies that were not live - film and recorded music. things were “live” on television.

Auslander argues that theatre today cannot escape from the culture mass media. primarily making an argument about the ways in which live performance is as he puts it no longer ontologically pristine. looks at rock concerts and other forms of popular performance. and his interest in primarily in television and its relation to theatre as calling into question the ontologically purity of theatre.

But what about the digital? How does the issue of liveness apply here?

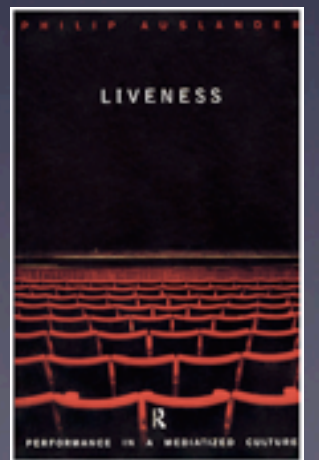
rethinking is taking place at the conference in fact:

but I would like to take it in another direction name - mixed mediation that juxtapose what is understood as theatrical liveness with the digital signal. but first let me start with purely digital works. and consider their theatricality.

questioning the ontology

“The spectator sitting in the back rows of a Rolling Stones or Bruce Springsteen concert or even a Bill Cosby stand-up comedy performance is present at a live performance, but hardly participates in it as such since his/her main experience of the performance is to read it off a video monitor.”

Phil Auslander, *Liveness*, p 24.



Thursday, April 26, 12

But it is interesting to consider that liveness developed its current meaning as a cultural category with the advent of technologies that were not live - film and recorded music. things were “live” on television.

Auslander argues that theatre today cannot escape from the culture mass media. primarily making an argument about the ways in which live performance is as he puts it no longer ontologically pristine. looks at rock concerts and other forms of popular performance. and his interest in primarily in television and its relation to theatre as calling into question the ontologically purity of theatre.

But what about the digital? How does the issue of liveness apply here?

rethinking is taking place at the conference in fact:

but I would like to take it in another direction name - mixed mediation that juxtapose what is understood as theatrical liveness with the digital signal. but first let me start with purely digital works. and consider their theatricality.

Why is liveness still important?

Thursday, April 26, 12

Famous Ashlee Simpson case.

Why is liveness still important?

Why is liveness still important?



Thursday, April 26, 12

Famous Ashlee Simpson case.

Avant-garde video: Richard Serra

Thursday, April 26, 12

Boomerang: avant-garde video explores liveness

Avant-garde video: Richard Serra

Avant-garde video: Richard Serra



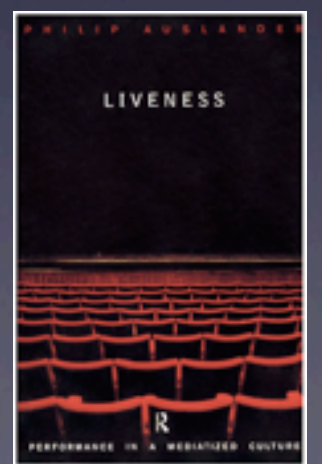
Thursday, April 26, 12

Boomerang: avant-garde video explores liveness

the future of liveness

“In the economy of repetition, live performance is little more than a vestigial remnant of the previous historical order of representation, a hold-over that can claim little in the way of cultural presence or power.”

Auslander, *Liveness*



Thursday, April 26, 12

So in this context we wonder about the contemporary status of the debate between Phalen and Auslander. Auslander would appear to leave a dim future for liveness. But in fact, as we have suggested, liveness (like aura) can be reinscribed inside of digital media— now especially mixed reality forms.

the difference perhaps is that liveness is not an absolute category, as Peggy Phelan suggested, but itself open to renegotiation as it is itself mediated in hybrid ways.

relationship to digital media?

What does this have to do with digital media?

Performative character of many digital media examples

either captured in digital media or as real-time performances

Thursday, April 26, 12

Why is any of this interesting?

playing the interface: games and performance



Halo3, Bungie

Thursday, April 26, 12

First could argue for the performative character of a lot of digital media. Due to that much maligned term - interactivity.

Interactivity invites you in. can mean two different things. you are invited to perform within a game loop. insert yourself into the procedure, become part of the procedure.

machinima as performance



Red vs. Blue, Rooster

Thursday, April 26, 12

Certainly performance is a means of measure the genre of game-expressive digital artifact called Machinima that are recorded live: just as Vita Futurista was. Machinima is tremendously popular: early and very successful example is Red vs. Blue

machinima as performance

Red vs. Blue, Rooster

Thursday, April 26, 12

Certainly performance is a means of measure the genre of game-expressive digital artifact called Machinima that are recorded live: just as Vita Futurista was. Machinima is tremendously popular: early and very successful example is Red vs. Blue

machinima as performance

Red vs. Blue, Rooster Teeth

Thursday, April 26, 12

I would argue that in this case the piece has the feel of being "live" - oddly enough. that the voices give it a live feel almost in the opposite way that the original Facade feels that the prerecorded dominates and it is entirely because of the quality of the voices.

machinima as performance



Thursday, April 26, 12

I would argue that in this case the piece has the feel of being "live" - oddly enough. that the voices give it a live feel almost in the opposite way that the original Facade feels that the prerecorded dominates and it is entirely because of the quality of the voices.

mixed reality games and performance



Guitar Hero

Thursday, April 26, 12

Performative character of digital media becomes even more obvious in cases where the physical and virtual are mixed, as in Nintendo Wii or even better Guitar Hero which is obviously performative, live, and yet completely mediated at the same time.

social computing as performance

Facebook as performative
performing your identity
performing through games and applications

YouTube as performative
“Broadcast yourself”

Flash mobs and social AR/MR experiences

Thursday, April 26, 12

Performative character of digital media becomes even more obvious in cases where the physical and virtual are mixed, as in Nintendo Wii or even better Guitar Hero which is obviously performative, live, and yet completely mediated at the same time.

flash mobs: life as (mediated) performances

Thursday, April 26, 12

Flash mobs are turning spaces into performances, but almost always now mediated too. Grand Central Station Freezing in Place. no obvious mediation, but of course, it actually is presented as a video on YouTube. I mentioned the futurists earlier as example of the political avantgarde - those like the Dadaists who wanted to reintegrate art into life.

One wonders whether these flash mobs are not contemporary expressions of this avantgarde desire.

Flash mobs are part of a general trend to extend the issue of mediation in mixed reality - really potentially to the whole world - that is to say, all spaces become mediated. But if all spaces are mediated, then what happens to the cultural category of liveness. In fact, this is

Our MR experiments are just suggestive examples of the potential uses of pervasive computing technology to transform the everyday world into a performative space, but one in which the performances are necessarily hybrid combinations of recorded and live, mediation and "natural"

The pedestrian vision of mobile technology as offering restaurant advice - soon blossoms into all sorts of more complicated and interesting applications - where applications show your friends in the same area, etc. suggesting that the whole space can become a performative space. this is the idea behind many kinds of alternate reality games for example. extends Auslander's notion of mediation far beyond its original application to rock concerts and installation pieces to the whole world.

not just that the world becomes mediated, but that the world becomes "live" in Auslander's sense - that is it becomes a space in which performance elements of liveness are completely interlaced with elements of mediation.

in other words, the world become performance space - available for performance. at the same time

flash mobs: life as (mediated) performances



Thursday, April 26, 12

Flash mobs are turning spaces into performances, but almost always now mediated too. Grand Central Station Freezing in Place. no obvious mediation, but of course, it actually is presented as a video on YouTube. I mentioned the futurists earlier as example of the political avantgarde - those like the Dadaists who wanted to reintegrate art into life.

One wonders whether these flash mobs are not contemporary expressions of this avantgarde desire.

Flash mobs are part of a general trend to extend the issue of mediation in mixed reality - really potentially to the whole world - that is to say, all spaces become mediated. But if all spaces are mediated, then what happens to the cultural category of liveness. In fact, this is

Our MR experiments are just suggestive examples of the potential uses of pervasive computing technology to transform the everyday world into a performative space, but one in which the performances are necessarily hybrid combinations of recorded and live, mediation and "natural"

The pedestrian vision of mobile technology as offering restaurant advice - soon blossoms into all sorts of more complicated and interesting applications - where applications show your friends in the same area, etc. suggesting that the whole space can become a performative space. this is the idea behind many kinds of alternate reality games for example. extends Auslander's notion of mediation far beyond its original application to rock concerts and installation pieces to the whole world.

not just that the world becomes mediated, but that the world becomes "live" in Auslander's sense - that is it becomes a space in which performance elements of liveness are completely interlaced with elements of mediation.

in other words, the world become performance space - available for performance. at the same time

digital media: liveness and aura as design parameters

real time, procedural, and prerecorded can be mixed.

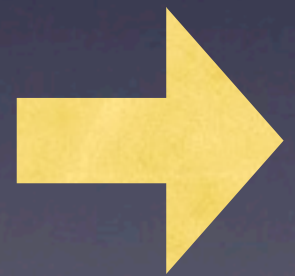
augmented reality and mixed reality are about combining these elements

in all digital media, particularly social and mixed digital experiences

Thursday, April 26, 12

Liveness like aura as a design parameter now.

mixed reality & the question of liveness



Thursday, April 26, 12

Abstract

Performance and media studies have long discussed whether television has changed the cultural category of "liveness." We should now expand the field of inquiry to include digital media. Are MMO environments such as Second Life "live"? What is the status of Mixed Reality experiences, which combine human performers with avatars or situate human performers in virtual environments? How is the notion liveness related to presence in mixed reality and more generally in the performative situations of social computing? These questions are now available for cultural negotiation in an age of pervasive computing.

aura (in mixed reality?)

“We define the aura [of natural objects] as the unique phenomenon of a distance, however close it may be. If, while resting on a summer afternoon, you follow with your eyes a mountain range on the horizon or a branch which casts its shadow over you, you experience [breathe] the aura of those mountains, of that branch.”

Walter Benjamin, “The Work of Art...”

Thursday, April 26, 12

No talk in media would be complete without quoting Benjamin and invoking aura. But I actually think that it is particularly relevant in this context. because aura obviously related to liveness as well as presence. aura, liveness and presence as interlocking notions all of which get reconfigured in the context of mixed reality and location-based media.

for Benjamin, loss of aura through photography and film- loss of uniqueness in time and space -because these media can be shown anywhere. people have often speculated on how to apply this to digital media. here I'm inviting us to speculate again in the context of mixed reality and location-based applications.

and in such applications it seems as if the auratic is lost and then reinscribed. location-based applications are or can be unique in time and space. yet they uniquely set off media objects that are themselves reproductive technologies. mixed reality applications in general consist of composites of different media whose lines of composition remain visible.

a distance, however close...



Thursday, April 26, 12

Benjamin's distance no matter how near - could describe in fact the distance Augmented Reality Second Life applications, the distance between you and a virtual object - where you can never really get beyond the distance of the fact that it is another representational mode.

that's the thing about pervasive computing that we forget and then (through works of digital art) remember again: the distance between ourselves and these mediations. and yet the ways in which this distance is diminished.

liveness (and aura) as design parameters



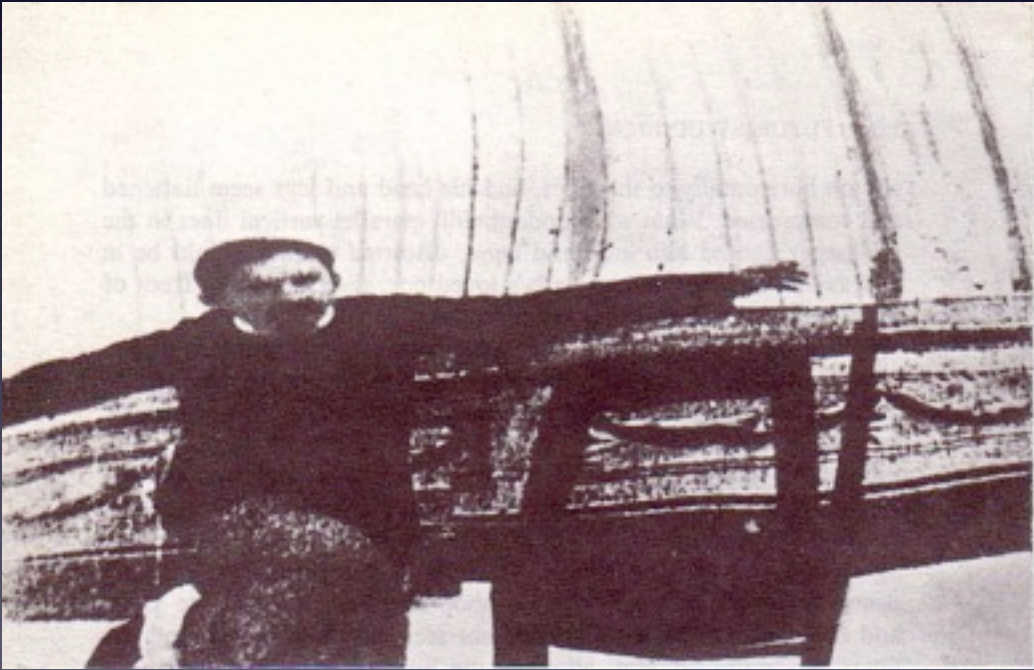
Thursday, April 26, 12

it is true that theatre seems vestigial and that is part of its appeal.

In addition, liveness becomes a design parameter today: something that one can design into mediated experiences now.

designers or artists can decide the extent to which they want to invoke category of liveness. despite the fact, or perhaps because of the fact that liveness, like aura, seems to be exhausted of its mystic quality. This is in the character I think of pervasive computing in general and mixed reality in particular—what mixed reality foregrounds is the fungibility and availability of these categories (aura, liveness, presence) that were felt to be inherent in earlier media forms or earlier aesthetic regimes.

The Futurist and the chair



Thursday, April 26, 12

The break dance example. Breakdance contest. may not use this.

Stage actor and screen actor

“This situation might also be characterized as follows: for the first time--and this is the effect of the film--man has to operate with his whole living person, yet forgoing its aura. For aura is tied to his presence; there can be no replica of it. The aura which, on the stage, emanates from Macbeth, cannot be separated for the spectators from that of the actor. However, the singularity of the shot in the studio is that the camera is substituted for the public. Consequently, the aura that envelops the actor vanishes, and with it the aura of the figure he portrays.”

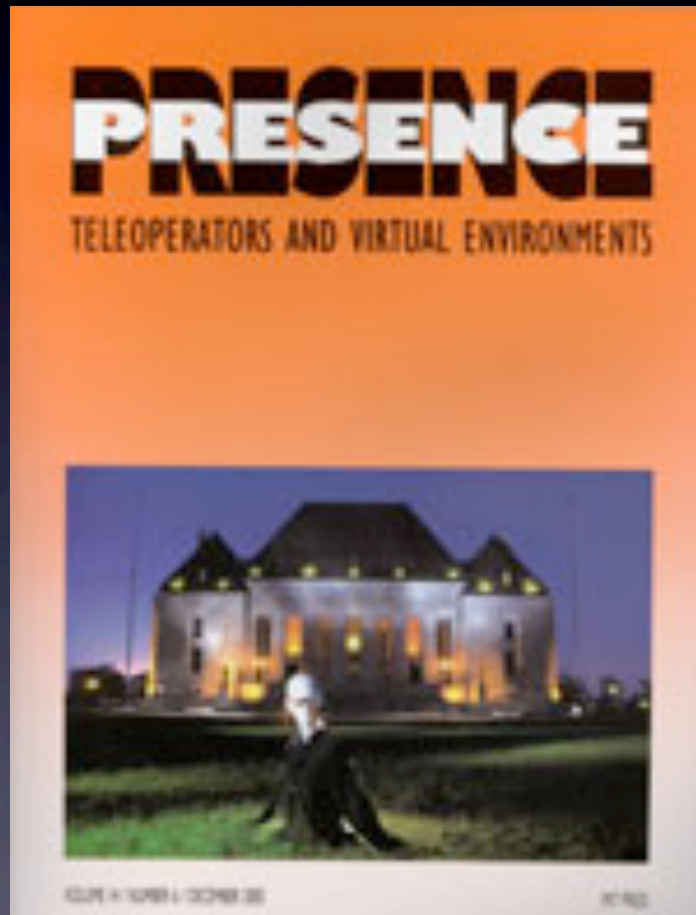
Benjamin, “The Work of Art...”

Thursday, April 26, 12

Benjamin himself considered the issue of the relationship of live acting to film acting. live acting was auratic, but film was not, because the technology penetrated the space of the actor - dissecting.

so dissection here becomes rather interesting. technology penetrating the space of the human, potentially non mediated or premediated perhaps. this would suggest a relationship that is similar in some ways to the situation of mixed reality technology that we have been talking about

virtual reality and presence



Thursday, April 26, 12

Issue of presence. as another way to describe aura or liveness. Note that the computer community had unproblematic notion of presence. that question was how to get VR to that point. It is the humanistic tradition that problematized the notion of presence and therefore also liveness. but now mixed reality, even popular manifestations of MR, have overrun the notion of presence in virtual reality.