comment

Dance on Screen

writings on dance 17

In this cultural moment, contemporary dance performances often make extensive and simultaneous use of such current technologies as film, video, computer-graphics, movement-triggered and/or live mixes of image and sound fragments and lighting cues, telecommunications-mediated and Internet-mediated image projections and audio broadcasting, and virtual reality installations. And away from the live

Brannigan continued

succumbed to a choreography of images, a re-choreographing of the dancing body. He describes the 'immediacy' of this

performance arena, dance artists are increasingly turning to video, CD-ROM and other multimedia systems which allow production of their work in a portable form which can facilitate wider exposure of their artistic endeavours.

Contributors to this issue of *Writings on Dance* raise matters to do with this increasing engagement of dance with technology, the body with the machinery, the material with the immaterial, the corporeal with the technological. They meditate on their experiences, share the insights gained through personal projects, identify a re-invocation of the old mind-body dualism which has haunted dance for centuries with its ideal of disembodied consciousness, and remind us that dance need not involve other technologies to be a medium of transformation. They note that our current performance technologies have counterparts stretching back 4000 years, that the technologies are only made operational through direct contact with the human body, and that the human body is a far more technically complex system than any computer system currently extant. And despite certain disquiet with the political economy of technological production and the way the technologists appear to view the body, these writers proclaim the potential for dance

17

WRITINGS ON DANCE

Images beginning back cover, continuing above and running through Russell Dumas interview: Stills from the video *321*. Choreographer and director: Russell Dumas

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Brannigan continued

technique, the 'control' that the medium offers.[1] There is a power relation inscribed in his experience; a pleasure in

1 Trevor Patrick, interview re: *Microdance*, August 1997

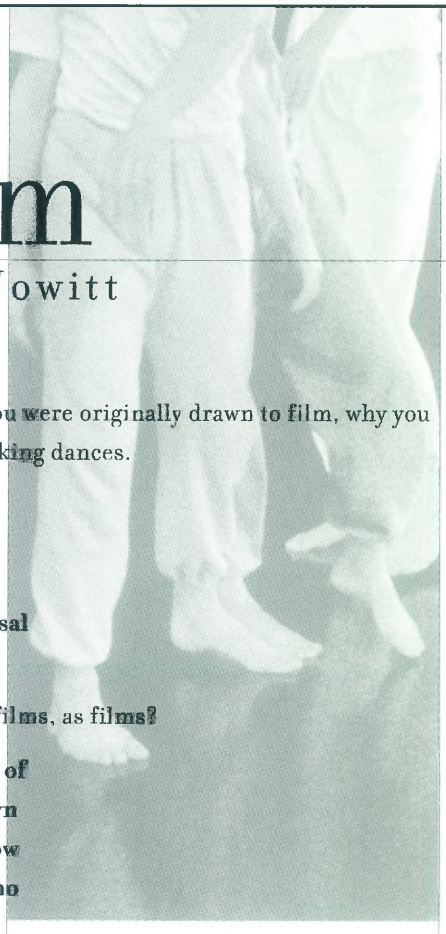
practices to inform technological practices in ways which can transform the technological.

Two main groupings of articles appear here. One grouping considers the making of videodances in which the videomaking is informed by choreographic and dance perspectives rather than being dominated by videographic perspectives. Trevor Patrick talks about his experience of making a work for the Microdance project, of what happened to 'the dance' in the process; Russell Dumas talks about 'reclaiming the body' in the making of *Remembering Ando's Wall* which is 'not a dance anymore'. Erin Brannigan and Jodi Brooks, respectively, reflect on the cinematic reproduction of movement and the ways in which film provides a new kind of access to the body and its movements, presenting them for renewed attention.

The other grouping circles around notions of presence and dynamics, digital aesthetics, the implications of certain tropes of the body, and the special knowledge of the body which dancers develop and which informs both their art making and their approach to performance technologies. Sally Norman takes the long vision of these matters, looking back 4000 years to a ritual in which virtual

Russell Dumas: on FILM

an interview by Deborah Jowitt



Images in right hand panels through this interview: Rehearsal photographs 32c. Choreographer and photographer: Russell Dumas

Jowitt Let's talk a little bit about why you were originally drawn to film, why you wanted to make films in addition to making dances.

Dumas **It was partly because of the fact of the isolation in Australia. I was interested in an area of dance that was, if not esoteric, at least not popular. I would do things there and then they would disappear. Few people would see them and I was interested in having the work subjected to the critical appraisal of an audience.**

And to do that you had to make quality films, as films?

Yes. Not just as records of the work that we were doing. It was also a question of situating the work in relation to particular modern dance lineages. I've shown five or six seasons of work in New York and I believed it was important to show work there because it was really only in New York where there were critics who

mastery. For Henri Bergson, the 'cinematographical method' was a semiological system whose signs have "a greater precision

reflections played a vital role, Thecla Schiphorst looks ahead to a time when computer technologies have been subverted, radicalised and 'rescued' by dancerly knowledge of the body. Susan Kozel, inspired by Merleau-Ponty, theorises a phenomenological poetics centering on the irreversible dynamic entwinement of body and world, coining a notion of the 'dancing-danced' which proves equally applicable to actual and virtual bodies and spaces. Dianne Currier examines the implications for the actual bodies attached to virtual bodies operating in the virtual spaces of the Internet, Virtual Reality, telepresence technologies, and cyborg fantasy.

There are multiple resonances among these articles and interviews, and between these writings and those which have appeared recently in other forums such as conferences and workshops and festivals and performance-related seminars, and in journals such as the Australian arts journal *Realtime* and the British *Dance Theatre Journal DTR*. Fortunately for those who have no immediate access to such forums, many of the key writings and discussions make their way onto the Internet via the Critical Theory collection of the Internet web site *DTZ: Dance and Technology Zone* at

could recognise a lineage from Trisha Brown and Twyla Tharp. They could recognise a modern dance heritage and were able to distinguish where I had progressed, whether I had augmented or diminished that tradition. Twyla used to say, "Know what's gone before you and attempt to go a little bit further". Even if its only a tiny step in a certain area. I guess I'm interested in the notion of dance as an art practice rather than dance as trite entertainment – not necessarily trite but the popular is usually trite. It's only exceptionally that it's also serious art.

And how did film help that ?

It wasn't that film helped, it was the only way you could actually have a history.

It helped to provide a context?

Yes. I mean you worked in Australia, you did performances. The work was seen by five hundred people who usually had no ability to contextualise it. So the work was not perceived in the context of the traditions which informed it; it was seen as some kind of anamoly in dance in Australia. Audiences had no ability to discern between something that was a genuine development, stuff that was just trite innovation, or blatant rip-off.

But to gain the audience that you hoped for you had to transfer it to video. Now you say that except for projects like ... *and yet* you always start with film and you always shoot on 16mm.

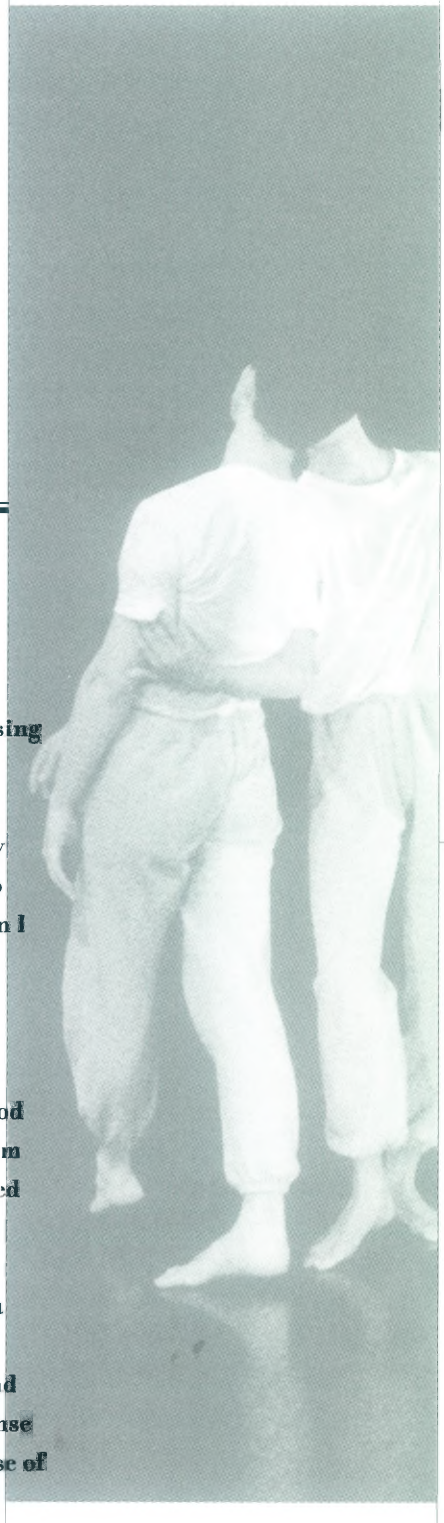
Brannigan continued

and... higher efficacy."[2] He saw the cinema as part of the general movement of science towards enlarging our influence

2 Henri Bergson, *Creative Evolution.*
Henry Holt and Co. New York.1924.p329

<http://art.net/~dtz/theory.html>, and heated discussion of dance and technology related issues takes place on a daily basis in the Dance-Tech email discussion list. To join the discussion or merely eavesdrop, send a single line message <SUBSCRIBE DANCE-TECH yourfirstname yourlastname> to: <listproc@lists.acs.ohio state.edu.> Their 2 year archive is online at <http://www.art.net/~dtz/mailarchive.html>.

Raewyn Whyte



I was more interested in film as a medium than video. From the beginning I recognised that there was a difference between something that was the registration of a theatre piece and the process of making video-dance (but using film). We were making something that would be seen on television – or in installation situations. I was working with Twyla when she started to get interested in making video dances. She used to say that television is basically about two things: the rectangle and the dollar. Basically it's up, down, side to side, and the dollar; and I couldn't disagree, in a sense, at that time. But then I thought that film was actually about something else.

About what?

In film there was an art house tradition and there were different lineages in film, Western and Eastern. There is a European tradition, there is a Hollywood tradition ... and a Bollywood tradition ... and there is a Japanese tradition. I'm particularly interested in the films of director Yasuhiro Ozu who is considered by the Japanese to be the one who makes films that are quintessentially Japanese. They are usually about very tiny domestic incidents. I'd seen these films and I was very interested in this way of looking which they embody. You get, from one film to the next, the kind of thing where you might recognise a place, a coffee shop for example, which is peripheral to one film narrative and the site of the next. Gradually by watching the films you would get a whole sense of this particular world, built up incrementally, and you would also get a sense of

over things; "It is always then, in short, practical utility that science has in view."[3] Science and dance, the body and the

3 ibid. p.329

the way that world was very finely perceived. The films were mainly black and white and they were nearly always about something that wasn't seen on camera. They always referred to something, or someone that was absent. And I thought that was a bit like, in some senses, the dance situation in Australia, where a heritage is imagined but not embodied.

Speaking of these films that you admire of Ozu, obviously you are not creating that kind of narrative, but what you're creating in your films is some sort of continuity about how you perceive movement. Also (although perhaps not in all of your films), by your use of extreme close up, there is something that's absent. It's not like a record film where you see the whole dance – and what is absent is as interesting as what is present.

Yes. But it's dependent upon a kind of ability to fill in and it's quite difficult to fill in what is absent. In the work I made recently, the last one actually, *Remembering Ando's Wall*, where it's quite chopped up – only feet and hands and close ups of the face – the experience I've had from talking to several people who have been interested in my dances is that there's a certain frustration because it does this. However, I still think this film has got the most interesting editing decisions.

I work closely with an editor, Reva Childs, and our concern with the development of a shared perception has lead us to undertake several projects together, the latest being martial arts. These various undertakings have helped to develop language in common that we bring to bear upon the problem at hand – which is framing movement and how to cut, how to establish continuity, texture, rhythm etc.

So the martial arts was just a choice to practice on because you were interested in martial arts?

No, the martial arts had to do with an aesthetic – it's an aesthetic of necessity. It never had a kind of flaunted aspect to it. It is not involved with the narcissistic display of the dancer.

This is interesting, because your work on stage is extremely natural to me: it's highly polished, the movements are carefully selected but the performance style is not engaged with impressing an audience but more with the doing of the things. So how do you preserve this on camera? I am thinking about this in relation to what you said about martial arts, about it not being done for the camera, not for display. Often, when the camera comes in close on somebody in film, a dancer, particularly if the dancer is outside or something, suddenly the

Brannigan continued

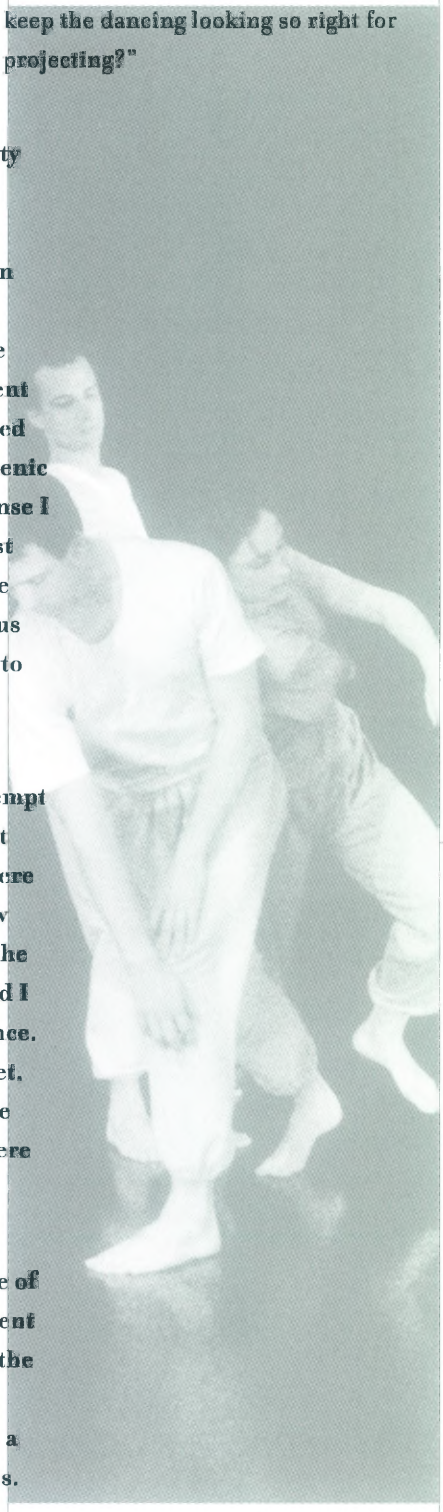
machine, are flirting. Or perhaps Fred Astaire was the flirtation and this is the obsession. Freed from the burden of their escort

dancer looks quite phoney. How do you keep the dancing looking so right for film, not looking as if "oh my god she's projecting?"

Partly it was a fortuitous thing. I'm interested in movement and a kind of aesthetic that can be traced back to the 1960s and '70s where the doing quality was what was aimed at – where you might for example, draw attention to workmen building a stone wall without their awareness, without their knowledge. There was recognition of the kind of pleasure that could be had in watching people doing things and also recognition of the great skill that was deployed in the doing. I think in the '60s there was some attempt to cultivate and to utilise the terrain of movement as dance. You were looking at movement and there was an attempt to establish a territory for dance that was not defined by its relationship to other practices. There wasn't a marriage to music, to scenic design, to costume or to story – a whole range of things. And it was in that sense I guess that I was interested in defining the territory of dance. These are purist concerns perhaps, but I've always thought that it's not that you can't combine these things but if you lose the identity of dance when you do, then I'm jealous about that. I don't want dance to be defined by all these other relationships, to play second fiddle to all these other things.

It seemed to me fairly logical that I should eliminate these things. In the origins of silent films there was an attempt to capture movement ..... I think it was the movement of trees. In the earliest films that we have there was this attempt to deal with movement. It seems there is some analogy there to my own interest. Within movement, in order to draw attention to what I was interested in, I had to eliminate. I was interested in the notion of the 'natural', but I recognised that the natural was a stylisation, and I wanted movement that could engage the kinaesthetic sensibility of an audience. I felt that the stylisation in the techniques that I was familiar with from ballet, Cunningham and Graham, led to a certain alienation. The audience sat in the dark and watched a display of virtuosity and thought "I couldn't do this." There was a sense of distance even as you were admiring the skill that was being paraded. There was this lack of kinaesthetic empathy, a sense of separation.

About twenty years ago I became aware of the new body work techniques, such as Alexander, Feldenkrais, Todd alignment etc. which have been embraced by the new age bodyworkers. It was a bit like the Industrial Revolution applied to the body. All are concerned with efficiency, which after all is the hallmark of the true virtuoso and all lend themselves to a certain cultish, holier than thou body look which the camera only exacerbates.



– the story – body and machine indulge in new depths of insinuation and suggestion.

Of course the insights offered by these techniques are invaluable to dance – in the bad old days you were practically not a certified teacher if you didn't have plastic hips. The dilemma about the inscription of the dancer's body is a continuing one. The techniques that I had known only dealt with training the body when you were actually in the studio and it seemed to me that in training you went through a process that actually worked against what you were interested in. So I became interested in techniques – whether it was running, rolling, crawling, walking, all of those things – and in anatomical information that supported a use of the body that allows me to explore when reapplied back into more technical things like ballet. It was actually the most intelligent approach that I'd seen and it came from a process of reclaiming the body. As a dancer you were so much at the mercy of all these teachers, saying pull up, turn out, hold your arms like this, do your double turns like this. So at a certain point you actually just wanted to reclaim your own body and these techniques empowered dancers. The experiential, anatomical approach of someone like Andre Bernard gave you your own body. Now, I understand that there are a lot of problems with trying to teach ballet or Cunningham or Graham from this basis and I do think all of these things are important, all of those techniques, they're part of the heritage that I actually like in dance. But I think this other approach is perhaps more efficient...and it just happened that this approach lent itself readily to film. It centred the body so that you could then say to the cameraman, there is no front in this work, you can walk around it. When I make work you can look at it from any side. I will have preferences perhaps.

I should also say that I was very influenced by the Japanese haiku poets – the notion of using a language economically. You know that notion of the finger pointing at the moon – if the finger was ornamented you didn't see the moon, you only saw the finger. Within haiku there was actually this tradition of using the vernacular. It was very direct, economical, pared down, unlike most Western literary traditions – our poetry was not as pared back.

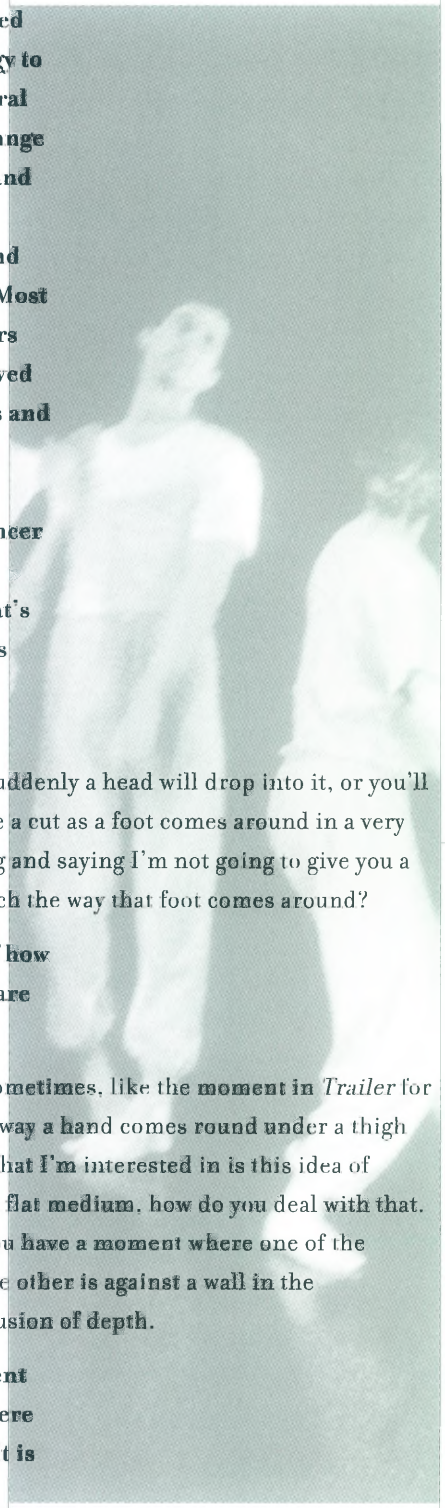
Last night when we were talking you said that sometimes, in putting dancing into film you had to take away and you said something like, "and they look as if they're doing nothing." By which you didn't mean 'nothing' but that it was so inevitable.

If you think about a real life situation, like this conversation now....we talk and I gesture and I use my hands and so on. On video this would look quite artificial

Brannigan continued

II

Philip Brophy describes the complex kinetic processes involved



because the video frames what we're seeing; we get something that is produced in a tiny frame and we look at it quite directly. We bring a focus and an energy to bear upon everything in that frame that we don't when we look with peripheral vision. I can talk to you and at the same time be aware of and track a whole range of things. If you were putting this situation in a theatre you would look at it and you would stylise the natural, you would take away a lot to make it read as 'natural'. If you think about the early films where they used theatre actors and they look quite artificial, that's where we are up to in dance at the moment. Most dance that's been committed to film is done with dancers and choreographers who have been trained in ballet, this technique that is designed to be perceived at a distance. It's akin to semaphore signals. Ballet is about certain extremes and the subtlety of something like Trisha Brown's involvement with transition is likely to be lost and in an extreme case not even recognised as movement. Techniques like ballet put railway tracks through the sensibility. A ballet dancer reads movement and looks at it...oh what did you do? Well you went to first position and then you went to second position and that squitchey thing... that's not dance, that's not movement, that's nothing... so that you end up with this very peculiar distortion in perception. It becomes your frame of reference; basically, how you see movement is by how you learned it.

Your frequent use of the frame where suddenly a head will drop into it, or you'll pan to follow a foot up and there may be a cut as a foot comes around in a very close shot.... is that a way of simplifying and saying I'm not going to give you a lot to look at, I'm going to have you watch the way that foot comes around?

Partly that, but also to make what's missing irritating – to make you aware of how you look. What we're looking at is how we look – are we looking at the body? are we looking at the legs?

But you know the film is very sensual sometimes, like the moment in *Trailer* for instance; it's not sexy, but sensual, the way a hand comes round under a thigh and you focus on that. The other thing that I'm interested in is this idea of flatness and depth – that since film is a flat medium, how do you deal with that. I know in *Remembering Ando's Wall* you have a moment where one of the dancers is far in the background and the other is against a wall in the foreground but relative size gives an illusion of depth.

I'm also using the illusion of the white space – the different textures, different qualities of white – there are actually various formal devices like that, that were used there. But it's actually also something that acknowledges the medium. It is

in the cinematic reproduction of movement; "The dialectic between movement within a fixed frame and the motion of a

flat. You take this on as a restriction as I would take on a restriction that's coming from dance. Using the fact that the restriction is an aesthetic, something to work against, gives you a certain kind of freedom. Acknowledging the restrictions of the medium allows another kind of freedom. It's not a dance any more. The dance (as live performance) has no relation to the camera, how it sees, how it frames – and there's a very different consideration of visual rhythms. For me looking at film and video on dance.... television has been a very poor medium in some ways. So one way I have explored of thwarting the medium, of testing its limits, is to take away (some of) the things that have defined it. In an effort to do something more rigorous I have eliminated sound which is the dominant ordering sense. You can put sound with anything and conventionally, when you start to cut, you make continuity with sound.

And you eliminated sound completely.

Well in *Ando's Wall* I used something that was electronic and new, which was possibly the ugliest thing you could do on television. My challenge to myself, given that I'd not used colour, not used costuming (the most basic tracksuit) and I'd eliminated sound was to say okay now within the limitations of the flatness, how do I make this thing engaging. The process is challenging also because I'm really interested in the sensual and my whole engagement in dance is with the sculptural, the depth of the body and its 3-dimensionality.

These restraints led me back to concerns about the persona of the performer. My interest in dancing is not really in dances; my interest is in dancers and this brings up the question of the relationship between the choreography and the dancing. In a sense that relationship between a dancer and a choreographer is always interesting to me. It involves a collaboration that is often not acknowledged. Just as in film there is a whole series of collaborative activities that are fairly arbitrarily attributed to directors, cinematographers etc.

I work a lot with light – after movement, the single other medium that I choose to engage with is light because it determines how something is seen. I always 'cut' dances through light. I can jettison movement. I don't actually do a dance and have someone come in and light it. I make movement and I think about how this movement is best displayed to somehow show what interests me in it.

That's true for stage?

Brannigan continued

moving frame pinpoints the kineticism at cinema's historical heart – a will to move... the cinema (as an animatic apparatus)

Yes. But when I do a work, say in New York, I don't have that luxury. I have very limited time and I don't have a lighting person that knows the work, knows my concerns. You hire a studio with so many restrictions; you're not allowed to have lights on the floor, you can only have top light where there's no depth etc. I was never produced, I was always self-produced in New York, spending my own money this way because I thought it was important for my own development to have my work positioned in relationship to dance practice there. The limitations about what I could then show meant that I was always restricted to the movement concerns, which then became exacerbated in New York because it seemed as if that was all I was interested in. It wasn't all that I was interested in, but it was all I could afford to show. But I guess I was always interested in virtuosity.

A different kind of virtuosity.

It's a subtle difference..I don't think that it's a different kind of virtuosity. I was always interested in efficiency and you can't be a virtuoso anything if you're not efficient.

I was thinking of it more in terms of the virtuosity of, say, the Noh actor who has to put his foot down...so. But to go back to something you were saying about the sculptural, I was thinking that when you use a black background the way you did in *Trailer* you seem to be examining movement from any side there. I don't know if that's true...whether you actually moved the camera – there are some fades in there – or whether the dancers were turning the movement? It seemed very modelled by the light, very 3-dimensional.

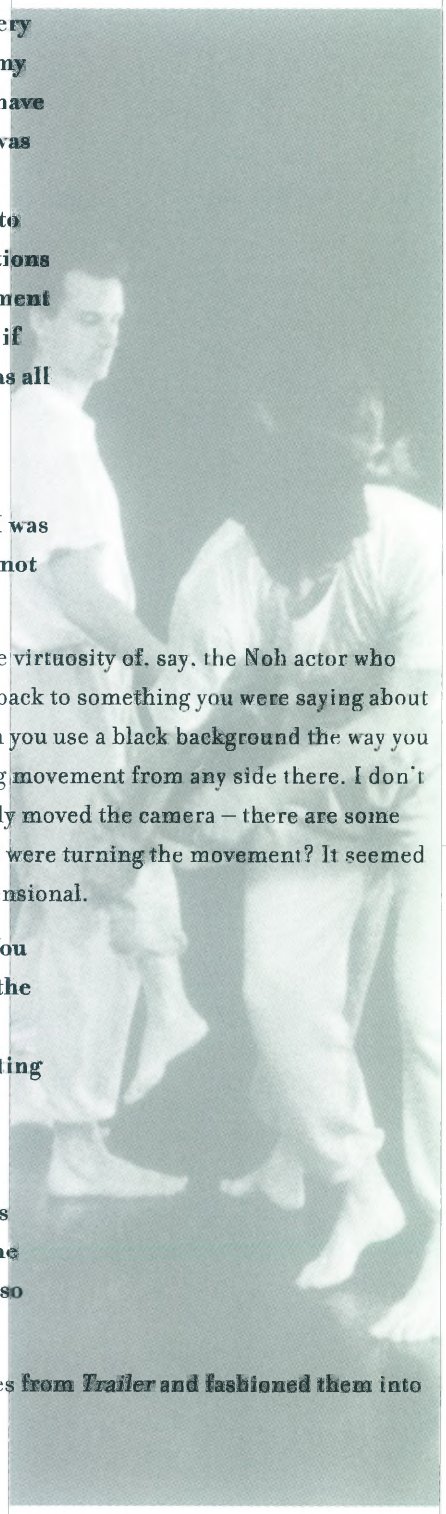
Well it's partly economic. It's partly that you have limits of time and space. You have a lighting stage and it costs to change that. It's often quicker to change the light than to change the camera and associated focus grids. And it's much quicker for the dancers to change what they're doing than to change the lighting rig and the camera.

And you shoot at a very low ratio?

I try to use everything. After *Trailer* (and I did it again with *ABCDEFG*) it was about using everything that I'd actually shot and if I didn't like it to find some way to deal with it as an editing problem; some way to deal with the material so that I could at least watch it, even if I didn't like it.

So what you did is you took the out-takes from *Trailer* and fashioned them into *ABCDEFG*?

Yes.



generates the dynamic resolution of the vertical with the horizontal – of the vertical strip of still images passing down in

But you must have some sort of ratio, like 3:1, 4:1 or something? You can't use everything,.

Well you can, almost, especially if you incorporate special effects like freeze frames. I'm not saying that we didn't eliminate anything. We probably did, but I became interested in say the dancer's collapsed foot and his behaviour where it just got too much and he fell about laughing. I could use that.

Your dance is usually constantly revolving, changing directions. It's never flat.

It's never meant to be. I'm kind of interested in what I can't see. I'm interested in that notion. I'm interested in showing material that might come from a theatre piece – a live performance – but I put it there and look at it through the lens and I'm interested in how it changes. Then the dance is what's being seen through the camera. It's not something that exists outside that. It comes from stuff that exists outside of that moment and the dancers are able to adjust. They just do the material and I will say to the cameraman, there's no part of the body that you can't follow; what I want is the smooth action of the camera and you can follow any rhythm that's in the body; I want you to think about how you see this. So that the film footage is almost a registration of how the camera-person sees, his looking, and what he's looking at when he watches this dance or this dancer. We'll work like that and I'll say well in fact that's not the most interesting frame: at this point the material is very much concerned with feet, or very much concerned with the arms so I think you're looking at the wrong place and then we'll do it again. So we'll do a couple of dry runs and we'll come into the studio and talk about it and look at it through the viewfinder, or we'll shoot a video and talk about that. Or else I might try to involve the cinematographer in a theatre piece – I'll incorporate the use of video into a live performance so he can practise a whole lot of stuff.

How do you mean incorporate the use of video?

I did a piece called *Envelope* and within the live performance there were four monitors, there was a fixed camera and a camera that was registering what the cameraman was seeing. I was directing a piece that the dancers were doing on the wall. I was restricting what he filmed – he wasn't to follow the whole dance, he was only to follow what was happening on the wall and he could go out only so far. There were four dancers on the wall and he could choose which one he wanted to focus on. We did this performance for a couple of weeks before we shot *Remembering Ando's Wall*. So there was a familiarity with the work.

Brannigan continued

front of the projector lens, while each image incrementally shifts sideways."[4]

4 Philip Brophy, 'Cinesonic', *Realtime* 21/ On Screen, October-November, 1997, p.24.

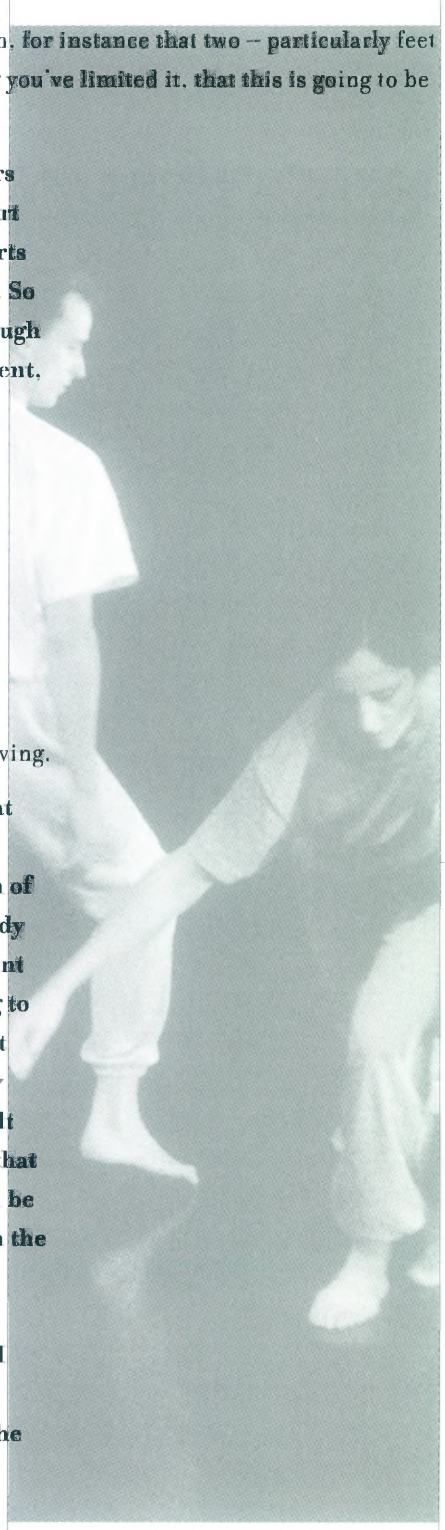
Sometimes you seem to make a decision, for instance that two – particularly feet – is all we see. That from the beginning you've limited it, that this is going to be only feet.

It's feet but .. in the section you're talking about in *321*, there are two dancers with two feet so there are in fact, four feet. In some of the framing Jo will start first. She'll start the sequence and then Nick will start. The next time, Jo starts in front and Nick is behind and the next time Nick is in front and Jo behind. So that means that within the tight frame, the rhythms of the arms coming through will vary and I was interested in how you can, with a tiny sequence of movement, change entirely what you see.

It's like how news is constituted – how it is framed and why it is framed. You know, the political reasons for hearing about certain kinds of massacres and not others. I think we're so used to this notion of the news and video and it somehow being believable because we see it. Actually I am also thinking of that biblical thing: 'Seeing is believing but touching is the truth.' It goes back to the Apostles: If you don't believe, touch my wounds.

But we know now that seeing isn't believing.

The sense of touch is for me the thing that refers to dance. I'm not saying that the body never lies. But I'm saying that there is something about dance and about the persona of the performer that is inherently truthful. This question of efficiency again goes back to the habitual and the emotional nature of the body and movement. If someone attempts to convince you to change your movement habits they had better have compelling reasons or else your body is not going to be convinced. So the technical information establishes a ground for the right that you then have to ask someone to do something differently. In a sense my dancers are quite courageous. I ask them to do something that is very difficult and I'm interested in the moments when they actually fail to do something; that has a certain rawness about it. If they succeeded in doing it then there would be the possibility for narcissism. When the dancers are strictly in control, when the dancing starts to have that performative stylisation where they are trying to produce how they're being seen, then you get this projection thing you spoke about earlier. When you go in close with the camera, you feel it. The trick as I saw it, directorially, was always to have the work just out of grasp so that the dancers' focus was just on doing the task at hand, rather than in displaying the task at hand, or the mastery of the task at hand.



This, of course, is a simplification. Dance does not progress horizontally but every way, often challenging the containment

But you can subvert that too, by focussing on another part of them, letting it be the hand or...

In film, yes. But the thing about that is that when it comes to the shooting of something, if the dancers don't have their task to do in each part and if that task isn't sufficiently difficult, then they begin to look out. I'm not opposed to the looking out, I mean the task doesn't have to be a physical task per se – you can give them a task that has to do with their focus or the transformation of gestural material. They're kind of like intellectual games. But it's a very fine line and you have to keep shifting the parameters. You shift them for one film and then there's usually a time gap – and the dancers get that task and they can do that and you have to move the parameters again. I also use light in that context. I'll do something like use bright lights..so that the dancers are so concerned about managing to do what they've actually got to do with this light stuck in their eyes that they don't get involved in the presentation of themselves performing what they're doing.

It seems to me too that your film technique is as subtle as the choreography. It doesn't call attention to itself or very rarely does – as in the use of superimpositions for example. Can you talk a little bit about your attitude toward these devices? You said you didn't like fades...

When I started to do *Trailer* I was using theatre lights and I used that fade in, fade out because when you do post-production you can do that electronically. Someone who knows about film can tell often that something's been done in post-production. You can do this, you can make a movie this way but it isn't as aesthetically appealing to me. Just as I was interested in the kind of virtuosity in performance where you just presented something in natural light; you just go to a gymnasium or a studio and engage people with the act of moving, with the act of dancing. I wanted to be able in film to do something with a certain kind of virtuosity; not cutting and not doing a whole lot of quick things like MTV, or the reverse – doing a whole lot of things like that but taking them further. Finally, something like a slow cross fade, which in the theatre I quite like, as film I find very cliched. It serves a purpose in that it allows you to get from one lot of material to another. If you've got a long section of one thing and another long section, how do you get between them? If you do a jump cut in the middle you really impede or impose on the visual rhythm. So I thought in *Trailer* that I would do just one thing like that... and when I look at it now I hate it.

Brannigan continued

of the frame. The frame is not always fixed. Filming dance, the 'will to move' seems to become uncivilised, restrained only by

Because it only functioning as a link?

Its functional as a link but it draws attention to itself.

Well, frequent fades can be like those dances on the stage where somebody has the lights come on and they do a few things and then its a blackout and then the lights come on again and so on. It can be effective dramatically but sometimes I think it's because they didn't know how to get from one to the other.

Well it is, but editing is about continuity. Usually for a film editor there is a script and so the overriding concern is "does it enhance the story?" So that the process of film editing is basically narrative driven and most film is narrative driven or else it's about music or an expressionistic interpretive thing which is like another kind of narrative.

Colouring how you see it.

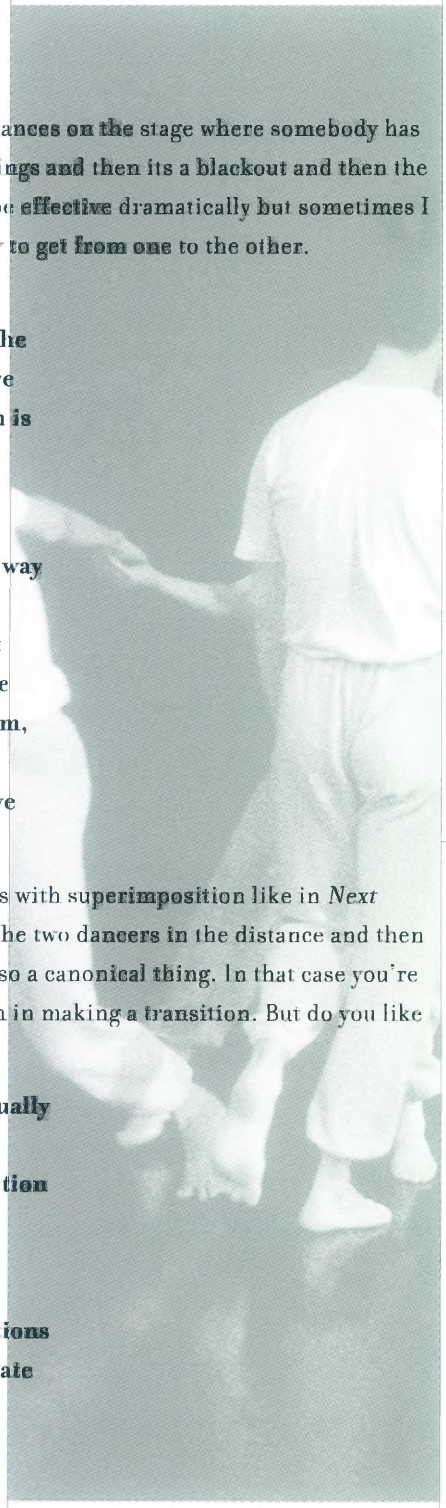
So that if you actually don't want to deal with narrative you have to develop a way of dealing with editors. Working with Reva we've had to say, well there's no narrative, so you look at what you've got and you try to show something about what you're interested in without having any of the usual parameters to guide you. It's much more difficult where you are working purely with visual rhythm, for example. You don't have a sound track or score, so you have to find something that is compelling from the footage that you have. If you don't have the footage there's not much you can do

But you've done some interesting things with superimposition like in *Next* where you're showing depth by having the two dancers in the distance and then two in close up at the same time, and also a canonical thing. In that case you're giving us different kinds of information in making a transition. But do you like that?

No, I liked the process of making that, of editing that. I'm not sure that I actually like it. I know that I arrived at those decisions by eliminating. I know that I couldn't bear to have certain footage included that so I had to arrive at a solution where I could cut it out.

Because you didn't like the material?

No, I didn't like the performance of the material so I was forced to find solutions that dealt with eliminating some of the stuff that I disliked. You can't eliminate so much that you don't have anything – which has often been my tendency (laughs). So, given that I've actually got to end up with something, what can I eliminate?



the surface of the screen. The single shot form, the filming of a scene or sequence in a single, unedited take, seems to attempt a

I was fortunate with Reva – she was very direct and she would say very quickly if I did something that was a cinematic cliche and I need that because my own experience is fairly limited in the cinema. I have become interested in cinema as a way of furthering my interest in dance and it's a way of perhaps preserving something of the things that concern me.

Your films in a sense are like limited edition books. The general public could very well like them and there will always be connoisseurs that will like them. There are not many choreographers working in film and the style in which you work is so related to the style of your choreography. It's so intimate, there is something very peaceful about it. There's something very natural about it and at the same time it's very sophisticated and very subtle. So it's a real work. It's another aspect of your work. Just tell me whether you are going to go about getting these edited so they could be distributed? Do you have any interest in that, or do you want to make more? Don't you have an urge just to take one and make it as perfect as you can? And find a larger audience.

Oh, yes. You're always aiming to do this. I want to make more. I want to make better ones. The problem is to work with film you need to work with dance for a long time and because of the kinds of interests that I have it takes about three or four years of working with a dancer before you can point the camera at them. So you're talking about something that is totally unrealistic commercially, and it's almost impossible in the funding situation where you're supposed to pick up dancers and drop something on them in six weeks. It's this confusion again of an art with fashion.

Brannigan continued

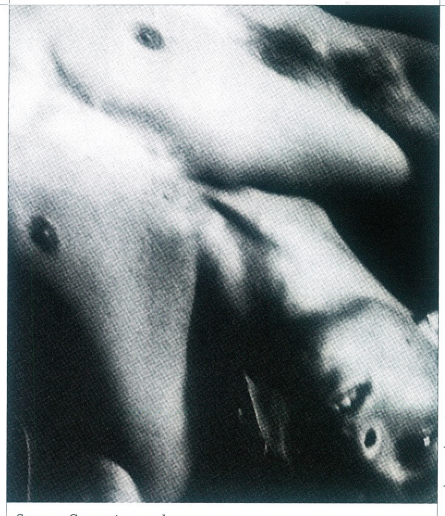
repression of this kinetic impulse. In "'Primitive' Cinema – A Frame-up? or The Trick's on Us",[5] Tom Gunning places this

5 Tom Gunning "'Primitive' Cinema – A Frame-up? or The Trick's on Us". *Cinema Journal*, 28/2. 1988 p.5

Mahalya Middlemist's *Vivarium*

Jodi Brooks

RITUALS OF THE FILMIC BODY



Steven Cummins and
Simon Hunt's *Resonance*

This paper was originally presented at the Performance Space in 1993 as part of the conference/event "Occupied Zones, Art and Artists in the Age of Electronic Media."[1] The title of the conference refers, of course, to Walter Benjamin's much cited essay on film "The Work of Art in the Age of Mechanical Reproduction," an essay which he wrote (in a number of versions) in 1935–6. Rather than departing from Benjamin's essay to address its relevance for the electronic medias, I am going to return to it to discuss two short films screened in this event – Steven Cummins and Simon Hunt's *Resonance*, and Mahalya Middlemist's *Vivarium*.

technique within the context of the early cinema where he finds a reliance upon "the space within the frame rather than

Benjamin's arguments in the "Work of Art" essay are well known and I do not intend to restate them here. Instead I want to draw on some of Benjamin's arguments about the body and technology and his comments on film acting, an area of his work which can provide a useful framework for addressing the kinds of filmic performances we find in films such as these. My intention is not to position these films as illustrations of Benjamin's arguments about film and photography but rather to look at the ways in which films such as these explore similar questions to those posed in Benjamin's work, though not necessarily in the same ways, nor even in the same ways across the two films. Returning to Benjamin's essay however provides a starting point for addressing the different types of work being done in the area of film performance in these films and the different types of performing bodies *Resonance* and *Vivarium* produce.

The invention of the film and the phonograph came in an age of maximum alienation of men from one another, of unpredictably interven ing relationships which have become their only ones. Experiments have proved that a man does not recognise his own walk on the screen or his own voice on the phonograph. The situation of the subject in such experiments is Kafka's situation; this is what directs him to learning, where he may encounter fragments of his own existence, fragments that are still within the context of a role.[2]

Vivarium

The concept of shock is crucial to Benjamin's work on film and to his work as a whole. Like many theorists of modernity, Benjamin argues that modernity is characterized by and written through with shock experience: daily life consists of a sensory bombardment which assaults and seduces the subject in work and leisure – both the working body in industrial (and we could add – though in different ways) – postindustrial labour. What distinguishes and defines modern life is the principle of interruption and interruptibilty which structures and destroys space and time as continuous. As Peter Osborne has argued, 'for Benjamin, unlike what has become the mainstream of the sociological tradition, "modernity" is no mere name for a chink of historical time and the social forms that happen to have occupied it. Rather, it designates a temporal structure of experience.'[3] Modernity is marked by and understood as a crisis of experience and an experience of crisis. Caught in a constant and endlessly repeated present, the possibility of either reflecting on experience or articulating it is virtually impossible. Benjamin's interest in film is in terms of how this temporal structure of experience can be grasped, given form, and interrupted. Benjamin's claim is that film can give form to the crisis of experience. Through its principle of fragmentation, film can stage the form and temporality of experience in (and that defines) modernity, and through the distracted attention it requires of the spectator, film can enable a form of alert absent-mindedness – a form of distracted attention on the part of the spectator that can serve to counter shock.

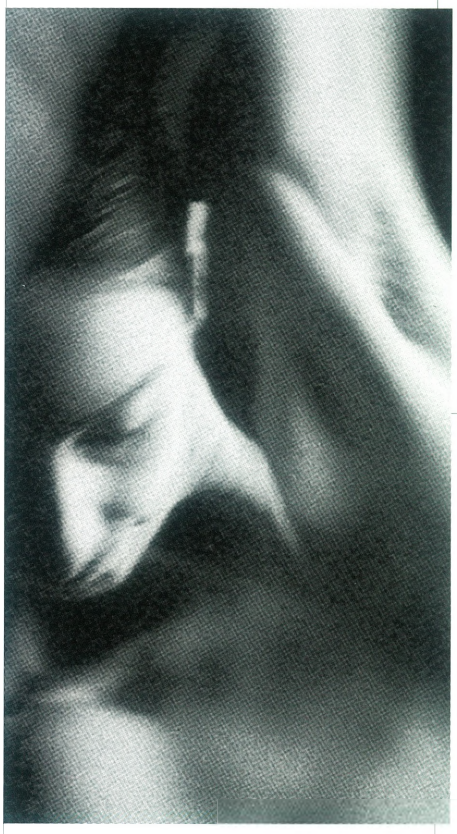
Brannigan continued

the possibilities of juxtaposition between shots." We can see the single shot technique in a number of recent Australian

Benjamin's comments on film acting provide us with one of the most evocative accounts of his understanding of shock experience and its relation to filmic representation and reception. As Benjamin argues, film acting is crucially written through by shock experience. Firstly in that it is already composed of fragments (of various takes, a separation of voice and image etc), but secondly because for Benjamin film acting itself entails a relinquishing of the self because it requires presenting oneself for and before the filmic apparatus.

Actually, of a screened behaviour item which is neatly brought out in a certain situation, like a muscle of a body, it is difficult to say which is more fascinating, its artistic value or its value for science. To demonstrate the identity of the artistic and scientific uses of photography which heretofore usually were separated will be one of the revolutionary functions of the film.[4]

'Even if one has a general knowledge of the way people walk, one knows nothing of a person's posture during the fractional second of a stride,'[5] Benjamin writes. Film however provides a new kind of access to the body and its movements: familiar gestures, movements, and expressions can be presented for a renewed attention. For Benjamin, such forms of renewed attention can entail both a resensitization of the spectator's body and a refiguring of the imaged body, which is not only available to new forms of visibility but renders visible new spatial and temporal configurations.



Vivarium

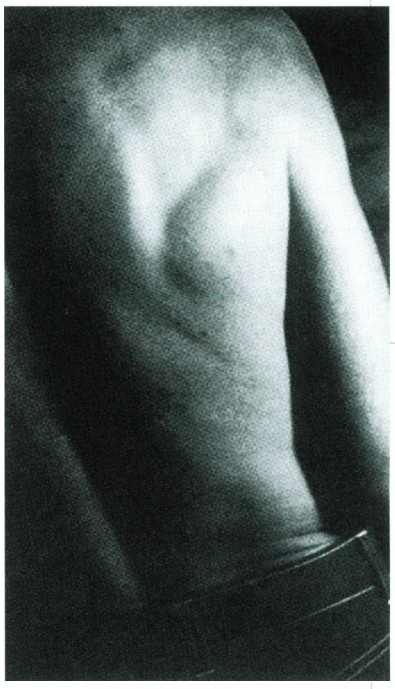
Vivarium and *Resonance* revolve around a fascination with the body and its gestures, and both films draw our attention to movements, poses and gestures of the body as sites of meaning and/or affect. These two films share much in common – a working with dance, gesture, and the capacities and parameters of the filmic body. Both films relinquish dialogue in favour of movement, and both films use the filmic apparatus as a way of refiguring the body and its relations to space. In these two films, filmic performance is by no means simply the documentation of a dance or performance piece but is produced, rather, through a dynamic working with the pro-filmic, the latter being re-staged through the filmic processes of framing, editing, and optical printing. Both films can also be seen as working with ideas of shock and the body. *Resonance* – the more narrative based film – revolves around a gay bashing, charting the gestures of the attack and the interpretations of those gestures across a number of characters and bodies. In *Vivarium* shock seems to structure the body itself and its negotiation of the spaces it finds itself in.

Despite the common ground the two films share, each of these films offers a different proposal of the filmic body. In *Resonance* attitudes and gestures of the body serve to connect spaces, characters, stories. Speech is suppressed in favour of a dialogue between and potency of gestures and experessions. The film moves from a heaviness of the body and its gestures towards lightness. In a quite literal sense we move from the heaviness and darkness of the back street in the initial gay

dance films; *Vivarium*, *Hybrid* and *Premonitions* (Sue-ellen Kohler and Mahalya Middlemist), *Horizon*, (Eva Karczag and

bashing sequence to the open and light rooftop of the final dance sequence. At the same time we move from the heaviness of gestures overladen with meaning (the fist which clenches despite itself for instance) to the "re-phrasing" of these gestures as lightness. By the close of the film we end up with a form of dance reminiscent of Fred Astaire's seemingly unbound-by-gravity dance sequences. In a passage on the compatability of modern dance with cinema, Godard has provided an apt description of the movement of *Resonance* toward this lightness: *Rather than a goal, repose in the cinema is on the contrary a starting point for movement. And this is even more true in the musical, which is in no way the idealization of cinema. A balustrade is no longer something to lean on but an obstacle to clear, a chair no longer something to sit on but a site for a delicate balancing act: everything becomes simply a pretext for the 'lines which displace movement'.*[6]

The dominant sentiment of this film could be seen as belonging to the figure of the lover. We find this in the ways the central male bodies are framed and offered forth as if to the attentive scrutiny of an amorous subject, and also in the ways that the soundtrack and written text seem to pierce the image. I'm most interested in the first of these – the framing of bodies and gestures. It is here that we find an approach to cinema which we could call 'physiognomic.'



Resonance

The Hungarian film theorist Béla Balázs is perhaps most readily associated with a physiognomic conception of the film image. Film, for Balázs, is the first medium which has the capacity to 'give visual shape to a physiognomic quality in human beings, in animate and inanimate nature.'[7] Conceiving of film as offering a language of facial expression and physical gestures, for Balázs the 'ideal language film promises to restore is a language of immediate expression, projecting a visible integrity of body and soul.'[8] In Balázs's proposals of the physiognomic and microphysiognomic aspects of the close up for instance, he argued that the film image could reveal expressions and meaning which could not be expressed in written or spoken language.[9] Moreover he argued that the capacity to 'read' these physiognomies would become more sophisticated through film and image literacy to the point where people could read the slightest nuances of meaning in an expression. *Resonance* approaches such a physiognomic cinema in its relation to gesture: in this film, gestures are offered forth for scrutiny and unravelling – they are as potent with meaning as a love object's expressions are for the lover.

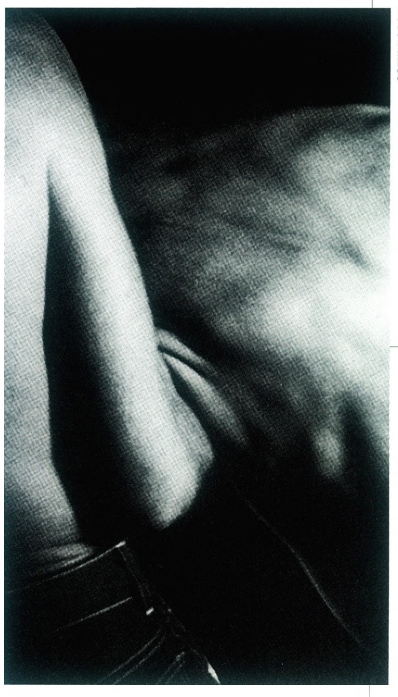
In *Vivarium* on the other hand the filmic body does not offer its gestures up for scrutiny in this way. This body is, rather, in constant production, and it is constantly being recharted by the space that it charts and with which it struggles. Likewise the dimensionality of the space is constantly put in question by this struggle.

Sue-ellen Kohler is both performer and choreographer in this film (based largely around her remarkable performance piece *Hybrid*), and the film is a collaborative project between

Brannigan continued

Michelle Mahrer), and *Behaviour* (Shelley Lasica and Margie Medlin). It could also be an (unconscious) attempt to revisit

Middlemist and Kohler. *Vivarium* works with Kohler's performance in a dynamic way, the lighting and optical printing producing the filmic body as a constantly changing surface. The filmic body here is similar to a mobius strip – it is as if it has no distinguishable inside or outside, front or back. The body here operates like a constantly unfolding sensory surface, and this surface is charged, constantly swallowing itself up. It is a sort of thick desiring surface constantly turning in and around itself, stretched and taut. This filmic body – which tends to be either seen in long shot as a graphic figure precariously clambering across an undefined space, or in close and mid shot as a writhing, struggling muscle – strains to make sense of this space, fighting its points of resistance. What I find most fascinating about this film is the relation between the figure's skin and muscle – it is as if they can be (and sometimes appear as if they have been) peeled apart. There is an image that I came across soon after having seen *Vivarium* which seemed to compliment the film well. The image, which was reproduced in Bashir Baraki's *Book of Pleasure* (in his installation for the exhibition *You Are Here* which was part of the 1993 Gay and Lesbian Mardi Gras) is from Juan se Valverde's *Anatomia del Corpo Umano* (1560). The image is of a skinless male figure, standing holding his own skin in his hand so that it hangs limp and empty like a deflated balloon. His facial features are collapsed and distorted on the skin. The caption under the image reads: 'Classical figure, having flayed himself, displays both his skin and surface musculature.' This body, which holds its protective surface at a distance, is charged, alive. There is no interior to this body, simply the peeling back of a surface which uncovers but another surface, that of the nerves and muscles.



Resonance

With *Vivarium* too the adjective that comes to mind is 'flayed' – less simply a flayed body than a flayed, raw image. It is not just the performing body here which seems to have this relationship between skin and muscle – this tension is also taking place between the figure and the image itself, as if the body is straining to pull itself loose from the space around it.

'In the cinema, a society that has lost its gestures seeks to reappropriate that which it has lost while simultaneously recording that loss.' [10] Each of these films locates the body and its gestures as a site of remembering and forgetting, and both films can be seen as working with ideas of the numbing effects of sensory bombardment. *Resonance* works against this numbing both at a narrative level through a sort of re-sensitizing of the body (of a character), and also in the ways that these bodies and gestures are proffered for the scrutiny of the spectator. In this film we could say that the body and its gestures are infused with drama, and the film's recharting of these gestures is the means by which it unfolds the gesture as story. *Vivarium* on the other hand offers a body as a highly charged sensory surface, struggling with and inextricably linked to the space which binds it – the body here is written through by ideas of technology and dislocating sensation and experience.

the 'unity of time' of the original dance performance.

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NOTES

1 The paper appears here in its original form. I would like to thank the Performance Space for allowing the paper to be published.

2 Walter Benjamin, 'Franz Kafka: On the Tenth Anniversary of His Death', *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn (Suffolk: Fontana/Collins, 1982), p.137.

3 Peter Osborne, 'Small-scale Victories, Large-scale Defeats: Walter Benjamin's Politics of Time', *Walter Benjamin's Philosophy: Destruction and Experience*, eds. Andrew Benjamin and Peter Osborne (London and New York: Routledge, 1994) p.83.

4 Walter Benjamin, 'The Work of Art in the Age of mechanical Reproduction,' *Illuminations*, ed. Hannah Arendt. p.238

5 ibid, p.239.

6 Jean-Luc Godard, *Godard on Godard*, translation and commentary by Tom Milne (London: Secker and Warburg, 1972), p.87.

7 Gertrud Koch, 'Béla Balázs: The Physiognomy of Things,' *New German Critique* 40 (Winter 1987), pp. 167–177, p.168.

8 Miriam Hansen, *Babel and Babylon: Spectatorship in American Silent Film* (Cambridge, Mass. and London: Harvard University Press, 1991), p.188.

9 See Béla Balázs, *Theory of the Film: Character and Growth of a New Art*, trans. Edith Bone (New York, Dover, 1970).

10 Giorgio Agamben, 'Notes on Gesture,' *Infancy and History: Essays on the Destruction of Experience*, trans. Liz Heron (New York and London: Verso, 1993) p.137.

CREDITS

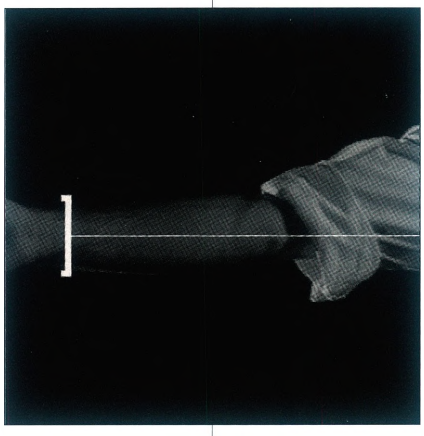
Vivarium A film by Mahalya Middlemist. Performance and choreography by Sue-ellen Kohler, based on the solo dance performance *Hybrid – turning the body inside-out*. Produced with the assistance of The Australian Film Commission and The New South Wales Film and Television Office. © Mahalya Middleist 1993. Available on 16mm. from Mahalya Middlemist (02) 9660 5815.

Resonance A film by Stephen Cummins and Simon Hunt. Still photography by Toula Anastas. Produced with the assistance of The Australian Film Commission. © Resonance Productions. Available on 35mm. Ronin Films (02) 6248 0851.

Brannigan continued

III

The Bergsonian science of the cinematic – cinema as utility – is



Susan Kozel

THE CARBON UNIT IN THE SILICON DOMAIN

Dance is no longer the still point of the turning world. And this is good. As the art world – from music to visual arts to architecture – increasingly turns to new digital technologies, the physical arts are not being left behind.

Dancers are exploring the interplay between movement and digital image manipulation technologies. The hardware and software are more accessible, funding bodies are recognising the need to support this type of experimentation, and digital artists are becoming more collaboratively minded. The choreography to emerge is increasingly sophisticated. Yet, the theoretical paradigms and concepts that we draw upon to understand and complement choreography in a technological environment are lagging behind. In effect, what we need is a new poetics that can account for the alchemy between the immateriality of the digital image and the materiality of our dancing bodies.[1]

The strange world of vision and movement conjured up by Maurice Merleau-Ponty in his later work is a wonderful starting point. Despite being one of the French phenomenologists

1 This article is a continuation of my research into dance and new technology, which has taken the form of both theory and practice. See Kozel 1994a, 1994b, 1995a, 1995b.

evidenced in the history of the dance/film relationship and the dominance of the imperatives of documentation. This involves

to transform Edmund Husserl's transcendental phenomenology into an existential phenomenology, he never gained the global attention directed to Jean-Paul Sartre. He died abruptly in 1961, and for over 30 years scholars have struggled with the ontological, existential and ethical significance of his major, unfinished piece: *The Visible and the Invisible* (1964). Now dancers working with image reproduction, manipulation and projection facilities are in a position to uncover powerful new interpretations of Merleau-Ponty's ideas, and to ground his philosophical thought in the experience of bodies moving through space - virtual space as well as physical space.

In this article I introduce some of the intriguing concepts found in Merleau-Ponty's *The Visible and the Visible* and *Eye and Mind* (1961). I weave the philosophical ideas together with a description of two performances that employ multi-media technology: *Stampede* by Blast Theory, and *After the Last Sky* by Rosemary Butcher. Why call this a poetics? When first confronted by Aristotle's *Poetics* I was taken aback by how mechanical it is. I anticipated poetic prose, but was confronted by a lexicon of terms and practices, a 'how to' manual for writing and criticism. How dull, I thought. Now I find myself uniting two seemingly disparate fields, French phenomenology and dance that involves 'new' (or digital) technologies, and I am intuitively drawn to lay a foundation for this research by first explaining several of Merleau-Ponty's concepts and then describing their significance. In effect, I see the need for constructing an aesthetic vocabulary based on a highly imaginative account of the lived experience of an artform: a poetics based on phenomenology. A phenomenological poetics.

I deliberately avoid discussing the basic components of phenomenology such as the reduction and intentionality.[2] Instead, I start by offering the idea that phenomenology is a description of lived experience which overcomes the mind-body divide by accepting that experience is an entwinement between intellect and senses. The ideas from Merleau-Ponty's writing to be touched upon (or danced through) are: reversibility, formlessness, and disequilibrium.

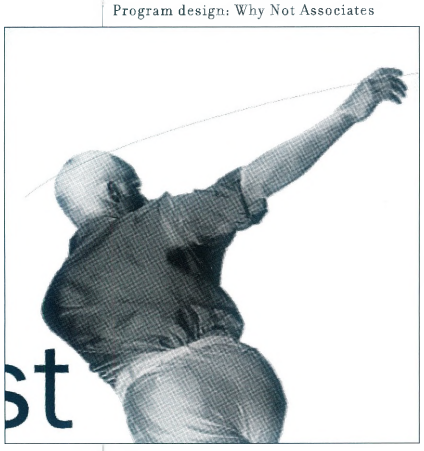
2 For a useful introduction I recommend the first chapter of Sondra Fraleigh's *Dance and the Lived Body: a Descriptive Aesthetics* (1987), a thought-provoking phenomenology of dance based on a zen experience of movement and spirituality; an earlier, and very different, account is provided by Maxine Sheets-Johnstone in her *Phenomenology of Dance* (1966). This article draws upon and expands my Ph.D. thesis which is a phenomenology of dance based on the thought of Maurice Merleau-Ponty called *As Vision becomes Gesture* (1993).

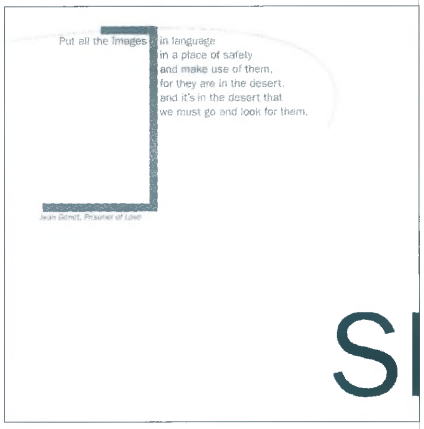
Brannigan continued

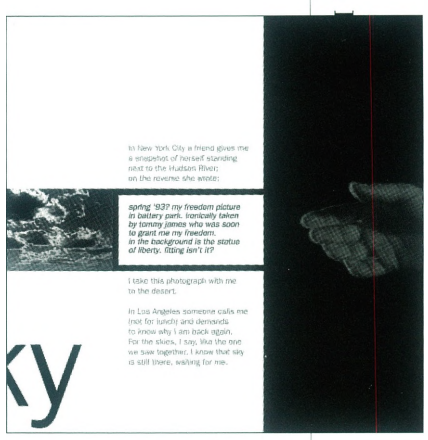
the notion of dance performance as a 'pro-filmic event',[6] an event presented to, and independent of, the camera. Film as

6 Peter Wollen, 'The Two Avant-Gardes', *Readings and Writings*, London NLB, 1982, p.97

Image at article opening and images below:
Pages from the program for *After the Last Sky* (1995)
by Rosemary Butcher, David Jackson and Simon Fisher.
Program design: Why Not Associates







'Where should we go after the last frontiers – Where should the birds fly after the last sky?': *After the Last Sky* (1995) was a collaborative project combining recorded movement in projection with a specially commissioned sound environment. Choreography was by Rosemary Butcher, video by David Jackson and sound by Simon Fisher Turner. Shown in a darkened, square gallery space, it consisted of large video projections on all four walls, suggestive of the four points of orientation of a compass rather than confinement. The dancers were projections; the visitors were bodies in the space, sitting, standing, walking, watching, interrupting each other's sight lines. It was an exploration of time, space, and frontiers: images of the vast organic space of the desert were layered with the geometry of moving bodies and entwined with the space of language and memory. The sound was recorded in Israel the year before. Movement was ordinary or pedestrian emphasising repetition and the observation of controlled detail. The images of the dancing bodies were generally life sized and full body, but through layering of visual and audio technology they spoke of dislocation and fragmentation. The physicality of the dancers was subsumed by the vastness of the desert environment portrayed, yet the essence of this environment was somehow released by the moving bodies.

dance documentation can also be traced to the transitory nature of dance, a characteristic which influences almost every aspect

Stampede (1994–95) was an on-going project by Blast Theory. It was an exploration of crowd behaviour, the dynamic of riot and anarchy. The performance space was a large darkened room where the audience milled around the performers, inadvertently setting off sensors triggering images or sound that the performers had to integrate into the controlled anarchy that was their 'choreography.' Physicality was taken from the extremes of exhaustion (spinning around on harnesses, climbing over walls) to the intimacy of motionless, confessional monologues. Visual, spatial and aural disorientation became an aesthetic tool for the communication of personal and political material. The movement of the audience merged with that of the performers and the projections in an uneasy harmony, even some structural components of the set were shifted or transformed into other shapes. The space was alive and mutating by means of a range of technologies, from the simple to the sophisticated.

The challenge facing a philosophical approach to dance performances such as these is being able to account for the juxtaposition of opposites, the blurring of aesthetic and physical boundaries.

above and right:
Stampede (1994–95) by Blast Theory

Brannigan continued

of the art form. Ironically, while dance is innately ephemeral, it is the art form most

one: reversibility: the seeing-seen, touching-touched, dancing-danced

Reversibility is a philosophical notion to emerge from Merleau-Ponty's realisation that my body simultaneously sees and is seen, touches and is touched. This phenomenon is conveyed by the expressions 'the seeing-seen,' and the 'touching-touched.' Reversibility is a lived dynamic, not a category of thought. I see objects, yet I also see my body alongside objects: this is the experience behind the seeing-seen. My body is an object that loops back upon itself through the capacities of sight and touch. The reversibility of touch, or touching-touched, is a poignant way to illustrate the rapport between my body and the world. Merleau-Ponty writes that there are three experiences of the touch: an active touching of the sleek and the rough textures of the outside world, a passive sentiment of the body and of its space by which I feel things touching me, and a touching of touch. This latter is the *touching-touch, and is epitomised by one hand touching the other: with one hand I touch the other but am in turn touched by it in a continuous sequence of encroachment and reversal. This conveys the truth of my rapport with the world such that the first two experiences of touch, the passive and the active, are moments entwined together.* When the touching subject is touched, either by itself or by objects, it *passes over into the rank of the touched, descends into the things, such that the touch is formed in the midst of the world and as it were in the things.*[3]

3 Merleau-Ponty (1964, 134).

The first implication of recognising that our bodies are seeing-seen, touching-touched is to prevent us from conceiving of vision as an operation of thought that turns the world into a picture or representation. This philosophical approach rejects the idea that art is a mere imitation of reality, and also rejects the idea that vision produces an imitation of the external world for the benefit of the mind. As such it is a suitable starting point for looking at the use of image projection in choreography, since the engagement between images of bodies and 'real' bodies cannot be accounted for as art imitating life, nor can it be seen as prioritising vision or images at the expense of physicality. Merleau-Ponty's understanding of the reversible body does not privilege consciousness over physicality, or the mind over the body. Reversibility acknowledges the far reaching implications of embodied vision.

Physical movement is essential to his understanding of how we engage with and respond to the world we live in: our bodies move around in a space inhabited by people and objects, our vision interacts with the 'radiation' and 'vibration' of colour and form around us. The dancing body intensifies his idea of reversibility by being

fundamentally tied to our corporeal existence.
It is 'unmediated' and in being so, leaves no visible trace.

an active exploration of the region where the subjective control over the body is at its limit. In this sense the dancer dances, and is danced by the force which she sets in motion. Whether or not the space of dance is technologically enhanced, the experience can be called the dancing-danced. This expression is not Merleau-Ponty's for he never mentions dance, rather it is my extension of his seeing-seen and touching-touched.

The dancing-danced is a reversibility that unfolds through movement in space and time. A dancer exerts strong subjective control over her limbs by virtue of the physical effort which is necessary to set her limbs in motion, but the momentum of any dance move is a created force which in turn animates the body in movement. Space becomes tangible, sometimes assisting with the lift of a leg, sometimes resisting as though it were a leaden substance. The dancer controls her body but also allows it the freedom to explore the space according to its own desires, as if conscious subjectivity continually leaves and returns while the body carves its shapes in space and plays with time and rhythm. Instead of reinforcing a divide between mind and body, they become entwined sharing a passive-active role in movement.

This passivity-activity is another way of describing interactivity, a term that is fundamental to so much experimentation with new technology. When we interact with computers, whether by using a mouse or by triggering sensors through touch or breaking a light beam, we engage in an interaction where we control and respond in equal measure. The control the dancers in *Stampede* exerted over their movement was challenged by technological diversions caused by themselves or the audience. This has philosophical implications regarding subjectivity and the linearity of time or narrative. Merleau-Ponty destabilises subjectivity not by claiming that we are schizophrenic or intellectually fragmented, but by simply describing how we are made up of an interaction between what is inside and what is outside of us: *not to see in the outside, as the others see it, the contour of a body one inhabits, but especially to be seen by the outside, to exist within it, to emigrate into it, to be seduced, captivated, alienated by the phantom, so that the seer and the visible reciprocate one another and we no longer know which sees and which is seen.*[4]

4 ibid, 139.

According to the dancing-danced relation derived from Merleau-Ponty's thought, time has an ambiguous quality. Like space, it is both within and beyond the control of the dancer. The temporality of a dance itself, even in a non-technological environment, is ever changing and flexible: circularity of time is explored through repeated sequences, and the ease with which rhythms are varied shows how arbitrary the second by second metering of time really is. One single

Brannigan continued

IV

The movement of the frames is doubled by the moving figure.

movement can be slowed, or quickened, it can be extended in its middle with the end performed rapidly, or drawn out indefinitely through the imposition of moments of stillness within the dynamic sequence. Even while dancing, time is not fully controlled, the dancer may intend to draw out a certain sequence, but often the body's own momentum and balance dictates otherwise, as if it were determined by the temporality of the dance that emerges, as if it were shaped by the space that thickens to slow the dancer or becomes even more liquid to let the movement get ahead of itself.

Reversibility describes a state of being that is greater than the sum of its parts, yet it is fundamentally incomplete. For Merleau-Ponty the essence of reversibility is a chiasm. To illustrate this he cites the example of two mirrors, a poetic image to describe how the 'turning back upon itself' involved in vision and touch forms a rapport that rests neither in the body which sees or touches, nor in the world that is seen or touched, but in the space created between the two. This space between opposing poles, such as the object and the subject or the body and the mind, is the truth of the chiasm. The indefinite series of images which arise when two mirrors are placed opposite each other belong to neither of the surfaces, since each is only a response to the other. Yet it is in their rapport which Merleau-Ponty detects a couple which is 'more real' than each of its constituent parts. If the space of *After the Last Sky*, with its projections on four walls, is understood as two sets of facing mirrors then it seems even more alive, the passivity of film viewing is supplanted by the active entwinement between images and viewers.

This gives us a model for understanding the effect of integrating digital image reproduction and manipulation into dance. Technology and bodies respond to each other like the mirrors, and create an infinitely mutable space between them. What emerges is greater than the sum of its parts; physically and intellectually we are drawn into an open ended experience. One of the most unique features of a highly technologised performance space is that the borders of the physical body are blurred, that what is physical and what is non-physical meld and swirl together, making the space outside the body somehow more corporeal, and the inner space of the dancing body somehow less self-contained. Merleau-Ponty had a sense of the power of visual distortion based on his fascination with Cézanne's view of the world. For him, disorientation of the senses, with physical as well as visual implications, generates philosophical insight into how we live in the world, how we conceive of our own subjectivity and how we engage with others. We can read the same into collaboration between dance and new technology.

Dance film is a hyperbolical expression of human motion. The privileging of the dancing figure in the dance film is like Tom

TWO: Formlessness

Paul Valéry came to the conclusion that a person's body simultaneously belongs to, and escapes them: *[My body] is formless, so much mine and yet so mysteriously and sometimes – always, in the end – our most redoubtable antagonist, is the most urgent, the most constant and the most variable thing imaginable: for it carries within it all constancy and all variation.* [5]

5 Valéry (1924, 36).

Formlessness is present in the release of form, the inability to ask the question 'where?' and receive a spatial point as an answer; or to ask 'what shape?' an obtain a fixed image. Formlessness is not nothingness, but the active dissolution of form. Merleau-Ponty captures the essence of this when he claims that in Cézanne's late water colours the question 'where?' is not to be asked, because in them space 'radiates around planes that cannot be assigned to any place at all.' They consist of 'a superimposing of transparent surfaces,' 'a flowing movement of planes of color which overlap, which advance and retreat.' Once again the prose that he uses to describe his encounter with Cézanne's paintings is striking for being applicable to the experience of moving bodies in the type of space generated by dancers using digital image projection, Blast Theory and Rosemary Butcher among others.

The strange powers he attributes to colour apply even more strongly to projected images, particularly once they have been digitally worked on to some degree. Colour, he writes, is the dimension that 'creates identities, differences, a texture, a materiality, a something (un quelque chose)..'.[6] The 'something' is particularly significant for being a gesture towards categories of thought and physical experiences that are new, and as of yet undefinable. By means of a disorientating visual and audio environment, Blast Theory question the border between the private body and the public body, suggesting that materiality and identity are entwined. The disorder of vision and sensation shatters physical borders, as well as theatrical and political categories, only to let them resettle, transformed. Formlessness is an aesthetic tool, it interspaces and animates form.

6 Merleau-Ponty (1961, 181).

Above I said that dance, even in a non-technological context is characterised by reversibility, the same applies here: all dance is a constant challenge to form, a dissolution and a redevelopment of form. Since it exists in a constant state of transgression and restoration of shape, it cannot ascribe to a fixed philosophical notion of form, or to a fixed point in space. Dance therefore destabilises our experience of form: bodily shape gives way to bodily shape in an experience that is powerful through its unequivocal physicality as a concrete event in the 'now' of

Brannigan continued

Gunning's 'act of display' in his 'cinema of attractions'[7] – a term he uses to describe an aesthetic and form of spectatorship

7 Tom Gunning, 'An Aesthetic of Astonishment. Early film and the (in)credulous Spectator.' *Art & Text* #34 Spring 1989 p.36

experience, while at the same time being amorphous and unsustainable. Although a dancer who is utterly still can be located in time and space, she continues to play with formlessness, drawing the audience into seeing the movement through the stillness, calling attention to the relative insignificance of the 'where,' the 'when' and the 'what shape.'

So what happens when the dancer engages with, not just other dancers, but images of herself and others? Does she confront ghosts, or extensions of her own precarious physicality? The body of a dancer does not just engage with formlessness through movement and exaggerated formlessness through technology, but confronts it in a basic way in her own body. What is at stake is the transgression and the restoration of the limits of physicality.

Just as we must be wary of reducing virtual reality to immateriality, we must guard against implicitly equating formlessness in dance with a sort of blissful transcendence on the part of the dancer. A dancer's body is prone to injury or illness, at which point it enters into another entwinement with formlessness: that of the disintegration of that tenuous form which is the healthy body. Every dancer is intimately aware that her body atrophies, that it tires, that it is easily injured. Then there is pain, that everpresent substratum of a dancer's life, that uncontrollable and invasive force which affects one's vision and movement. Pain made all the more unbearable because it foreshadows the cessation of dance, and because it is the result of dance.

Formlessness as a philosophical concept applies to the full range of the experience of dance: from the carbon to the silicon. The carbon experience of form and formlessness involves coping with the limitations of our bodies, to feeling the exhilaration of carving a dynamic path through space; the silicon is introduced once we move with or through computer generated and projected images.

THREE: DISEQUILIBRIUM

When Merleau-Ponty considers the function of line in painting he decides that it is no longer a thing or an imitation of a thing: 'it is a certain disequilibrium.' Matisse's lines are more than anatomical, they are 'the axes of a corporeal system of activity and passivity,' while Klee saw how a filigree of tangled lines is 'the generating axis of a man.'[7] How far, I wonder, is a filigree of tangled lines from a mess of entwined electrical cables?

Once again, Merleau Ponty's phenomenological description of his experience of painting lends insight to moving bodies in technologically enhanced environments. He unites

7 ibid, 183–4.

in the early cinema; "Rather than being an involvement with narrative action or empathy with character psychology, the

two intriguing ideas: that line captures the instability of a living being suspended in time, between a before and an after; and that this instability arises by capturing a body in an anatomically impossible position. He cites Géricault's horses and Rodin's sculptures as examples of how positions that are impossible for a real horse or real person to sustain give a painting or a sculpture the necessary dynamic tension. It is their internal discordance that introduces time and movement into them. Géricault's painting, for example, *makes movement visible by its internal discordance. Each member's position, precisely by virtue of its incompatibility with the others' (according to the body's logic), is otherwise dated or is not 'in time' with the others; and since all of them remain visibly within the unity of a body, it is the body which comes to bestride time.*[8]

8 ibid. 185.

This relates strongly to the body altering capabilities of technology, those that challenge a 'body's logic.' Not far from any discussion of digital technology is the idea of real bodies merging with computers and becoming cyborgs, that is to say part machine and part natural organism.[9] We instinctually recoil at the thought of our bodies being contaminated by any physically distorting apparatus, until we realize that becoming a cyborg need be no more life threatening than a dependence on the telephone or a word processor, and as life preserving as having a pacemaker – to say nothing of the cyborg implications around plastic surgery and silicon breast implants. Operating contrary to the body's 'natural' logic in an aesthetic context introduces a disequilibrium that, according to Merleau-Ponty, draws us in to a work of art and makes it more powerful.

9 See Haraway (1985) for "A Manifesto for Cyborgs."

When I first began to consider Merleau-Ponty's ideas I was suspicious of transcending the logic of the body, concerned that this removed the discussion from a physical realm and made it less useful for dance. But now, after thinking and working with new technology, I am not suspicious of moving beyond the logic of the body in a narrow sense. Just because images of dancers can fly, rotate, change size and mutate into anything else does not mean that the physical integrity of a dancer is violated; for what emerges is another logic, one that doesn't have to be non-physical. I have come to understand virtual reality as a sort of expanded materiality, and I now see the logic of bodies in technologically enhanced environments as an extended or augmented physicality. The body is not lost, it engages more actively with the formlessness of space and disequilibrium through time.

Choreographic experimentation with new technology is an area in need of aesthetic understanding. The strength of addressing new work from the phenomenological perspective of a viewer, dancer or choreographer is that we develop tools of thought

Brannigan continued

cinema of attractions solicits a highly conscious awareness of the film image engaging the viewers' curiosity."[8] Deleuze links

8 Idem

simultaneously to our movement awareness. The 'tools' I am in the process of developing are inspired by Merleau-Ponty, but not confined to his usage of them. The ideas of reversibility, formlessness and disequilibrium have a wide range of implications from questions of subjectivity to materiality; fluidity of movement to physical limitations; the transformation of space and time to the political function of the work. An awareness of the broad range of aesthetic and physical issues that makes up a performance involving dance and new technology will help us to develop sophisticated choreographic and critical use of the rich resources that are opening up.

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this effect directly to dance when he refers to dance within the musical as the 'spectacle' within the 'spectacular'.[9]

9 Deleuze, *Cinema 2*. p.62

Trevor Patrick
interviewed by
Sally Gardner

making microdance

Trevor Patrick was one of four choreographers to make a six-minute dance video, *Nine Cauldrons*, for Microdance, an initiative of the Australian Film Commission and the Australia Council, undertaken with the assistance of the Australian Broadcasting Corporation.

As a result of a three-stage selection process Patrick was invited to go into full production (see crew list at the end of the interview) to make one of four 'dance-on-screen programs' to be 'broadcast as a package in a half-hour time slot by the ABC'. Patrick talks here about his encounter with the machinery and the collaborative processes of Microdance.

Brannigan continued

V

Film, in its utilitarian aspect, has had to 'make sense' of dance,

Stills from the video *Nine Cauldrons* (1996–97)
by Trevor Patrick

Sally Gardner You said that at one time you thought you'd never have anything to do with technology …

Trevor Patrick **I wasn't interested. Possibly it was that I didn't know how to do it. So I just didn't want to engage with it, because I knew it would take such a lot of energy. But the whole Microdance process was so predetermined that I didn't have time to even think about it. I was coming from a background where you work on something and it doesn't really materialise completely until the moment you perform it, and possibly it doesn't materialise until the end of the time that you performed it. The process of performing changes it. Well, the difference in working with this film was that I had to know exactly what it was before I'd even begun working on it. Even to apply for funding to assist with the making of it, I had to be very clear about what every part of it was, and how much it would cost, and how long it was, what it involved, what the images were. It seemed bizarre to me to be deciding that. There was a very rigorous process of evaluation going on from the source of the money. It was as if long ago someone was given a very large amount of money and they pissed off with it to the south of France and were never heard of or seen again. And since**

demanding that it be answerable to time, budget, story-boarding, framing, lighting… Dance has been captured on

then the funding people have determined that it will never happen again. So everything is signed in triplicate and all rights are signed away. To me it is a very foreign notion of artistry. It is as though the artist's expertise or their creative process is bought for quite another process.

You're saying that usually you don't actually know what something is going to be, and in this instance you were supposed to already know.

In the other dance funding situation if I've had an idea of what I wanted to work on I'd then apply for the money to help me develop that idea. I was only able to be involved in this Microdance Project because I already had an idea developed to some extent and was therefore able to just transfer it across. I'd been working on a performance concept as part of my Master's degree at Footscray. When Microdance came up I saw it as an opportunity to develop those ideas further. I just transferred them across. I suppose I had an ulterior motive. I felt that I could further my work at Footscray if I shifted it sideways out of the academic environment and worked on it and then, having developed it, shifted it back. And I felt like I could make a good film out of these ideas, if I took the work I'd already made at Footscray – or the ideas that I'd already been working on – and developed them for film. So it was a play-off of the two.

Do you think you made the film that you thought you could make? Or did it end up being something different?

It became homogenised by the processes that I had to work with in order to make it. For instance, almost immediately I'd begun the process of honing down the ideas and pinning myself down to lengths of time and images, I realised the potential there to make another piece or any number of different pieces.

As films?

As films. (I keep saying 'film' but what we made was a video.) But I couldn't do that. I had to stick with the one we said we would make. And that was an interesting challenge, because in the normal course of events I would have just changed things and I would still have been able to change things up to the point of performance, or even during performance. But a matter of months away from shooting I had to settle on something that would be achieved.

You said that for the purposes of this process your idea had to be thought through in terms of images. Did you look through the camera

Brannigan continued

celluloid and tamed. Film gives dance longevity but makes it determinable. (How did she do that? Now we can know.) The

to see what you wanted? Because thinking in terms of images is one thing, looking through a camera is another, isn't it? You were the director and the performer, did you decide on the shots?

I was working with Paul Hampton. Paul was the outside eye and... we each directed it. I went through the sequences of movement for Paul and then *with* him. I showed him what the movement was. Then I talked through what was involved in the moving from an energetic point of view. I talked him through what I was thinking as I was doing it, what it was, what I felt as I was doing it. And we kept going through this process consistently for a while as a way for him to understand what I was looking for – for him to understand my point of view, I guess. And he'd give me feedback too.

How did that translate into what the camera sees?

I scripted what the movement was. I wrote it down. I broke the phrases up into smaller clumps of movement. And I gave them a name and I talked and I wrote briefly what I felt in doing them – what was involved for me physically in doing the movement.

Where the focus was or the intensity or something like that?

Yes. And from doing that it became clear to us what sorts of shots would be necessary in order to make the most of seeing that movement as I felt it, and seeing where my focus was in doing the movement – and where the focus was that we wanted an audience to experience. So I graphed the movement – the energy that was involved in the movement – so that there was some visual way that we could all see the energy levels – where the energy was pitched over the period of the time that the film would last.

How was the camera choreographed in relation to the energy of the phrase?

Well, from my drawings and descriptions we worked out what we wanted the camera to see and we hired a video camera and Paul shot the movement phrases from different angles. We later watched the material at length and talked a lot about the intent and meaning of various ways of filming the piece, and from there we arrived at a final shot list collaboratively. In my writing I describe the camera's eye as a seeing eye. I wanted the seeing eye to see particular things, and to understand something about... a figure's engagement with energy.

live performance seems to haunt the dance film more than the drama based film. The immediately physical nature of dance is

What about the camera-person? Did they need to be someone who was sensitive to this?

Laszlo Baranyai was our Director of Photography – DOP. And I didn't know Laszlo, but I talked to Paul about what was needed, the sorts of things that I wanted – and he suggested Laszlo. He had worked with Laszlo before. He recommended him.

So Paul was a kind of proxy director?

We directed in consultation with each other.

You were saying, too, that the Producer seemed schooled, if you like, to take almost a directorial role. Or expected to have that kind of input.

Well, initially I thought a Producer was an administrator. I thought a Producer was purely and simply someone who administered the money and that their job was to help realise the vision of the maker... of the originator of the idea... See, I even had to balk at saying 'maker' because the 'team' – the team as they call it – is integral to the film-making process. They would say 'We made this film'. It no longer becomes the work of the dance-maker. Not that it ever was in the film industry. Certainly in their normal run of the mill experience of making a film the choreographer is someone who just comes in and puts some moves together and then leaves. They're certainly not the person whose baby it is. So, my expectation of a Producer was and is that they would just facilitate the easy development of 'the concept'. But really nowadays Producers are also Directors. Not necessarily Directors, but they often are Directors, and they're also often Writers. And so they have a supposed artistic interest. Next time I'll be very clear about what my expectations are of a Producer. I was lucky. Our Producer was Liz Burke and generally she was very good. There were just a couple of sticky moments where there was some confusion about our roles. I think that just happened initially while sorting our positions out. And you know, Paul is known as a Director and he thinks of himself as a Director and he's a good one, but in our working relationship in the past ...when he performed in my work...

You in effect directed him.

Yes.

So he was prepared to learn something from being in a different situation.

Brannigan continued

one of its defining forces. Film effects a scientific revelation of this spectre, an undoing of the uncanny. Could my anxiety

Yes. And I was happy to use any feedback I got from him to make decisions about the work, and we made decisions together, but it is funny, I feel a bit hesitant – like I'm stepping on uneven or shaky ground by questioning the titles that people assume for themselves in that industry..

Did the Director of Photography have a compatible view of what his role was?

Yes. He was great. He was very open. Still, when we showed him the video, when he saw the final product, he was surprised. He didn't really know that's what he was shooting. In fact it wasn't as he had imagined. So I guess his role within that wider framework was really quite specialised and fine.

What was his contribution then?

It was his sensibility really, his sensitivity to the problems that he was set. You know, if we said we want this shot, we want a shot that does this, then the ball was in his court to make that happen.

So was he party to the energetic graph, and engaged with that?

Yes. I think that was interesting for him but I don't think it was really necessary.

I think the descriptions were more helpful to him. I don't know this for sure but I described roughly what the feeling was about each scene so when he shot it he was aware of … I think of words like 'mood' or 'feeling' … I guess those words would do.

You mentioned 'story-boarding'.

It's visualising on paper what you want to be seen, so breaking up, say, a narrative or story into blocks of action or scenes, with significant moments that you want particularly to be seen. It's like a map that leads you through the whole work. And the good thing about them is that you get a clear idea how much action is involved because you can just see at a glance, for example, if nothing is happening for a long time. And you may choose to take some action to remedy that. If you see that as a problem. And often it is in terms of film.

Yes. The sense of time changes quite a lot.

Yes. Well I guess there are similar values to performance. You know when something needs to happen and you may choose to ignore that as a way of saying something else. But you may just as well go with it and actually make something

about this be related to Christian Metz's 'anxious' audiences of the early cinema,[10] my own readjustment, this time to a new

10 Christian Metz quoted by Tom Gunning, 'Terror in the Aisles', *Art & Text* #34, Spring 1989, p.32

happen because the length of time has been enough. Any longer, a moment longer, and it will be too long. Or too short. That need to balance the types of shots became clearest most to me in the editing process. Paul and I would go into the editing suite having sat down and watched all of the shots and listed which ones we liked, which were the best shots and for what reasons.

Did you watch them in sequence or just watch them as 'rushes'.

We just watched them as they were shot which may not have been in any particular order. I think we shot according to gender. The 'frocked' characters were first off the rank.

So you just chose in that situation what was, let's say, pleasing or appropriate? In itself?

Yes . And then, when we went into the editing suite, we would go straight to the moments that we needed – to edit – and we would look back to our shot list, and from our personal shot list suggest those moments which we thought would be appropriate. Then we might see, having done that, that there were too many close-ups for example – that by now we needed to get a sense of the whole figure moving. So in that case I may have to discard a shot that I like in order to have a shot that I don't like very much because it fitted. It was appropriate in the overall thing.

And you couldn't go back and make a better one. That was all.

No. By this stage we had to deal with what we had. There was one scene in particular where we both realised at the end that we hadn't gotten the shots that we wanted, that we needed in order to edit in the way we wanted. So I made a decision to retrograde some of the shots and splice them together. We were able to re-cut the scene in a way that was pleasing, not as pleasing perhaps as what it might have been, but I was satisfied. I think finally we were all satisfied with what it had become.

So where did the idea to retrograde arise? Was that a choreographic idea?

No. I decided to do that because I was playing all of the shots backwards and forwards trying to sort them out, and I realised that a bad shot played forward was actually quite an interesting shot played backwards. That's how that came about and by that stage anyway it was clear that a hundred films could have been made from all this material and they could each have been very different.

Brannigan continued

way of reading dance? I am still caught between watching a dance performance and its cinematic treatment.

This was the editing process that brought all that out.

Yes. It seemed odd to be discovering all of this at the end when, in a way, it was too late. I mean it was not too late but it was, again, a situation where I said to myself, 'Well next time, put it on hold till next time'. But that's just my inexperience. I mean the others may have, it may have been clear to them, but it certainly wasn't clear to me.

Why was something considered a bad shot?

Well for a number of reasons. A lot of times it was because of bad performance. The human error. It was me not being able to actually pull it off and sometimes it was some technical hitch, like a light coming into view or some background thing coming into shot by accident. But I didn't mind having to repeat sequences. I liked the whole process of working and re-doing and re-doing and re-doing, generally. It was very focussing. Very meditative.

In the editing process many other possibilities open up. And you were saying that maybe that's why you have to have your plan to begin with because otherwise you just go crazy.

Yes. You might keep making decisions to change things and suddenly it would become this un-guided missile in a way. Just shooting off because you lose sight of what your aim is, and Paul and I had to keep looking at each other and saying let's keep it simple. We were determined to make it a simple, pristine thing – and I thought we were being simple, but the final thing was extremely complex, in my mind. To mix sound and language and shots was a highly complex thing and I felt like the whole time I was being... I was really restraining myself and thinking I was being very Zen. (laughs) Really it was very interesting to discover that.

What is it that is going on at once? Is that complexity because of the technology or the number of people involved or what?

For me it was the number of people involved. Like sometimes, you know, I thought I would just be there with Paul and the Editor, Rosie, or Livia, and we would work, and sometimes that was complex enough dealing with the two other points of view. It was good also, but complex. But sometimes Liz was there and at one time Laszlo was also there and it became very touchy. I almost lost it. You know it could have been quite an unpleasant situation. They all had points of view. I am used to my work being my work and really in film it is something else. It is very much a team effort even though the creative energy at the source of the idea comes from a

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Cinema offers dance a reproduction of the flux of time. If

particular place. The creative input of the other members of the production team figured strongly as we got close to the shoot and, later, in post-production.

So..

So, finally everyone's being creative in their own way and it is coming from all over the place.

So, when you see it now, broadcast or played on video, how does it seem?

Well, I still see it as my work, but in saying that I am also imagining that Paul will describe it as his work when he is talking to people and Liz I guess will be saying it is her work, and Laszlo will talk about his work, and so on. So we are all talking about our work, which I like. I like that. In my mind it can still be my work and I can still see all the things that have occupied my mind and fascinated me and preoccupied me for twenty years or for forty years. But at the same time other people can see their contribution in it as well and that's fine. It's a touchy thing, you know, trying not to deny people their place in order not to feel short-changed myself. And I don't feel that. I don't feel like I have lost out. I can see it could have happened. I can see that I could have lost ownership of it. In fact the whole structure is geared to the losing of ownership in order to become the collective ownership and collective responsibility.

Maybe not even a collective – more an institution?

Oh yes. I am able to look at it now and feel close to it, but really if I looked again at the contracts, I have signed away my ownership of it. It now belongs to the ABC and you know, the words I wrote, belong to someone else. It is like all of these things have become necessary in law, that they own it and they have control over it. But when you are just an artist trying to make work and you don't have plans to rip off the people who supply the money or do any of that stuff, it's very disheartening to have to sign things in triplicate and seek permission from the people who gave you the job in the first place to move on to the next step. I suppose it's just a formality in a way.

Well it's a real attitude, though, I am sure. Did the ABC have a proxy (director)?

Yes. Steven Burstow. We had to send him a video of where we were at a certain point, as well as a video of the final cut. He had to approve it for us to go on, and he

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science must deal with 'moments', film has the frame.[11] The logic of the frame 'framed' studies of human movement such as

11 Bergson on science and time: 'Science may consider rearrangements (of action) that come closer and closer to each other; it may thus increase the number of moments that it isolates, but it always isolates moments. As to what happens in the interval between the moments... it does not bear on the interval, but only on the extremities.' 'Which amounts to saying that real time, regarded as a flux, or, in other words, as the very mobility of being, escapes the hold of scientific knowledge.' *Creative Evolution*, p.330 and p.337 respectively.

did. I think possibly most of the time they do. Claire Dobbin came to have a look once during the shoot and during the editing process. She is with the AFC. And the possibility was there for her to say, 'No I don't like this, you will have to change this.' I can't prove it. Anyway, she didn't, she was very supportive, as was Steven Burstow. But the power there is for the people who give you the money to say yea or nay, so I found that extraordinary having gone through such a rigorous selection process. You know, that we weren't just trusted to get on with it.

That's interesting to think about in relation to the Internet, which is quite unregulated. I mean, that is one face of technology. The ABC is another face – keeping a close guard on these projects because they are going to be on national television.

My impression was that the ABC was in turmoil because of the Howard government's cuts. And so our dealings with the ABC to get approval to go on were often delayed. We didn't know who we were dealing with in particular. We knew Steven's name. But he had just been shifted to children's television. The ABC was in turmoil and no-one knew what they were up to, where they would be next – where their next meal was coming from in a sense. And we were trying to just move on, just progress. So I think at one point the process was held up for a week or two, as we tried to get in touch with these people. It seemed very funny because there were so many safeguards to make sure that we got the product made but then there was all of this disorganisation and hindrance, so there were obstacles in our way from actually doing this.

You mentioned something about your consideration of the sound in relation to the energetic graphs. The film has a voice over, doesn't it?

Oh yes. Initially we asked a few people to read my text. I felt I wanted a voice of an older man because of the levels of experience in such a voice. Paul suggested we consider having a woman's voice. It was interesting because when Margaret came here to read and I was sitting across the table here from her and I was watching her prepare the language to come out of her body, I could see her physically embody the language and I was totally convinced by it. I thought, 'Well she is fantastic, this means we must have a woman read'. And when I heard Peter Cummins I didn't have that same feeling when I looked across the table, in the way he spoke from the text, spoke through the text. But when I came to listen again when neither of them were here, Peter's voice was so musical, so full of all of the textures that I didn't see when I was present with him, watching it come out of his body, and all of the textures that I watched emerge from the body of Margaret

Eadweard Muybridge's work late last century; *Man moving at a walking pace; Woman walking and picking up a jug.* This logic

didn't translate onto the tape at all. And so it was clear. It was an interesting thing to realise, I didn't ever expect that.

The speaking had then to be spaced through the film.

Oh yes. I sat with the graph in front of me of the energy levels that were happening in terms of movement and I tried to place the language so that it occurred in moments of least energy so that the competition was less between what is heard and what is seen. Paul had lent me a book by Bresson about film-making and he talked about the importance of giving silence its place and not having too much of one or the other, but it's something I felt, you know, anyway. It was logical.

Yes. So did the speaker then have to modulate his voice in relation to the film. Was it an editing or a speaking problem?

What I wanted to do was to treat the voice like the rest of the sound and not make it or record it in reference to the images, to seeing the images.

Other than the energetic aspect?

Yes. Other than the energetic aspect. So we recorded Peter's voice with him not knowing in what context he would be speaking, he was speaking.

And then you could digitally edit him in

Yes. Then it was recorded on to DAT and it was only placed against the images later, and it was able to be shifted because once it was then manipulated it came up onto the screen as visual images and they could be moved around and cut and spliced. It was very exciting. It looked like a piece of medical technology – a cardiogram. Segments could be removed and replaced by ones that worked better and then they could be blown back up and you couldn't tell that any operation had occurred.

So what are the possibilities for next time? What sort of situation presents itself?

Well not much really. During the editing process with Rosie and with Paul, too, we would look at each other, things would just happen on the screen and we would just look at each other and think, that's a fantastic image, knowing that we couldn't use it. Knowing that it had nothing to do, that this beautiful image had nothing to do with the film that we were making or the video that we were making. And that was interesting and I keep wanting to say it was hard to say no, but really it wasn't

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was elided when the interval between moments gained significance, both practically and theoretically, in 'aberrant'

because the parameters had been set and we knew what we were doing and so it wasn't a difficult choice to realise what could be included and what couldn't. But I feel like I want to go back. I would like to go back now and look at the material again and lift out those moments, those sorts of images that we found, and make something else of them.

So do you own those rushes or that stock?

No I don't, so it would be illegal.

I see. So you don't have them in your possession.

I have them and I am allowed to have them, I think, under contract, for three years. I have got three years I think before all this stuff must be handed over and archived. So what I have got is all of the original shoot, uncut.

And you would have to apply for permission or arrange something legally to do something else with it.

Yes. I will have to apply for permission. Now I am thinking that I would like, as part of my rationale to take back to my Master's research, what I had lifted out. I would like to take back a different use of this imagery and use it in performance. So it would mean cutting something that could be used as projection in performance. I am really interested in doing that but it wouldn't be something, I don't imagine, that could be sold as a video. So I am not sure yet how to go about that.

Another interesting thing was that everyone involved in Microdance – all of the other people, the other choreographers and their film makers -wanted to shoot on film and we had budgeted to shoot on film, but we weren't allowed to shoot on film. No-one was allowed to. I gather it was because it was a video project and so they wanted it shot on video, but the irony is that if all goes well, they will transfer it onto film. It just sounds crazy to me when it could have been shot on film to begin with. Microdance was always billed as 'a series of short dance films for public broadcast'. But with video Rosie could make any number of versions for us to look at immediately and we could look at all of them at the same time, if we wanted to. It was just amazing. Yes. I feel like I really don't know enough, I still don't know enough about the process, but part of me thinks that is a good thing that I don't know the boundaries. I was very aware of being surrounded by a film culture, and people took certain things for granted and because I didn't take those things for granted, more was possible, even than what we achieved. I was

filmic practices such as those Gunning found in the early cinema, and the techniques of the historical avant-garde. What

influenced by the aura of the institution and I was influenced into making quite conservative decisions, really.

At what point?

I think all the way. There were some things that I just didn't have the confidence to say. I couldn't say, 'This is what I want', because I am used to not knowing what I want. It is like what we were talking about before about improvisation. It is that not knowing what I want is a conscious decision for me. I deliberately don't set things in concrete until... or ever. (laughs) I mean even in performance. If things change and they work better, then they are in. If they are changed and I can work with that I think it is fantastic. But with film it was a case of how do you convince people that you know what you are doing if you insist on not knowing where you are going. And I do in my dance work, I insist on not knowing where I am going and in film you have to know where you are going before you have even decided to go anywhere. (Laughter) It is...astounding. But I can understand. The money stakes are so high.

Perhaps that original sense that you had of having to know what it would be is countered by the multiple of interfaces in film production where... something else can happen.

Yes.

Because I suppose something conceived of initially as an object or a scene in fact is made up of a whole lot of different instances and different technologies and people and so on and so it's growing from being known to being less known. Whereas maybe the live theatre process that you were talking about is going from being not known to being more known. If there are so many factors and technologies and moments in the making of a film then doesn't that multiply the possibility that it will be other than what it was before, even though the agreement is that it is what you decided at the beginning it would be?

It isn't what it was at the beginning. It *has* changed. You know I was so precious in my determination to be seen as the author of this thing – because initially I was – that I think I tried to hold on to what it was, but really it is not what it was and the people that I have worked with have influenced it and it has changed and it grew because of the numbers of times it had to be explained and particularised and ... sort of itemised. Yes. So I had to become clearer and clearer about what it was and

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'motion pictures' ultimately achieved was the magical transformation of the still frame into 'flux' – the release of

people around me questioned me and I was forced to realise that it could be other, that perhaps there were other ideas coming up and Paul would make suggestions which would change the way I thought about it. I think of myself as not being good at collaboration, so collaboration has sort of crept up on me. I sort of collaborated against my will. In a way. And ended up with a.. I keep calling it a 'product' because that's what it is, I ended up with one in which I still recognise all of my tastes and flavours and things that are I feel a part of me. I wonder if the others look at it and see in it things that are a part of them?

nine cauldrons credits

Directors: Paul Hampton and Trevor Patrick
Producer: Liz Burke
Choreography/Text/Performance: Trevor Patrick
Voice: Peter Cummins
Director of Photography: Laszlo Baranyai
Costume: Jane Hyland
Production Manager: Charlotte Seymour
Make-up: Phaedra Vance
First Assistant Director: Chris Odgers
Continuity: Julie Fedderson
Editor: Rosie Jones
Sound Design: Livia Ruzic
Sound Mixer: Craig Carter
Gaffers: Colin William, Tim Morrison
Grip: Colin Benallack
Best Boy: Jarek Szalec
Camera Assistant: Rohan Zerna
Stills Photographer: Ponch Hawkes
Wardrobe Assistant: Terri Anderton

Giorgio Agamben's 'image' into its rightful place within the gesture.[12] No other visual art form could offer this to dance.

12 Giorgio Agamben, 'Notes on Gesture', *Infancy and History*, London: Verso, 1993. Agamben on the image: '...it is as if, from the whole history of art, a mute invocation were raised towards the freeing of the image in the gesture.' p.139

Dianne Currier

ABSENT, MUTATED, DIGITALISED, DESEXED – POSTHUMAN BODIES IN CYBERSPACE

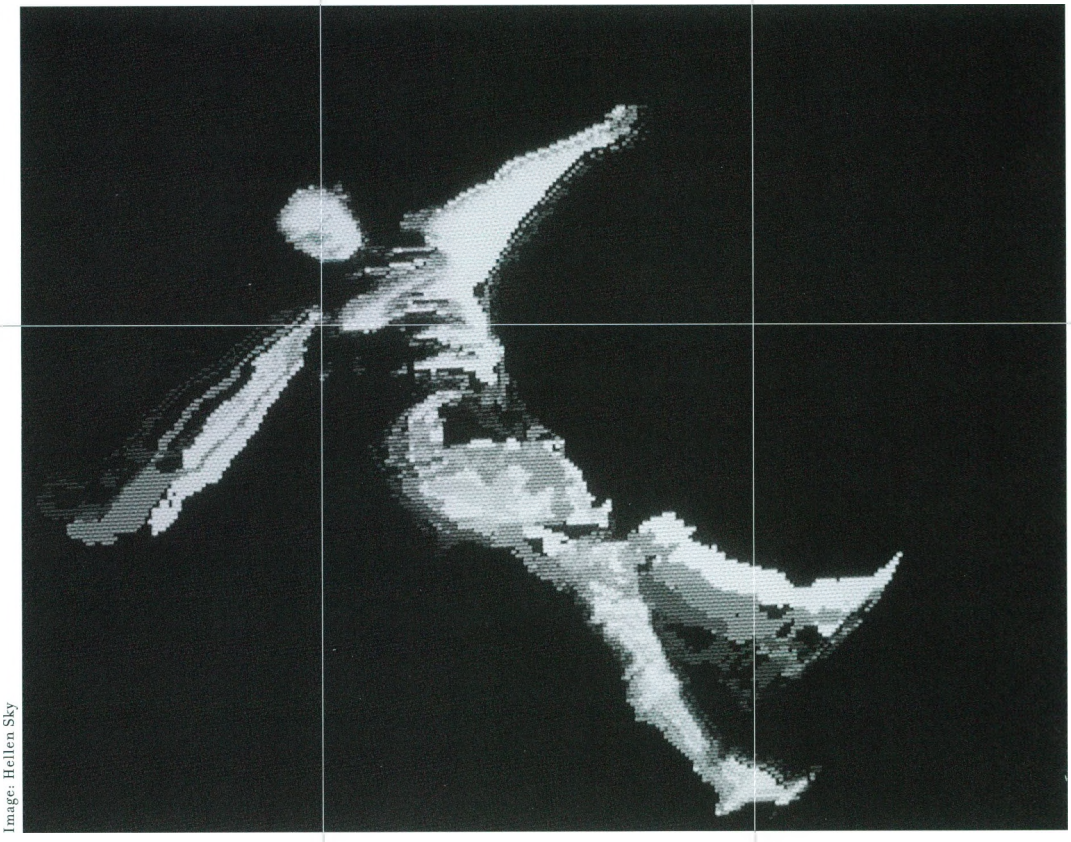

Image: Hellen Sky

Brannigan continued

Nothing could match it on this score; the consistent flux of the signifier.

They say he raped them at night. They say he did it with a cunning little doll, fashioned in their image and imbued with the power to make them do whatever he desired. They say that by manipulating the doll he forced them to have sex with him, and with each other, and to do horrible, brutal things to their own bodies.

(Dibbell 1994:237).

This is how Julian Dibbell describes the now well-known and discussed incident of 'rape' in the cyberspace of Lambdamoo – a multi-user domain on the internet. While it is obvious that a 'virtual rape' on the internet is of an entirely different order of experience to physical rape it is curious that Dibbell, and those involved in the incident, use the language of rape and bodies to describe the experience. The language of these commentaries alludes to what I consider to be one of the most crucial and underdeveloped issues in feminist engagements with cyberspace – the status of the body in cyberspace. In this paper I want to trace the figurations of embodiment in the discourses surrounding nascent electronic technologies collectively referred to as cyberspace, and to evaluate the understandings of the body they present in terms of their usefulness or otherwise for feminist projects concerned with exploring sexual difference.

Discourses of cyberspace canvass a wide range of social, political, aesthetic, cultural, economic philosophical and epistemological issues. Invariably one of the central questions to emerge from these divergent considerations concerns how technologies of cyberspace refigure relations between the individual and the social. Repeatedly the notion of individual comes under scrutiny in an attempt to discover how, in a social environment largely, if not exclusively, mediated by technology, identity is to be represented, enacted and experienced. Indeed one of the main reasons that cyberspace has generated so much interest amongst scholars and artists of varying disciplines is the perception that it offers a new or at least novel context in which to examine these increasingly vexed questions, one to which many look for possibilities of refiguring entrenched patterns and processes of hierarchically organised subjectivities.

Any theoretical undertaking which seeks to examine the processes of construction and the experience of subjectivity, in cyber or any other space, inevitably encounters questions of embodiment. The body has emerged, particularly in the discourses of post-humanism and feminism, as a site of contestation and transgression and as such is obviously implicated in any attempt at rethinking and refiguring individual and community such as those undertaken in the multiplicity of discourses surrounding cyberspace. The body as a focal point at the intersection of post-humanism, feminism and cyberspace provides a lens through which to assess the claims of each for radical reconstitution of subjectivity. This paper aims to discern the conceptual models of the body and embodiment in operation across the terrain of contemporary theorising of electronic technologies; it seeks to assess the efficacy of these models in terms of the broader feminist and other claims made for the transformative potential of cyberspace; and proposes, via the framework of psychoanalysis, one approach which allows the issue of the body to be repositioned as central to considerations of cyberspace. It is instructive to approach the question of the body in cyberspace, in the first instance, via the discourses of

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"... it is the flow of time, it is the very flux of the real that we

post-humanism, including its feminist adherents. The question of the status of the body in relation to technology, particularly new information and electronic technologies, is specifically addressed by post-humanism, with the consistent understanding that in the encounter with technology the body is inevitably transformed and that this bodily transformation is desirable inasmuch as it precipitates a refiguring of subjectivity.

POST-HUMAN BODIES

If postmodernism has shaken the foundations of the stable modernist categories of knowledge, history, art, politics, ethics, and identity then it is post-humanism to which many feminists and others look to divine the subjects of the future. While 'post-human' operates as a generalised trope to mark the postmodern transmutations of the modern 'human' individual it is also more often concerned with an element of materiality, that is, the bodily (trans)mutations which further reiterate the loss of integrity, the impossibility of singular, stable, individuated subjects in the post modern milieu. Such bodily mutations make manifest the reconstitution of subjectivity which results from the transition to postmodernity with its irretrievable breakdown of boundaries between human and non-human. Technology is central to the post-human concern with physical transformation. It's ability to be (even the requirement that it be) operationalized through direct bodily contact immediately suggests the possibility of initiating bodily transformations in the course of such interactions.

... there has been a huge ontological shift not only in the nature of human society, but in that of our very bodies. This mutation has been brought about, on the one hand, by the exposure to simulated images in the most traditional media, and on the other, by the slow penetration into our daily life of almost invisible technological gadgets, from contact lenses to personal computers. This process of 'invasion' of the human body and psyche by the machine is destined to increase over the years (...) and give rise to a potentially new race of human beings whose symbiosis with the machine will be total. (Terranova. 1996:167)

In another register post-humanist theorising is less concerned with ontological shifts precipitated by high-tech futures than it considers that post-humanism to be in operation in more recognisable and everyday bodily discourses and practices such as those of AIDS, cosmetic and other medical intervention, body piercing and other ornamentation. While not precipitated by direct contact, technology is likewise implicated in this process. Foucault detailed the manner in which technologies were developed and deployed across social institutions and practices such as the workplace, the hospital, military, domestic spaces and schools, to constitute and regulate particular bodies and social subjects. Although not claiming to link into any evolutionary supersession of the human this aspect of post-humanism likewise engages an attempt to materialise the displacement of the stable subject of modern humanism by rewriting/re-representing the surfaces and interiors of the body. This displacement of the modern subject is the source of the transformative and liberatory possibilities which draws feminists and others to both postmodernism and post-humanism, it also provides the entry point into discourses of cyberspace. The development and widespread deployment of sophisticated technology, often signalled by the term 'cyberspace' has provided a wellspring for post-human claims. This paper will examine the modes of bodily transformation, under the umbrella sign of 'post-human', which accompany the development of information technologies. It aims to track how the emerging culture of information space,

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should be trying to follow... it will not extend our empire over nature... but if it succeeds, it is reality itself that it will hold in a

technologically mediated interaction, and cybernetics, has been incorporated into a post-human project of rewriting/building the (human) body in such a way that individual and society are permanently transformed. Further it aims to evaluate the feminist inflections of post-human theorising, how, as a concept and 'practice', it is useful or otherwise to feminist projects of articulating embodied sexual difference and exploring possibilities for self-defined feminine subjectivity – projects to which the body and its openness to multiple articulations and representations are crucial.

DISCOURSES OF CYBERSPACE

In true post-modern fashion the emerging discourses of information technologies, cyberspace, and post-humanism draw material from far and wide with little regard for disciplinary boundaries. Attention to the relations between individuals and technology, has long been pursued across a range of scholarly disciplines and fictional genres. However, contemporary considerations of this relationship as it congeals around information technology is underwritten by an understanding that these new technologies and their deployment are qualitatively different and are symptomatic of an epochal transition from an industrial age to a post-industrial information age, marked culturally by postmodernsim and post-humanism. Roseanne Stone, for example, observes the emergence of 'virtual systems' of community and culture made possible by information technologies marking the 'close of the mechanical age'. (Stone 1992:609) Within this dawning epoch disciplinary boundaries, like all others, are irretrievably breached and permeable, and investigations of concepts such as cyberspace move easily across fiction, art, scientific inquiry, philosophy and other areas of theoretical exploration. Much recent commentary revolves around textual interpretation. It undertakes readings of cultural products as the basis of imagined futures and contemporary collective phantasies. This is not surprising given that the notion of technology enabling or precipitating new social spaces and cultural orders is a staple of science fiction and much of the imagery and terminology surrounding cyberspace originated in pages of science fiction novels of the early eighties.[1] That the guiding metaphors, particularly that of cyberspace, were brought into currency and given their particular inflections through science-fiction texts, and to a lesser degree popular science texts, has lead to particular and peculiar epistemological and theoretical starting points – indeed it has lead commentators in the area to remark that they are investigating a domain which does not yet exist.[2] While there are differences apparent in the bodies and environments imagined and theorised within the range of both theoretical and fictional discourses on cyberspace, in terms of the question of the body, I would claim there are discernible points of convergence and similarity which indicate recurring theoretical obstacles. These problematic sticking points suggest that the transformations and possibilities loudly proclaimed on behalf of emerging technologies are not so easily won, that certain niggling theoretical and political difficulties are not so simply eradicated or rendered redundant by developing more efficient, intelligent technologies and seamless interfaces. In recent research and commentary it is around questions of the body surfaces that this problematic conceptual terrain becomes apparent. I want to propose three tropes under which the body is figured in the discourses of electronic technologies. These three, the redundant body, the virtual body and the cyborg, provide a nominal framework within which to examine not simply the varieties of bodily mutations explored by post-humanism, but to investigate the conceptual models of the body upon which these rest, and evaluate the

firm and final embrace... complete the intellect and its knowledge of matter by accustoming it to install itself within

usefulness or otherwise of such models for the feminist projects previously indicated. While this is a somewhat arbitrary division, one which obviously does not provide three neat self-contained and all-containing categories, it does provide a methodological convenience which allows the range of theorising (and fantasising) expressed across the terrain of cyberspace discourses to be elucidated and evaluated.

THE REDUNDANT BODY

If post-humanism is concerned with transgressing or transcending the stable bounded identity of the human(ist) subject and intervention on a material level is crucial to this endeavour, then at its most radical moment the proposal of disembodied consciousness would seem to offer an immediate solution. Disembodied consciousness released from a redundant physical body is one of the earliest and most pervasive tropes in discourses of cybernetics and information technology and one which seemingly presents the most potential for radical refiguration of individual and community. There is a dual lineage drawn from cybernetics and science fiction informing the notion of disembodiment as the desirable condition for participating in an enhanced information environment.

One branch of this lineage originates in the scientific discourses of cybernetics based on which the most exemplary advocate of radical disembodiment, Hans Moravec, envisioned a postbiological age where the increasing power and sophistication of computer hardware and cybernetic technologies eventually facilitates the uploading of consciousness into computer software which would survive the mortal physical body. According to Moravec's 'transmigration' scenario this data-based consciousness could then be transferred into a variety of robotic vehicles pragmatically selected to accomplish any number of tasks. Further, due to the vastly increased speed, information processing, physical strength and dexterity of technologies the uploaded 'person' could potentially expand their abilities to unlimited dimensions. Clearly Moravec's 'thought experiment' is a fanciful imagined future. However, grounded as it is in the language of information as deployed in cybernetics and artificial intelligence research, it signals an ontological shift which allows the exploration of disembodiment as a scientific rather than an entirely science-fictional possibility.

Cybernetics proposed ... fundamental nature of the human organism – its Being be reduced to an organisational pattern *whose operational logic was also coextensive with other organisms and types of machine systems.* (Thomas 1995:27/28)

Once the human body is coded as information it is a short step to separating the physical from the ethereal. N. Katherine Hayles explains that the separation of information from the physical markers which embody it allows for information to be quantified, that is information becomes removed from the material substrate in which it is instantiated. This, of course, allows a notion of disembodiment in cyberspace where a subject becomes information and can take any form. (Hayles.1994:452) For Moravec this distinction between material and information is central to his transmigration project:

Body-identity assumes that a person is defined by the stuff of which a human body is made.... Pattern-identity, conversely, defines the essence of a person, say myself, as the pattern and the process going on in my head and body, not the machinery supporting that process. If the process is preserved, I am preserved. The rest is mere jelly. (Moravec 1988:116)

If Moravec finds the material 'human' body utterly

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the moving... (Bergson)".[13] This is what dance spectatorship promotes. This is the affective force of the dance/dancer.

13 Bergson, *Creative Evolution*, p.343

unnecessary and radical disembodiment an ideal solution to the limitations of the flesh, his strategy is taken up in somewhat less extreme manner in the work of those interested in analysing the participation and engagement of individuals in the non-material spaces of the internet. Moravec's formulation drawn from a scientific heritage based on research in cybernetics meets with the images and metaphors drawn from science fiction in the second branch of the lineage of disembodiment which informs contemporary commentary on the internet.

Disembodied consciousness finds some of its earliest links to information mediated environments in the cyberpunk fiction of the '80s. William Gibson's *Neuromancer* (1984), which is for most commentators the landmark 'cyber' text, has been source of much commentary and it is not my intention to revisit it here. I merely want to note how the body becomes for Gibson's protagonist an encumbrance, that which is unable to enter the privileged domain of cyberspace, not merely unnecessary but an obstacle. Gibson's model of disembodied inhabitation of cyberspaces is repeated through a raft of sci-fi novels[3] where Cyberspace is a space of information access and exchange participation which requires 'parking' the body and releasing consciousness to navigate and interact not simply with information but with other free-floating consciousness. Many researchers and commentators take their cues from Gibson's characters and find in his fictional formulation of the mode of participating in cyberspace based on disembodied consciousness a basis for a range of projects investigating questions of identity and community in the age of the internet. These include feminists who identify the space of the internet as a space where gender can be displaced and rendered irrelevant, as well as proponents of egalitarian democratic virtual communities. Prominent amongst the latter is Howard Rheingold who in his examination of the communication practices and patterns of individuals interacting in the text-based bulletin boards, mailing lists, chat rooms, muds and moo's of the internet frequently describe these cyberspaces as places where individuals interact without bodies.

Because we cannot see one another, we are unable to form prejudices about others before we read what they have to say: Race, gender, age, national origin and physical appearance are not apparent unless a person wants to make such characteristics public. People who are thoughtful but who are not quick to formulate a reply often do better in CMC than face to face or over the telephone. People whose physical handicaps make it difficult to form new friendships find that virtual communities treat them as they always wanted to be treated — as thinkers and transmitters of ideas and feeling beings, not carnal vessels with a certain appearance and way of walking and talking (or not walking and not talking). (Rheingold 1993:26)

Clearly, disembodied interaction is regarded as liberating or at least more egalitarian, displacing the common prejudices of 'real life'.

It is this aspect of disembodied communication and the consequent construction of disembodied identity which has generated considerable interest within feminist quarters. This interest derives from the assumption that the movement of disembodiment displaces embodied sexual difference and therefore leaves individuals free to construct their own sexual identity.

By providing women with an opportunity to express their ideas in a way that transcends the biological body, this technology gives them the power to redefine themselves outside of the historical categories of 'women', 'other', or 'object'. (Shade 1996:5)

While advocating disembodied identity as an experimental practice for resisting and displacing gendered identity, feminist thought often stops short of advocating the radical redundancy of the body articulated by Moravec. Some feminists subscribe to a middle ground which holds that, while ultimately tied to one physical

Filmic science interferes with this force; the time of the dance is overwhelmed by the time of the film and the logic of the film

body, 'subjects' can create new identities for themselves 'on line' which allow them to experience and perform other bodies and subject positions. In the crudest sense this position is articulated by Sherry Turkle: working from a therapeutic psychologist's understanding of identity or 'self', she cites various case studies where, in electronic environments, participants have used created identities, often of the opposite sex, to 'work through' psychological issues.

As MUD players talked to me about their experiences with gender swapping, they certainly gave me reason to believe that through this practice they were working through personal issues that had to do with accepting the feminine and/or masculine in their own personalities.
(Turkle 1996)

Turkle is concerned with psychotherapeutic practices and while she holds with the position that the internet is indeed a place of disembodied interaction and that textual 'gender swapping' is possible – in some cases therapeutically useful – she clearly sees the activities of the disembodied identity as having a direct even causal relation to the embodied subject operating on the other side of the screen. On a more complex level Rosanne Stone considers the relationship between the disembodied entity in cyberspace and the embodied computer user as one continually mediated by the cultural formation and structures of power which envelope technology and subjectivity.

No matter how virtual the subject may become, there is always a body attached. It may be off somewhere else .. but consciousness remains firmly rooted in the physical. Historically, body technology and community constitute each other. (Stone 1991:111)

This view is echoed by a number of feminist theorists of cyberspace and VR who want to insist that the material female body cannot so easily be dislodged.[4] However, interestingly, while recalling in the last instance the presence of the body, they still gravitate toward the possibility of disembodied consciousness in-so-far as they continue to advocate the destabilising and transformative potential of a post-gender identity constituted and instantiated in the electronic networks of the internet. I will return to this seemingly contradictory explanation of the body to investigate exactly what is being proposed in terms of an model of embodiment and sexual difference in the instance of an, at once, embodied and disembodied subject.

THE VIRTUAL BODY

If there is some resistance to the proposal of a completely disembodied subjectivity, particularly from feminist viewpoints, there remains the recognition that embodiment undergoes a radical modification in the transition into cyberspace, and some suggestion that in the process of this transition some potential for transformation may exist. While technologies such as the computer- generated electronic spaces of the internet suggest to some the possibility of free-floating consciousness navigating and inhabiting a cyberspace, the related and perhaps bridging concept which would attempt to articulate a body of sorts into this electronically mediated space is that of virtual reality and the virtual body. Proponents of virtual reality propose that instead of discarding the body entirely in order to access and inhabit information space, the body is transformed or (re)constructed via technology into an entity which is capable of being represented in these spaces.

As with much discourse surrounding nascent electronic technologies the use of a variety of terminology as interchangeable tends to obscure the different applications and understandings of, not just the technologies employed to achieve particular effects but,

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and its creation becomes the ruling force. One unit of choreography takes one unit of time to perform. That same

the differing conceptual models deployed around these technologies. There are two broad schemas in current circulation within which the question of the virtual body must be examined: one relates to the electronic environments of the internet (cyberspace) and the other to virtual reality and telepresence technology. While there is much speculation as to the eventual convergence of these two realms as technology becomes more powerful and sophisticated, presently they remain distinct.

Cyberspace

Representing the body in environments or locations other than immediate physical presence is an age -old preoccupation. In this instance it is within the context of primarily text-based (though sometimes graphic) electronic environments that one notion of the virtual body is deployed. In the multi-user real-time interactive spaces of the internet, individuals engage in a variety of activities some of which, particularly erotic encounters, draw heavily on the textual articulation and representation of a body:

Bodies in virtual space can be created with a bit of programming. 'Real life' gender can be switched, skin colour can be forgotten temporarily, age or infirmity can be escaped. (Cherney1996:1)

It is not the text-based element itself which is crucial to the virtual body, it is the process of shaping a body enacted by the individual and materialised, realised via electronic construction. Similarly the development of visual representations or 'avatars' reflect the representational choice of individuals where bodily characteristics are subject to alteration. This virtual body by virtue of being the product of the individual's independent choice is thus free from the machinery of cultural constraints that impinge on the 'real life' body. This is an innocent body – an attempt at self-representation which while it has no physical manifestation (much the same way as disembodied consciousness) nevertheless represents a movement of embodiment – one which sees consciousness bounded by, attached to, and located within a body, be it material or electronic.

Virtual Reality

The other schema of the virtual body is one generated by virtual reality technology and telepresence technology. These technologies locate subjects and objects within a visual real-time representation of spatial surrounds and the participant occupies a virtual body which is able to move and interact with other objects in the simulated (computer generated) environment. The virtual body in this instance exists in direct relation to the 'actual' body insofar as movement and perspective are generated by the 'actual' body and then experienced via visual immersion in the virtual environment. This however is not a simple ethereal doppelganger or electronic shadow. By passing through the process of electronic mediation, interpretation, and reconstruction a visual, virtual body capable of taking any form is generated and, once again, we have the reshaping of bodily attributes, abilities and functions via technology. Howard Rheingold, in his exploration of the possibilities for erotic encounters in the cyberspace future, describes one such remapping of the bodies zones and meanings:

If you can map your hands to your puppet's legs, and let your fingers do the walking through cyberspace..... there is no reason to believe you won't be able to map your genital effectors to your manual sensors and have direct genital contact by touching hands. (Rheingold 1991: 352)

Running through both these constructions of a virtual body is a commitment to maintaining, even in modified ways, a relationship between the virtual and the 'real life' physical body. The 'real life' body is that which must be translated and refigured, within technical limitations, along the lines of the individual's will, to provide a more

unit, when made into a film, becomes a product of the time taken to film; various takes and perspectives, the time it took to

accurate representation of their identity as conceived by themselves. As such the virtual body is not a movement to discard the body entirely: it is rather an attempt to rearticulate the material of the flesh into another space and context and to reshape its representations, meanings, and movements during that process.

Penetrating the screen involves a state change from the physical, biological space of the embodied viewer to the symbolic, metaphorical 'consensual hallucination' of cyberspace; a space that is a locus of intense desire for refigured embodiment. (Stone 1991:109)

This fulfils a desire to escape the limitations of the material body insofar as it is considered possible to filter out the unwanted cultural baggage in the transitions from 'actual' to 'virtual'. In this respect participation in virtual reality enacts the same movement of dispensation and distancing of the physical which proponents of disembodiment advocate. Although in this instance, it is one which allows an embodied (although electronically only) subjectivity, but which likewise presumes that consciousness, once free from the restrictions of the materially bound and constrained body, can autonomously and freely articulate its own identity.

Cyborg Bodies

The third trope which features prominently in discourses of technologies and bodies represents something of a shift in terrain. The figure of the cyborg functions as a trope for that strand of post-humanism which attempts to examine more closely the encounters between technologies and material bodies – not in terms of disembodiment where a technological excision of the flesh takes place, nor in virtual realities where a digitalised, informatised version of the body is agent in space, but in the instances where technologies and flesh meet. While the cyborg is a figure born of the discourses of cybernetics and one which populates the history of science-fiction it is Donna Haraway's evocation which raised it to post-human preeminence and gave the cyborg its current inflection as boundary breacher and identity destabiliser. For Haraway, in the figure of the cyborg technology interpenetrates the human. Based on the logic of cybernetics all things are understood as systems of information storage and exchange in such a manner as to render meaningless the very category of human:

As far as we know ourselves..., we find ourselves to be cyborgs, hybrids, mosaics, chimeras. Biological organisms have become biotic systems, communication devices like others. There is no fundamental, ontological separation in our knowledge of machine and organism, or technical and organic. (Haraway 1992: 177/78)

In doing so the cyborg dislodges such binarisms as nature/culture, machine/human, human/animal all of which have served to prop up the increasingly shaky edifice of western male subjectivity. Haraway's cyborg, by destabilising these binaries, brings down the whole house of cards and allows a limitless variety of hybrid and mutated identities to emerge.

While much more theoretically savvy than Moravec's cybernetic robots Haraway, however, in one aspect relies on a model of the body which shares much with the formulations of disembodied consciousness and virtual bodies. In Haraway's and most other post-human cyborgs the material 'human' body forms one half of an equation and technology the other half. This formulation in which technology by its intrusion or addition refigures the relations of the body to the cultural, and disrupts the stable cultural categories of human is underwritten by an understanding of the body as irretrievably imbued and marked by cultural relations of power. The cyborg, by disrupting the body, physically enables some dislodgment of that power.

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create soundtracks and lighting. "The time taken up by the invention, is one with the invention itself (Bergson)."[14]

14 Ibid p.340

POST-HUMAN GENDERS

The tropes of the redundant, virtual, and mutated bodies of post-humanism are invoked in varied attempts to rethink subjectivity in a postmodern context characterised by the intervention of electronic and information technologies. Underwriting these three tropes is a particular understanding of the body in its relation to society and subjectivity which, while it may draw a theoretical heritage from various places, commonly understands (in line with postmodern constructionist orthodoxy) that it is through shaping and defining the meanings of bodies and institutional regulatory practices enacted on bodies that restrictive and limited subject positions -which individuals must assume in order to be intelligible to society – are allowed. Further, these positions are constituted within the hierarchy of binarisms which provides the framework for the stable, bounded 'humanist' subject. Of principle issue to feminists are how these binarisms are organised around a structure of sexual difference. For many feminists this informs projects focussed on the issue of gender in relation to cyberspace and information technologies.

Gender has been a fraught concept in recent feminist theory and I want to suggest that it is problematic for a feminist engagement with cyberspace for two major reasons. Firstly, it is entrenched in mind/body dualism, and, secondly, it elides the question of embodied sexual difference. To claim a gendered identity which is freed from the body in cyberspace is to propose a model of gender and sex or gender and body which is immediately recuperated into the logic of mind/body binarism. Indeed, any understanding of gender as a cultural construct arbitrarily assigned to inert bodies is entrenched within this logic. As we have seen, one of the most pervasive understandings of the body across the three tropes operationalised in the discourses of emerging information technologies and computer-mediated environments has been one which views the body as the site of cultural constraint which must be either dispensed with, electronically filtered or physically mutated to allow a self-representing identity. This understanding of course accounts for the preference for a sex/gender model in feminist investigations of cyberspace and virtual reality as it sits so easily in conventional accounts of computer-mediated environments with their pervasive and seemingly unavoidable recourse to this mind/body dualism. Insofar as post-humanism seeks to disrupt and transform the binarisms which comprise the categories of 'humanist' identity by disrupting the corporeal surface on and through which it is materialised using strategies such as transcendence, electronic rearticulation or physical mutation, it nevertheless remains entrenched in the mind/body dualism.

Not surprisingly some feminist theorists of emerging modes of technological embodiment are deeply suspicious of any movement toward disembodiment or autonomous consciousness freely articulating electronic or cyborg bodies. These theorists rightly locate these ideas within the dualist model which rests on that Cartesian paradigm which sees the body and mind as separate and eminently separable – a model to which a raft of binarisms has been attached and on which the hierarchical edifice of patriarchal logocentrism is erected. N. Katherine Hayles (1996) wants to insist on embodiment as unavoidable to participation in cyberspace and identifies the impulse toward disembodied consciousness as one which can be traced to the semiotic commitments invoked by the disembodied consciousness/flesh dualism insofar as it participates in the broader pattern of dualisms which underpin western logocentrism, with their lines of association.[5]

Deconstruction, particularly in its feminist inflections via

VIII

In Louis Giannetti's chapter on the avant-garde in *Under-*

Luce Irigaray, has demonstrated that this economy of sameness institutes a power relation which precludes women from autonomous existence.

embodiment and cyberspace

Embodiment is a complex intermeshing of knowledges, representations, power, and biology driven by institutional, cultural, and historical arrangements and epistemologies. It is the process through which social subjects are constituted. It determines how subjects experience and understand their bodies and how bodies shape the subjects they become. It is no surprise that feminists and others have turned their attention to bodies as site for tracing some of these processes – to attempt to decipher and possibly challenge the power and knowledge structures at the moment, point or place where they are materialised, enacted and enabled. While the movement to modify or transcend the body reflects the concern of certain brands of post-humanism and feminism to escape cultural constraints of the body perceived to be the site of cultural articulation of frameworks of power and repression, it nevertheless remains a loaded issue for feminists insofar as the body provides a locus for the articulation of sexual difference. Feminist projects on the body have been attempting to argue for a representational space for embodied sexual difference – a difference which has been elided or repressed in a logocentric economy of sameness. The body in such an economy is at once the source of representation – the bearer of the logos and the possibility of resistance to it. So while feminists recognise the need to try and dislodge current bodily subjectivities due to their implication in patriarchal logocentrism there can be no immediate solution in dispensing with the question of the body altogether. Instead feminists need to explore other ways of thinking bodies, society and technology in order to articulate a more complex picture of how the three intermingle and in order to develop a framework for understanding the potential offered by cyberspace.

I want to examine, briefly, one approach which suggests a notion of bodily subjectivity conducive to addressing issues of cyberspace and embodiment and explore how such a subject and body presents a challenge to the conventional notions of a primarily cerebral cyberspace of interaction and identity formation. Such a notion is one which would insist that the material body cannot simply be parked, redrawn by an independent conscious will nor equalised with technology through its conversion to pattern and information. Let me state that this is only *a* model not *the* model, one which takes as its starting point psychoanalysis. While fully acknowledging the unacceptabilty of much of his work to feminist projects there are two major levels on which I consider Freud's work productive and relevant for this exercise. Firstly, he presents the possibility for thinking subjectivity in a way that problematises the mind/body split and, secondly, he insists on the centrality of questions of sexual difference. We may not agree with his inflection or conclusions on these questions but what he does in embedding sexual difference intractably in the processes of subjectivity is invaluable.

As we have seen it is redundant at this point in feminist and postmodern scholarship to talk of a natural body as it is almost a matter of convention that the body is now pretty well universally understood as constituted by cultures' representations of it. I want to step back from this convention for a moment and while I do not dispute it, in Freud we find a more complex understanding of how these representations come to be lived by and constitutive of the subject. Freud addresses questions of embodiment and subjectivity in many places and contexts and his theories were subject to his own constant modification. It

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standing Movies,[15] under the sub-title 'The Poetic Cinema' we find the films of Maya Deren. Poetic language involves an

15 Louis Giannetti, *Understanding Movies*, Fourth Ed. Prentice-Hall 1976, pp.347–350

is beyond the scope of this paper to canvass all such incidences so I want to just signal three major threads of his work which lend themselves to rethinking the body in cyberspace.

Firstly, Freud develops a notion of a bodily subject which displaces the mind/body split. In his accounts of the passage though the Oedipus complex into social subjectivity (1925), Freud demonstrates clearly the role of social and cultural understandings of the body in the formation of a sexed subjectivity. However, this is not merely the assumption of gender norms. Subjects come to live their bodies and experience their bodies in the terms dictated by the dominant cultural regime and this process of internalisation of a particular cultural understanding of the body becomes the condition of social subjectivity, of consciousness, of any form of identity and motility in the social world. Furthermore, Freud describes a bodily ego, one which incorporates outside objects – it exists in a libidinal relationship with the outside world – libidinally writes space, place, objects, and so on. The body of such a subject clearly does not begin or end at the skin, the skin becomes one of the perceptive organs or surfaces of the body. In his discussion of prosthesis Freud notes the ever flexible boundaries of the body as lived by an embodied subject:

With every tool [man] is perfecting his own organs, whether motor or sensory, or is removing the limits to their functioning. Motor power places gigantic forces at his disposal..... By means of spectacles he corrects defects in the lens of his own eyes; by means of the microscope he overcomes the limits of visibility set by the structure of his retina... Man as it were, becomes a kind of prosthetic God. (Freud 1929:90)

The bodily ego is an imaginary body which functions not as a separate entity, an ethereal twin of the material body, but is part of the representation of any given body, part of the way it is lived, part of the way the embodied subject encounters and moves in the world. Thus, the world writes the body and consciousness at the same moment that the world is written through the body for the subject. In Freud's discussion of memory in his *Project for a Scientific Psychology* (1895), he presents a model whereby perception moves through the physical structures of the body into the psychical mode of consciousness and the unconscious. What such a model suggests is that not only is the world internalised via the body into a necessarily embodied consciousness, but the body is that which, through the processes of perception that engender consciousness, allows any understanding of the world in the first place. Except through the body there can be no understanding, action or encounter with anything, and except through this encounter there can be no consciousness, knowledge, embodiment.

Even within Freud's work there are contradictions and incoherent moments and indeed he never articulates a single theory of 'the body' or 'subjectivity', but what we do find scattered across his work is an understanding of the body as not merely a passive physical receiver of cultures' disciplinary representations of bodies nor host to a socially prescribed (gendered) identity. He offers a reading of the body as a fluid, movable entity – a constitutive site of a necessarily embodied subjectivity, that is, a consciousness which is written through the body and at the same time writes the body in complex and multiple ways. Further, as feminist interventions into psychoanalysis have demonstrated, this is an inherently sexed enterprise – sexually differentiated bodies are the locus of sexually differentiated subjects. Freud's understanding of the body at first glance would concur with post-humanist projects which see that corporeal changes precipitate or reflect subjective changes. However this represents a crude instrumental interpretation of the processes of embodiment. In Freud's formulations body and subject are mutually constituted within a sphere of power, knowledge, and culture; and any project of transformation would need to

innovative approach to its tools, with rhythm and meter bearing as much meaning as the words themselves. What is common to

address the complex interactions amongst these structures and practices rather than simply dissolve, remark or combine the material body and expect a corresponding shift in consciousness.

cyberbodies

If we insist on an irreducibly embodied subjectivity this obviously has consequences for thinking our engagement with cyberspace. Primarily, it suggests that if all encounters with and experiences in cyberspace are those of a social subject, which they must be, then they are necessarily bodily encounters. If this is the case then it is no surprise that those involved in the LambdaMoo 'incident' did feel that they had been raped, bodily assaulted. In the social space of the Moo the 'victims' were engaged not simply in mental activity while their bodies rested safe on the other side of the screen, they were acting and interacting as embodied subjects, experiencing events in ways which, though greatly removed from the experience of 'real 'rape and assault, nevertheless involved their bodies, marked and manipulated their bodies and did so without their consent.

If as feminists we wish to resist the logic of the binary, and we accept that drawing a distinction between mind and body, gender and body, identity and body, deprives us of any conceptual basis for thinking woman outside patriarchal representation, as well as the excessive and disruptive possibilities of bodies, we must insist that journey into cyberspace is as much a bodily journey as a mental one. This claim having been made, a whole raft of issues arise as to the mode of embodiment in cyberspace and the status of a body within that space. I cannot begin to detail these but I want to signal some of the questions and implications which come to the fore. Firstly, insisting on a necessarily embodied existence in cyberspace would seemingly refuse the notion of cyberspace as a space where swapping online genders offers any real challenge to entrenched representations of sex and sexual difference. Secondly, if this is the case we must then ask, how do the discourses of cyberspace and technologically mediated embodiment operate to fix the dominant concepts of sex, and do they simply mirror 'real culture' space? Thirdly, if it is an embodied subject which encounters Cyberspace how is the body articulated and represented in this space and place, how does it encounter objects? Is the relation between bodies and subjects altered or shifted over the course of this journey, is the body written in different ways? How does it encounter other bodies, is it a desiring body, can it die, feel pain, be transformed radically? How is the subject's experience of embodiment altered through the refiguring of the body in cyberspace?

In short, the development of sophisticated information technologies and electronically mediated environments and spaces, far from dispensing with the crude materiality of the body, insist on its complexity and mutability. Investigating the processes and experience of embodiment within these spaces, presents feminists with new challenges, not only in terms of shedding light on the social and cultural processes which shape the embodied social subject, but in finding in the mutations of a cyberbody new avenues for resistance to these and alternative modes of articulating a sexed subjectivity. The transformative possibilities of the move into electronic environments and increasingly intimate physical relationships with technological hardware are not located in the movements of transcendence of the physical body, be it through an uploaded consciousness, digital translation or the informatising of flesh, but in the proposal of other bodily possibilities which have long been repressed in order to maintain the centrality and supposed naturalness of the one body of humanist logocentrism.

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dance, poetry and a certain kind of cinematic practice, is the interrogation of the kinetic as/of language, as a means of re-

notes

1 William Gibson's 1984 novel *Neuromancer* is widely credited with coining the term 'cyberspace' and many of the associated defining characteristics particularly that of the 'consensual hallucination'.

2 See Stone (1991) (1992)

3 Prominent amongst theoretical discussions of science fiction cyberspace novels are Marge Peircy (1992) *He, She and It*, Bruce Sterling (1985) *Snowcrash* & Pat Cadigal (1991) *Synnners*. In these works disembodied consciousnesses in many instances exist in conjunction with a range of other embodiment options – ie avatars, cyborgs, simulations, as it does in Gibsons' work.

4 See N. Katherine Hayles (1996) (1993), Stone (1991) (1995), Grosz (1995), Balsamo (1996)

5 Elizabeth Grosz describes how the mind/body dualism has become correlated with a range of other binarisms which underpin western knowledge and subjectivity. 'The mind/body relation is frequently correlated with the distinctions between reason and passion, sense and sensibility, outside and inside, self and other, depth and surface, reality and appearance, mechanism and vitalism, transcendence and immanence, temporality and spatiality, psychology and physiology, form and matter, and so on.' (Grosz 1995:3)

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approaching the subject. Deren was a theorist too and wrote, as Giannetti describes it, on the differentiation between 'personal

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films' and 'commercial films'; "Like a lyric poem, personal films are 'vertical' investigations of a theme or situation. That

Gay McAuley

THE POLITICS OF DOCUMENTATION

Twenty five years ago the development of cheap and accessible video technology seemed likely to usher in a new age in theatre studies.[1] No longer would the discipline be so dependent on the written word and on techniques of analysis derived from the literate domain; with this tool, performance itself, rather than theatre history, could become the privileged object of study; new kinds of discourse about performance would become possible, to supplement or replace the evaluative, judgemental and personal response modes that have hitherto been the only options... etc., etc.

It can still be argued that theatre studies as a discipline is being transformed by the advent of video technology, just as ethnography has been transformed during the course of this century by the development of film, but it must be acknowledged that the transformation has been slow and is still a potentiality rather than reality. In this article I would like to address some ethical and political issues that arise from the increasing use of video in theatre studies and in theatre practice,

is, the filmmaker is not concerned so much with what's happening as with what a situation feels like or what it

issues which need to be addressed with some urgency if video is going to fulfil its potential as a tool at the service of theatre practitioners and scholars, rather than become yet another site of commercial exploitation and control.

It has to be stated at the outset that video recording live theatre is a very difficult enterprise, there is no easy or obvious way to do it, results are frequently disappointing to the theatre practitioners and the video makers and, indeed, also to the academics who initiated the venture. Many theatre practitioners cannot see the point of doing it at all; they argue, quite rightly that theatre is of necessity ephemeral, it is multi-focused and it involves the live presence of both performers and spectators and that, therefore, it is the polar opposite of the video recording which must necessarily destroy or distort these crucial dimensions of the theatre experience. The fact that theatre has been massively displaced by television as a purveyor of drama, that television has developed its own conventions, its own dramatic forms, is another complicating factor. A recording judged successful by videomakers may be one which has effaced the theatrical reality so completely that the performance can be experienced in televisual terms.

Theatre practitioners are notoriously heedless about what Eugenio Barba called their "Eftermaele" - the traces of their work they leave behind for those who come after[2] - and in the case of video recording, this general lack of concern is compounded by ambivalence to the recording enterprise itself. The academic attempting to make archival recordings of live performance is thus likely to be caught between videomakers whose imperative is to make good video and theatre practitioners who are either hostile to, or uninterested in, the problems of transposing stage to screen.

Anyone seeking to record performance for the purposes of research and study, as opposed to publicity and promotion, will probably come up against one or more of the following situations. Outright hostility, polite refusal of permission, grudging acceptance but refusal to assist the recording in any way (one camera only permitted on one single occasion, the camera to be placed in an unobtrusive position, very little time to set up, no concessions for members of the production team who need to see the production several times before recording), no interest in the resulting recording, severe restrictions on the use that can be made of the recording, protracted negotiations with unions and lawyers in order to establish complex contracts, requirement to pay a loading to all performers and to the theatre's technical staff. There are, of course, also theatre artists who are fascinated by video and other electronic gadgetry but this

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means."[16] The 'verticality' interrupts the 'horizontal' flow of the film.

16 Ibid p.347

is no guarantee that the documentation enterprise will proceed without complication. With such practitioners, the recording tends to get incorporated into the performance and what emerges is new and enhanced forms of performance expression, rather than documentation of the live performance.

Many theatre companies and groups make their own video recordings for a variety of purposes, practical and promotional. Directors and actors who are convinced that the theatrical reality is unrecordable and that any recording is a distortion and a diminution are nevertheless prepared to have a "truth tape" made (single fixed camera, wide angle shot, unedited), and it is evident that these "truth tapes" do provide useful information about blocking, the organisation of the stage space, and even about such intangibles as rhythm. Recordings are also made for promotional purposes, to give festival directors, international producers and other influential people an idea of the "product" they are being urged to buy or hire. But these recordings are by no means readily available to researchers, nor are they being carefully catalogued and preserved in archives or special collections. Students and others requesting permission to view in-house video recordings may be refused access (I have even heard of the case of a sound designer refused permission to watch a video recording of a production on which he had designed the sound); an academic researcher may be permitted to watch a video recording if facilities exist at the theatre, but not borrow it to watch at home, and certainly not to copy even a brief extract for use in research or teaching. Although there is an element of the arbitrary here (for instance, an individual academic with good personal contacts at a given theatre may get permission to borrow a tape while others are refused), these constraints are not wilfully imposed by the theatre companies but usually result from the contract negotiated by the actors' unions whereby the companies are permitted to make any recording at all.

Academics studying a work of literature can read the text in a library, purchase a copy in a bookshop (if it is still in print), procure a photocopy or microfilm if it is not. They can quote from it extensively in lectures and in the presentation of research papers at conferences, even in print in the context of their own critical analyses (with suitable acknowledgement). All this is simply to say that our society has institutionalised the use of print, but as soon as one becomes involved with video, one has to deal with a whole set of problems concerning copyright, ownership, intellectual property and rights - legal, monetary and moral. Video, which in theory opens up the possibility for performance to become as much the object of study as written text, in practice creates more

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Part of the project of dance is the development and

barriers between artists and academics. With video, the discourse surrounding the work of art and one's own critical, analytical and scholarly work becomes overshadowed by notions of rights and ownership and the dominant discourse is that of the law. Yet I would argue that the discourse of the law is peculiarly unsuited to deal with the reality of creative practice, and with the relationship between artists and scholars who study the work of those artists.

Mudrooroo Narogin's book *Writing from the Fringe* has a note on the flyleaf concerning the cover illustration. It says in part "This is a Dhuwa painting belonging to the artist's mother's tribe, painted by Terry Dhurritjini Yumbulul of the Warrimiri tribe of Wessell and English Company Islands, NT"[3]. How can the law, based as it is on 18th century English notions of property and the individual, sort out the complexities of "ownership" and "creativity" here? It is no surprise that permission to reproduce the painting was given, not by the artist or his mother or their tribes, but by the "Emerald Hill Gallery, Melbourne". The situation in theatre is surely far more akin to the Dhuwa painting than it is to any notion of individual authorship. Who can say exactly where ideas come from during the rehearsal process? The collaborative input of actors, designers, director, writer is complex enough, but then there is the intertextuality created by the play's performance history and by the cultural moment in which the production occurs. Contracts imposed by companies, impresarios and film studios have a simplistic and reductionist view of authorship, and these legal fictions certainly lead to injustice in the allocation of royalties but, even more serious, if not contested they can distort our understanding of the creative process and even the way in which practitioners work together.

A few years ago, the Centre for Performance Studies was given permission by a number of companies to make archival recordings of their productions, but it all came to a stop when Actors Equity demanded payment of $100 per actor, per recording. Equity and the actors it represented would, doubtless, claim that they were protecting the performers' rights and indeed, given the scandalously low average incomes of actors in this country, it is eminently reasonable to require payment. However, it has to be acknowledged that the requirement put a stop to an activity that was potentially of great value to actors, both here and now and in the future. Archival recordings, properly done, are not only a means of preserving a record of work that would otherwise leave little trace, they foreground the work of the performer and the *mise en scène*, and thus go some way to countering the dominance of the written text in the historical record and shifting the emphasis from play to performance. In seeing the university as a

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interrogation of gesture. What could this bring to film? If the body is, as Deleuze says, "that which (thought) plunges into or

well funded institution and our request as an opportunity to cream off a little of this wealth for their struggling members, Equity actually prevented us from continuing with our research into how best to record performance. So whose interests have been served, whose rights have been protected?

Without special funding or a more collaborative approach from theatre artists, it is clear that such archival recordings as we had begun to make, are not possible. To date, no funding body or cultural foundation has taken up the challenge to establish an archive of video recordings of theatrical performance in Australia. Some state theatre companies have begun to make "truth tape" recordings of their productions but few employ a librarian to catalogue and maintain the collection, and none have yet established their own video archive, with access for bona fide theatre researchers.

It is now only organisations like SBS or the ABC who can offer a trade-off of publicity for the show, who are still able to engage in regular recording of theatrical performance. However, they are also far more likely to distort the theatrical event by transforming it into something televisual. It would be churlish to attack the arts programmes, when they are the only place live theatre is even mentioned on television in this country, but it is significant that television stations have spent millions and millions of dollars devising and developing ways to televise sporting events but virtually nothing on filming live theatre. It does not seem that the producers and presenters of arts programmes on television are really interested in the issue of how to document theatre so that its theatricality remains foregrounded, nor are the owners of television stations concerned to ensure that their recordings are catalogued, preserved and rendered accessible to researchers. Material that is not used in a programme (performance recordings, interviews with artists) is routinely destroyed after a couple of weeks, which makes academics gasp with horror but is quite understandable from the point of view of the TV producers. Their interests are bound up with the ratings of their shows and with what makes good television, and not at all with the long term questions a theatre specialist would see as central to the task of archival recording.

There has been a good deal of discussion of the rights of performers, directors and writers in respect of recorded material, although it seems that, to date, the lawyers and unions have not been able to achieve outcomes that completely satisfy any of the artists involved. The question needs to be raised as to whether there are any other rights that need to be factored into the discussion. For instance, do either the makers or the users of video recordings have any rights? Video artists who

must plunge into, in order to reach the unthought, that is life,"[17] the skilled body of the dancer is a significant new tool

17 Deleuze, *Cinema 2*, p.189

have specialised in filming theatrical performance develop a particular expertise and a particular sensitivity to the complexities of the live performance. It is surely legitimate for such artists to wish to have their work in this domain seen and preserved as a totality, yet in the absence of major archival collections, this is unlikely to occur.

What about the end users of documentary recordings? Do they have any rights at all? I am concerned here particularly with academic users, although it is worth pointing out that when the Lincoln Center did a survey of the users of its Theatre on Film and Tape collection in 1988-9, it found that a substantial majority were other actors. It is perhaps in respect of academic users that the restrictions on access and copying become most pertinent. There is a creative dimension to the academic task of analysis, interpretation and theorising and it seems to me that researchers engaged in performance analysis, and working to develop methods that will not marginalise the live performance or efface it by reliance on more readily available filmic and televisual adaptations, are investing substantially in the work. This is not something that is parasitic upon the artists' work (as was suggested in our discussions with Equity) but it is part of the theatre process, part of the way theatrical performance can get enmeshed in the culture, part of the artists' "Eftermaele". Lawyers, unions and agents who encourage actors to see theatre studies academics and students as exploiting them and their work are doing a disservice to both actors and academics. When performance is conceptualised as a commodity and the only response to it is measured in terms of dollars, it is difficult to find ways of dealing fairly with either the creative process or with the academics' work of analysis.

In this paper I have so far been dealing with difficulties involved in getting permission to record live performance and in gaining access to performance recordings that have already been made. There is also a great deal to be said about the way video recordings are used by academics in research and in teaching and, while this really requires another paper, I would like to touch on three aspects of our current practices that are particularly disturbing. The amount of video recording used in research and teaching and in the presentation of research findings has increased enormously over the past 10-15 years, and yet it is still the case that at both local and international conferences the majority of people introducing video into a scholarly presentation begin by apologising for the poor quality of the recording. This means that we are still putting up with bad lighting, bad sound, cameras placed unobtrusively but not where they can get the best picture, etc. The fact is that priority is rarely given to making high

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for filmmakers. A highly-developed approach to the language of the body, (and not just language in the empirical sense but

quality recordings, and neither the research funding bodies nor the academics applying for grants seem prepared to put the necessary resources into making good quality recordings. From this point of view there is little distinction between academics and the theatre companies themselves.

Secondly, people showing video of performance rarely provide information concerning the relationship between the video makers and the production, nor concerning the conditions of production, yet such factors can have a vital bearing on the information conveyed. Viewers need to know at whose behest the recording was made, whether it was made by the theatre company (and for what purpose) or by a television company or by an academic for research purposes, and whether the actors and director were involved in discussions as to the method of recording. They also need some information concerning the principles according to which decisions concerning editing (if any), camera placement, movement, and shot composition have been made. It sometimes seems that there is a kind of naive belief in the truth value of a recording rather than open acknowledgement that recording is necessarily partial, necessarily an interpretation, and that viewers may need to be alerted to these factors if they are to make best use of the video.

A third area of concern involves the way the showing of a piece of video in either a research presentation or in teaching is normally embedded in an oral discourse. Viewers see a fragment of a recording, a fragment of a production, and furthermore their perception of this fragment is heavily constrained by the discourse in which it is embedded. There are important ethical questions involved here which need to be addressed if theatre practitioners are to feel confident about permitting their work to be recorded.

There is clearly a great deal of work to be done, both in terms of exploring how best to record live performance and in terms of relations between theatre practitioners and the makers and users of video recordings. I should like to conclude with some practical suggestions for action that we can and should be taking if we are to retrieve the situation and enable video to fulfil its potential both for theatre artists and for students and scholars.

In the first place, the documentation of performance needs to be given a much higher priority by theatre practitioners themselves, and by theatre studies academics, and a vital step has to be to persuade the MEAA to introduce much more realistic contracts. What is required is a contract that, while protecting performers against exploitation, does in fact recognise the value to them of video recording and the need for research and development in the area. A contract that is less concerned with restricting access and extracting fees and loadings, and more

also a heterogeneous, unthinking body language), offers film a subject that is capable of new excesses and subtleties, both

concerned with facilitating research and exploration. Recognition that we do not yet know how to record theatre and that collaboration between artists and researchers is required so that what does get recorded, what does come to constitute the "Eftermaele" of this generation's work, will not simply be televisually appealing images that have effectively effaced the theatrical reality they purport to record.

It is also high time that the Australia Council or some other cultural funding body took up the idea of a national video archive of stage performance. There is encouraging news in the April edition of *Artforce*, the newsletter of the Australia Council, in relation to dance not theatre. It is reported that the Dance Fund has provided two years of support to a partnership between the National Sound and Film Archive, the National Library of Australia and Ausdance to "see the collection and preservation of video recordings of Australian dance works". It is evident that such an undertaking is best achieved through partnership arrangements and, in fact, cannot occur without collaboration between practitioners, their companies, funding bodies and a national institution like a library. There is no reason, however, why the Theatre Fund should not immediately require all companies receiving grants to make a video recording of each production so funded and to deposit a copy of that recording with the Australia Council as a condition of receiving the grant.

Last year, after failing to persuade either the Australia Council or the Australia Foundation for Culture and the Humanities to put funding into establishing a national video archive of theatrical performance, I used a small University of Sydney research grant to initiate a move to collect information from companies, libraries, universities and performing arts museums all around the country as to their holdings of video recordings of stage performance, and policies on access and acquisition. This is being run with the assistance of ITI and it is envisaged that the information will be available on an electronic database through the ITI office. The National Sound and Film Archive has agreed in principle to house a collection of a small number of recordings to be made each year, but these initiatives all presume that we know how to make the transfer from real space and real time to recorded image[4].

Given that this is, in fact, far from self evident, the universities have an important role to play in developing, testing and discussing methods and techniques. I would like university authorities and research funding bodies to recognise that the documentation of performance is a legitimate research activity, and I think that departments that engage in performance activities should develop policies on

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within a classic fiction related form as a trajectory outwards, or within the avant-garde field of the short film format with its

documentation and recording and encourage much more discussion of methods and outcomes. ADSA could help here by introducing a regular segment at the annual conference dedicated to showing and reviewing performance documentation. I am thinking of the annual festival of ethnographic film that is held in Paris, where it is not so much the ethnographic content that is the focus but the methodology and the way that film has been used in the service of a specific intellectual discipline. Maybe ADSA could organise a festival of theatre documentation so that we could compare approaches, share ideas and maybe avoid pitfalls. I certainly think that theatre studies departments should be running courses on recording and documentation and should see this as integral to the skills they are teaching students of theatre.

We live in the video age and, as Walter Benjamin pointed out in 1936, the possibility of mechanical reproduction inevitably transforms our experience of that which can now be reproduced.[5] The big question confronting theatre artists and theatre scholars is whether video is to be an agent of commodification and control or whether it can be used to enhance our experience and appreciation of live performance.

NOTES

1 This article is based on a paper read at the Australasian Drama Studies Association annual conference, held at Monash University in July 1997.

2 Eugenio Barba, "Eftermaele - that which will be said afterwards", *The Drama Review*, Summer 1992, pp.77-79.

3 Mudrooroo Narogin, *Writings from the Fringe*, Melbourne, Hyland House, 1990, p.vi.

4 For more detail concerning experiments carried out in this field, see Gay McAuley, "The video documentation of theatrical performance", *New Theatre Quarterly*, No. 38, May 1994, pp.183-194.

5 Walter Benjamin, "The work of art in the age of mechanical reproduction" (1936, translated Harry Zohn, in *Illuminations*, New York, Schocken Books, 1968, pp.217-251.

historical suppression of dialogue. What does film offer to dance? An advanced and historical semiotic system regarding

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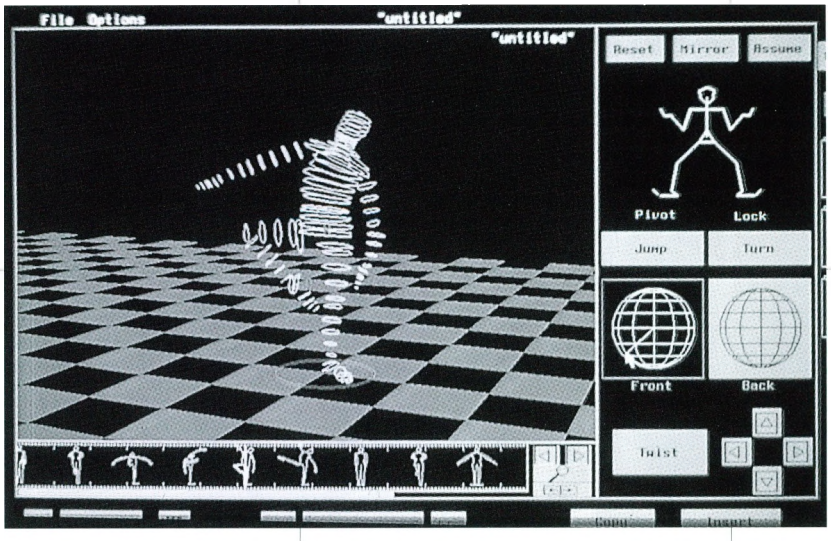
Thecla Schiphorst

BODY NOISE: SUBTEXTS OF COMPUTERS AND DANCE*



Screen shot of Life Forms choreographic software originated by Tom Calvert

DISENTANGLING OUR BODY'S (OF) KNOWLEDGE

Today, as we find ourselves situated within the Technological Society it is becoming increasingly difficult to disentangle the concept and experience of our own bodies from the dominance of the Technological Ethos.[1] It has become so popular to speak of disembodiment, nodding knowingly as we do so. Could it be possible to speak with equal resilience about the technology of embodiment? We have created our myth and now live so deeply within it,

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the treatment of the active body and along with this, a whole new set of allusions.

constructing a culture of the princess and the pea, sleeping for centuries in a dream of uploading our consciousness into the machine-mind. It would be best if we just stopped waiting for that damn prince, and simply pinched ourselves a few times. At least that would get the blood flowing. It seems to me that there are 'bodies of knowledge'; that have been forgotten, or perhaps simply missplaced?

In my own practice of dance, it is the language of embodiment which has provided the deepest technical knowledge and experience that I possess. Given that I have worked for years as a computer programmer and systems designer, and that I produce art and computer systems that are highly technical in both conception and implementation, this is not an insignificant statement. There must be a way for the language which is passed on in practices such as dance and somatics, to invoke a response and a re-production, within the realm of the technological society.

Defining Ourselves

There are two seemingly disparate technical languages suggested by the words, computer and dance. The Thesaurus on my word processor provides me with the following synonyms for the word computer: device, instrument, implement, mechanism and machine. And for the word dance?shuffle, caper, hop, bobble and cavort. Bobble? I thought that was a tasteless ornament. By now, edging ever more closely to the end of the millennium, it is still painfully clear that our language not only values materiality over physical experience, but privileges its own definition of the technical in such a way as to eliminate physical experience from its language.

When we view body intelligence as a subcategory of technological production, the experience and knowledge of the body becomes determined, informed and molded by the Technological Ethos. What would happen if we inverted this viewpoint. Could it be possible that these same technological processes can be seen as subcategories of physical experience and consciousness, informed and transformed by kinesthesia, embodiment, and physical memory? Our cultural resistance to this approach uncovers a two-folded dilemma. On the one hand as Jeanne Randolph so aptly suggests, 'the problem now is that technology's perception of culture is becoming our only perception of culture. Culture is losing the perception of itself that is apart from technology, and becoming unable to offer its own perception of technology, to interact with it, to influence its development and qualify society's assimilation of technological processes'[2], And, on the other hand our ability to read our own physical experiences is culturally deficient. Elizabeth Behnke, a well known somatics practitioner says: 'there is a widespread impoverishment of the experience of our own body in our culture. As numerous writers have indicated, the ability of many people in Western society to experience their own bodily feelings and sensations is profoundly impaired'.[3] The valuation of the experience of the body is shuffled outside the realm of serious technical consideration, a position it has held for centuries.

In Mahalya Middlemist and Sue-ellen Kohler's new collaborative work, *Premonitions*,[18] three screens with three

18 *Premonitions*, The Performance Space, Sydney, Oct 1997

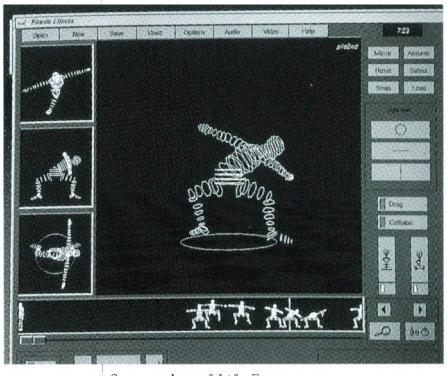
IMPLICATED IDEOLOGIES

The co-existence of these cultural norms opens the way for the emergence of the neo-technocult behavior of men like R.U. Sirius, serving as techno-pimps, prostituting our notions of identity and possibility through a process of mystification of the techno-elite. R.U. 'Seriously' claims: 'we're becoming disembodied.... creatures of media and communications technology. That's just an inevitable process that you can't really judge as good or bad. We're somehow just *meant* [my emphasis] to create this species brain and nervous system made of information and communications technology. All you can do is try and guide its development and make it interesting .... sexy and fun ....sex is the only good excuse for embodiment. People will try to get as much of it as they can before the body goes out of fashion...'.[4]

Let us temporarily overlook the fact that this hardly constitutes rigorous thinking; it is a nonetheless a brilliant example of the age-old his-teria suggesting body as Other, body as Abject, body as Shadow, and now in our post-industrial age, body as Commodity. Suggesting, not only that body is a fashion item but also that it is possible for the body to go out of fashion, while our minds (and presumably our consciousness) evolve (somehow somewhat vaguely) into communications technology. For the time being, let us not try to imagine the up-load time. Simon Penny has noted that this mind/body dualism 'is a strong continuous thread in western philosophy, from Plato, through Christian theology, to Descartes and beyond'.[5] Despite its hard sell as a 'new look', R.U's message is achingly old.

BODIES OF WORK

Compensating for this trend in our era of technological ethos is a growing body of work which counteracts the inclination to eliminate the dimensions of bodily involvement and attention. I recall a CNN reporter, covering Merce Cunningham's use of the choreographic software Life Forms, declaring 'and now technology is finally coming to the rescue of choreographers'. Antithetical to this notion, I would like to suggest that the knowledge of the body could radicalize and perhaps even 'come to the rescue' of current technological practice and implementation. What field has more counter knowledge and possibility of subverting

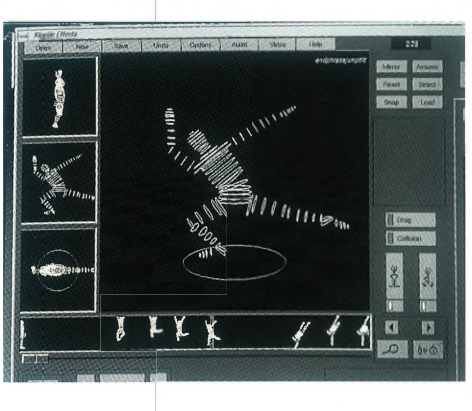


Screen shot of Life Forms choreographic software

Brannigan continued

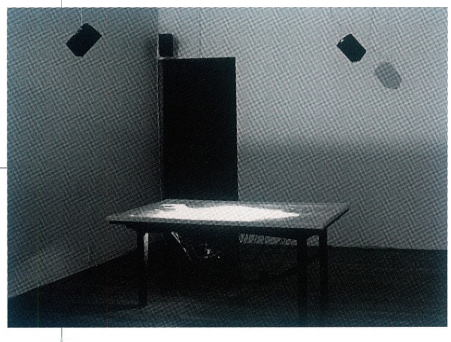
versions of the same dance sequence performed by Kohler surround the 'live' Kohler. The screen images contain

and infiltrating the ideology of the Technologically Correct? Dance training and body knowledge includes notions of imaging the 'extraordinary' body, experiencing and knowing one's physical self in non-linguistic ways, linking or connecting relationships between one's own parts (limbs, sensory systems, proprioceptive systems, mind, imagination) to practice and rehearse our own highly technical physical body. My own interest lies in the recognition that I am dealing with two highly technical systems, that of the human body on the one hand, and that of computer technology on the other hand. And let us not forget which of the two is infinitely more technically complex.



Screen shot of Life Forms choreographic software

THEORY IN PRACTICE; MAPPING THE BODY



Amongst the earlier software interfaces designed from the perspective of body knowledge is the choreographic software Life Forms, originated by Dr. Tom Calvert of Simon Fraser University, and now distributed by Credo Multimedia, its development still incorporates working groups of movement literate designers and testers. Among other developmental interfaces that I have been involved with is the Virtual Body Project, developed in partnership with Sang Mah, which utilizes motion capture; gesture is sampled from the physical world and metaphorically treated through bodymapping techniques based on choreographic strategies.

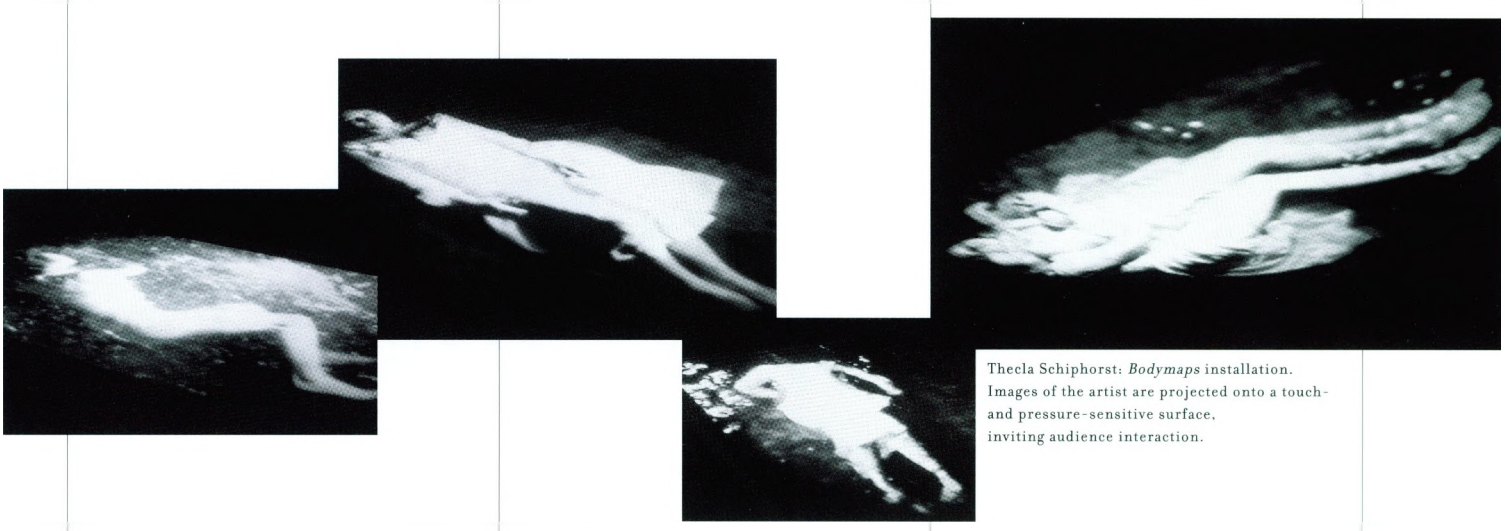
A number of artists are working with system and interface design based on consciousness or the attention of physical awareness. Of particular note is the work of Canadian artist Char Davies whose VR piece, *Osmose* utilizes an interface based on breath and balance to navigate through a virtual environment. Kirk Woolford, probably most well known for his interactive work with Cybersex has continued to explore interfaces which utilize the subtleties of physical perception to trigger interactive responses. Catherine Richard's historical work in virtual reality questions how the body

left and below: Thecla Schiphorst: *Bodymaps* installation
Touch- and pressure-sensitive interactive surface

variations of dance 'genre' and the consequent meaning that dance knowledge brings to the piece. But there is also the

is read, the nature of the body as data source and the redesigning of female subjectives in relation to body construction. Diane Gromala, Marcos Novak and Yacov Sharir created a Virtual Reality piece using a head mounted display and data glove at the Banff Centre for the Arts, entitled *Dancing with the Virtual Dervish* in which the participant navigates within the body's space. Bill Seamen's *Passage Sets: One Pulls Pivots At The Tip Of The Tongue*, is an interactive installation which explores sensuality in cyberspace. The movement of dancing bodies, along with constructed and deconstructed textual phrases creates a poetic network under the interactive influence of the user. In Paul Sermon's *Telematic Dreaming*, the bed is used as a telepresent projection surface in which two 'users' exchange their tactile senses and "touch each other's image by replacing their hands with their eyes".

My own latest interactive art work, *Bodymaps: artifacts of touch*, employs a table surface covered in white velvet. The specially designed sensor surface is embedded with grids of Electromagnetic Field Sensors and Force Sensitive Resistor Sensors which can detect touch, pressure and the amount of force applied to the surface. Together these sensors lie beneath a white velvet surface upon which is projected images of my own body. The surface yearns for contact and touch. Its rule base is complex and subtle, impossible to decode. Its effect is disturbing, erotic, sensual and subjective. The intention of the work is to subvert the visual/objective relationship between the object and the eye, between click and drag, between analysis and power, to create a relationship between participant and technology that transgresses rules of ownership and objectivity and begs questions of experience, power, and being. This work invites relationship through an experience grounded in proprioceptive knowledge, skin sense feeling, listening through touching, seeing through hearing, together integrated through attention.



Thecla Schiphorst: *Bodymaps* installation. Images of the artist are projected onto a touch- and pressure-sensitive surface, inviting audience interaction.

Brannigan continued

grainy quality of the film and the static, frontal, full-body, single shot of Kohler dancing which have filmic implications.

Perhaps this growing body of work can inject the much needed inverted viewpoint which counteracts the narcissism of the mind/body split that has plagued western culture since the time of Plato. As Sandy Stone says, "it all ultimately comes back to the physical body, these endless ramifications of virtual communities, come back to help, to assist, to increase the potential of, or to make better the physical body".[6] Computer technology, computer graphics and interface design need to be radicalized. Shall we bobble?

CITATIONS

1 Technological Ethos, a term coined by Jeanne Randolph in 'Technology as Metaphor', *Psychoanalysis & Synchronized Swimming and other writings on art*, Toronto, YYZ Books, 1991

2 Jeanne Randolph, 'Influencing Machines: The Relationship between Art & Technology', *Psychoanalysis & Synchronized Swimming and other writings on art*, Toronto, YYZ Books, 1991

3 Elizabeth Behnke 'Matching', *Somatics*, Spring/Summer 1988. pp 24-32

4 R.U.Sirius, 'R.U. Sirius Interview', from, 'Part 2: The Consequences of Untruth' *Clicking In: Hot Links To a Digital Culture*, Edited by Lynn Hershman Leeson, Bay Press, Seattle, 1996

5 Simon Penny, 'Artistic Practice, Body Knowledge, and the Engineering World View', Ars Electronica Festival 96, *Memesis*, Springer Wein New York, 1996

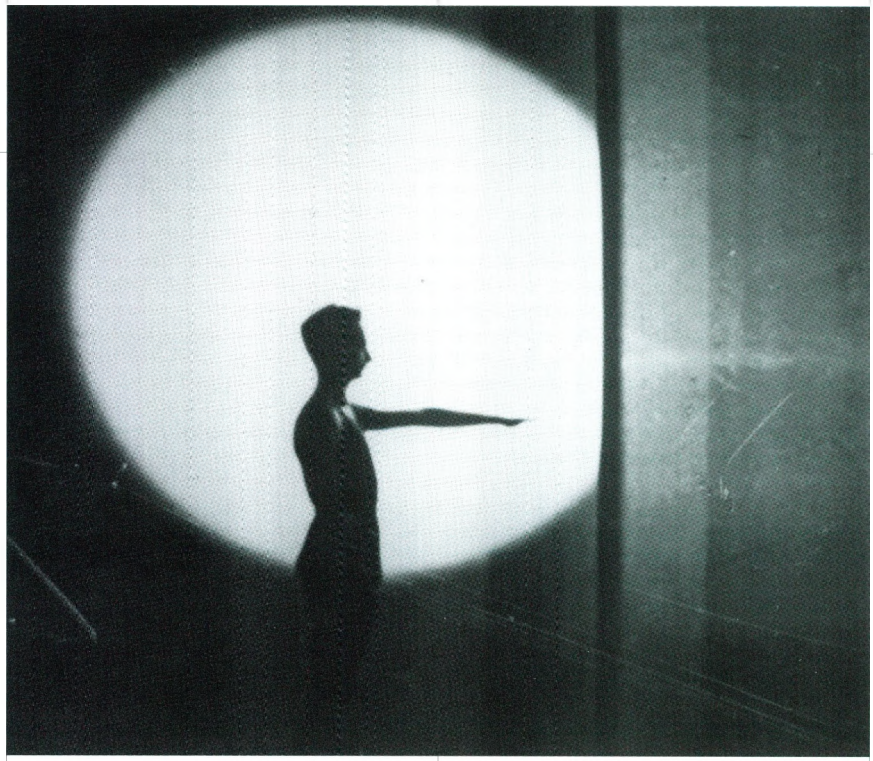
6 Sandy Stone, 'Sandy Stone: Interview', from, 'Part 3: Colonizing Virtual Space' *Clicking In: Hot Links To a Digital Culture*, Edited by Lynn Hershman Leeson, Bay Press, Seattle, 1996

These stylistics connote scientific documentation, reminiscent of Muybridge, and dance as spectacle as in the vaudevillean use

This paper was first presented at the 1996 Green Mill Conference *Is Technology the Future for Dance?* Sally Jane Norman provides 'a glimpse of how technology and live spectacle have constantly interworked, calling on illustrations ranging from long bygone days to more recent twentieth-century experiments.'

Sally Jane Norman

Technology in the Performing Arts: Ways of Doing Ways of Seeing



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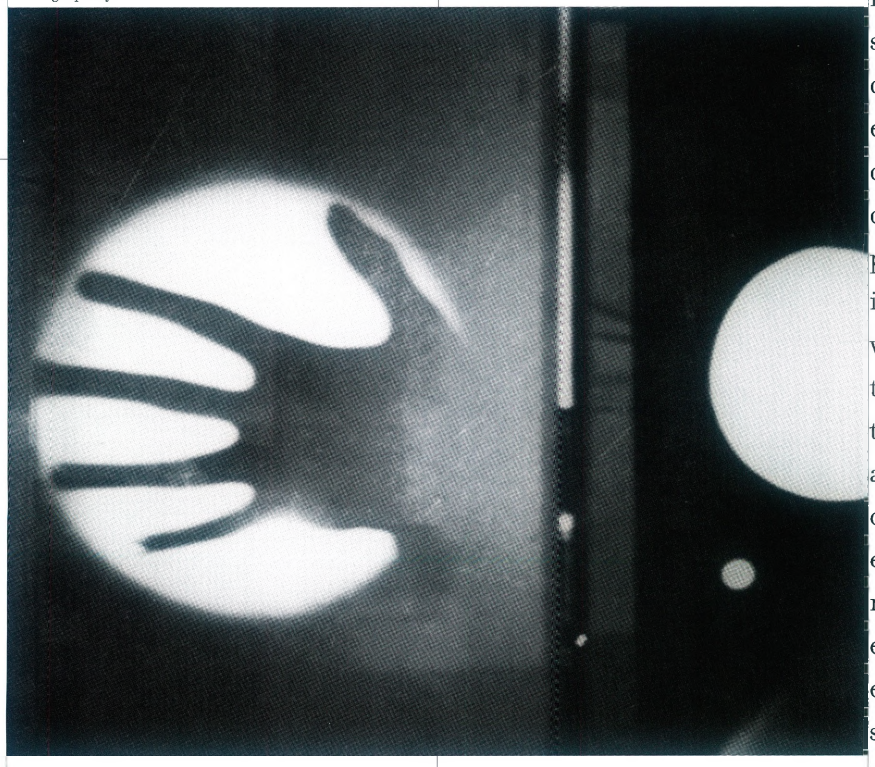
of the filmed dancer, with the duration of the shot and privileging of the figure insisting upon the significance of that

opposite and below
Light Play, Oskar Schlemmer, 1926.
Photograph by Ruth Horos or Erich Consmüller.



Current definitions of technology have drifted away from its etymological origins as a derivative of the Greek word *techne*, meaning art or artifice. In today's language with its progressist overtones, technology tends to refer to applied sciences and technical methods, specialised nomenclature, and characteristic skills. It can also be more broadly construed as the means a people employs to provide itself with the objects of material culture. Objects of material culture are obviously purveyors of incalculable immaterial ramifications: the wheel, the harness, the engine and the rocket are just a few artefacts that have revolutionised mankind at all levels. They have modified our projection into the environment and extended the range of our gestures and physical energy, thereby altering experience, ideas and ideals of space and time.

figure's behaviour. In combination with the 'real' Kohler, the grainy screen images are like spectres from the past, locked

Insofar as art fulfills a revelatory mission, making manifest otherwise unimagined forms of existence, it may serve a technological bent in portending future culture. Countless forms and works of art convey impossible, supernatural, utopian visions, and these symbolic attempts to override constraints of the physical world have often prefigured ways of being eventually made feasible by technology. The dividing line between phenomenological experience and concepts can appear thin at best of times, and particularly flimsy when it comes to such an instrumental domain as technology.

Technological processes and systems develop and take root as a function of cultural context It is interesting to see how technologies often exist in a 'silent' form before they are actually recognised for their utilitarian value. The ancient Chinese apparently knew about steam power, but did not develop it to act on and master their living space. The Aztecs wielded beautifully wrought, well-rounded shields, but ignored the wheel and transported everything on their own backs. Heron of Alexandria developed extraordinary pneumatic automata, and Archytas of Tarento even built a dove-shaped aerostat, but these were essentially used as puppets and objects of entertainment. Conceptually, we are not always ready to grasp sometimes formidable utilitarian implications of familiar devices. We must be able to discern their technological implications for them to effectively function as technology, and objects may be around for some time before this happens. Hence, while the inception of devices that eventually prove to function as and be identified as technology may result from utilitarian drive, this is not necessarily so. Closer scrutiny of how we define technology is thus called for: to equate it with objects would appear simplistic, since ultimately technological artefacts can be forged over long periods by persons oblivious to their latent usefulness.

Technology therefore seems to go beyond the realm of the tangible, to involve immaterial criteria such as purpose and intent. Its very existence is as much predicated upon revelation (recognition of a device's functionality) as upon physical attributes. The revelations whereby technology becomes effective as such are powerful moments in civilisation, analogous to the 'paradigm shifts' described by Thomas Kuhn in *The Structure of Scientific Revolutions*: at certain times, people are ready to cope with paradigm shifts and readily adopt a new mind-set, whereas at other moments they will stubbornly grapple with and bend over backwards to accommodate unsatisfactory concepts. Moreover, what we call new concepts and new culture frequently boils down to extant or momentarily obsolete concepts and culture viewed under a different light (Werner Heisenberg's *Physics and Philosophy* begins with atomic theory as formulated by Democritus, strikingly pertinent in the quantum mechanics context). This is one of many reasons knowledge of history seems so important: familiarity with culture of the past gives us much-needed perspective in a society entangled in its elusive but ever-urgent present. Furthermore, if past culture is embraced with sufficient breadth of vision, it can shed valuable light on our understanding of the future.

The performing arts have traditionally acted as a vital arena for revelation, dream, and anticipation, a place where we can exteriorise what Jeanne Randolph[1] has called our 'yearning for destabilisation, and for deranging precedents' (materialists would describe this yearning as constituting part of our inbuilt evolutionary and survival mechanisms). The intrinsically *in vivo* processes of live spectacle have repeatedly functioned as prescient

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into endless repetitions of the same phrase.

models for sounding the viability of untapped modes of existence. In Western theatre, actors suspended from cranes were flown into the scene as *dei ex machina* for Euripides' tragedies a couple of thousand years before aviators 'conquered' the sky. Multiple, transformable, physically incompatible spaces have likewise been represented on stage for eons, albeit rather clumsily compared with today's infinitely malleable electronic slices of life. Those who brag about the ubiquity of telepresence, which reconciles otherwise impossible spaces and experiences, forget the geographically distant sites taken in at a single glance by Sophocles's Preceptor in *Electra* (he successively points out Argos, Lycia, Hera's temple, Mycenae, and the Peloponnesian palace). Man's imagination endowed him with wings and superhuman powers of sight millenaries before the invention of aircraft and satellite views.

Practical and conceptual integration of technology

The impact of technology on the performing arts can be roughly described as twofold: live representation may practically implement technological means, and live art works may be conceptually catalysed and permeated by insight derived from technology. This perhaps sounds a bit truistic, but I think that art-technology links can only really be grasped if this dual impact is constantly borne in mind. Technology involves ways of seeing as much as ways of doing.

To take a historical example, elaborately choreographed floor patterns traced by court ballet dancers viewed from galleries overlooking royal reception halls testified to the cosmic, political and aesthetic order upheld in seventeenth-century France. These harmonious living geometries were just as deeply wrought by, and expressive of, prevailing ideology (including scientific and technological visions), as were the stage transformations engineered by Tirelli's machines at the same period.

More recently, Oskar Schlemmer's theatre experimentation during his 1920s Bauhaus years was strongly and avowedly marked by technological preoccupations. Schlemmer's theorising on transformation of the human body via prosthetics and accoutrements designed to let us live in non-natural spaces (extensions allowing us to evolve underwater or in space) subtends his analysis of 'spatial-plastic' costumes which condition the dancer's movements. His reflection on organically expressed versus mathematically imposed spaces entails notions of interplay and reciprocity between the body and surrounding space that were a pivotal feature of early twentieth-century scientific thinking, and that are now proving central to debate on interactive virtual installations, characterised on the one hand by highly 'organic' works like the *MindSet* electro-encephalogram-generated environment (devised by the Aqua Thought Foundation in California),[2] and on the other hand by abstract geometric grid-type spaces for virtual walkthroughs and ergonomics investigations. In-depth study of Schlemmer's work reveals a powerful, intimate, poetically formulated blend of technology and aesthetics. Despite the fact that he was working with fairly rustic materials – cardboard and string and bodies – he is at least as important in the history of art and technology as his contemporary Erwin Piscator, well equipped with revolving, partitioned,

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Cinematographic effects have become common in dance

multi-tiered stages, and multiple cinematographic and slide projections for his Berlin theatre production.

Explicit incorporation of technology in stagecraft, and implicit taking into account of technological concepts, are of course not mutually exclusive. They can and often do coexist. Furthermore, the risk of creating sterile works bereft of an artistic project exists in both cases: depiction of technological notions through pedantic analogies is just as artless as whizzbang equipment demonstrations. It is especially necessary during periods such as ours, smitten by techno-euphoria, to be able to differentiate between appropriation of new tools or concepts to render creative visions, and unabashed opportunism of quack artists who simply showcase the latest technical gadgets. The latter are unfortunately an eternal and undying race: Brunelleschi's ingenious apparitions for fifteenth-century Florentine mysteries drew throngs of imitators devoid of artistic sense; Nicola Sabbatini's theatre technology treatise (*Practica di fabriccar scene e macchine ne' teatri*, 1638) was a precious special effects manual for ungifted directors, like modern software breakthroughs which save uninspired film-makers.

Shadows and mirrors to generate other selves

A major danger that arises when the interworkings of art and technology are too narrowly viewed is that of loss of historical perspective, and consequent amputation of very useful and potent cultural references. Pretending that art and technology are embarked on a brand new, unprecedented partnership severely compromises our understanding of what is in fact a human constant, namely use of artistic creation to foster visions of new modes of existence. This problem of cultural amnesia is flagrant today, where inflationist terminology has created a smokescreen around virtual reality, mystifying the actual technology, clouding the real issues, and preventing critical distance. It is as if certain cyber-pioneers feared that any evocation of the past might undermine their leading-edge prowess, even through the most defensive amongst them are just jumping onto a sophisticated bandwagon. Yet the declension of various degrees of corporeal presence, authorised by VR technology, is something that has steadily fuelled man's imagination and traversed his art.

Over four thousand years ago, Hathoric worshippers of the ancient Egyptian empire performed rites where they brandished in each hand the sun goddess's accessories – a mirror and a rod topped with a sculpted hand. The choreography consisted of alternately capturing in the mirror the dancer's face, and the image of the sculpted hand. Tombstone etchings describing such rites are admittedly tenuous vestiges,[3] but they do seem to make it clear that this particular dance ascribed at least as much importance to virtual reflections and patterns as to physical bodies. Such performance integrates several degrees of corporeal presence, an active choreographic role being assumed by the mirror-mediated images. Dance has traditionally served as a propitiatory art from, and one of its most ancient lines of development was as a ritualised evocation of hunting. Paintings dating back to the sixth millenary in the Spanish Levant and in Catal Hüyük teem with dancers armed with bows and arrows. As men devoted more time to hunting each other, rather than four-legged or winged quarry, pyrrhic routines emerged: toward the sixth century BC, imposed figures taught Spartan children to thrust and parry the javelin, and in the *skiamachia* or shadow combat, dancers fenced with fictive adversaries. What is interesting about

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theatre; set designs that fragment and frame the action; lighting effects that edit the moving body; works that are cut

these practices, in vigour at a time where aesthetic forms were emerging alongside athletic and military training, is the fact that choreographic potions of presence and vital dynamics went beyond inherent morphological factors, and patently took into account such intangible considerations as ballistics and the agility of virtual adversaries.

These ancient Egyptian and Greek examples are just a couple of cases among many of dance which embraces space beyond bodily reach, and builds complex relations based on varying degrees of presence. In this respect, it seems to me that dance has long dealt with issues that are central to new image technologies and to their use in the live art arena. Choreographies involving diversely mediated figures are a fascinating possibility offered by real-time digital techniques, but the interaction of more-or-less substantiated forms in the performance context has much in common with archaic uses of shadows and mirrors.

THE BODY ELECTRIC

The impact of new communications and energy technologies at the beginning of the nineteenth century can be clearly seen in the vaudevilles and satirical works on European stages: Parisian successes such as *Les Nouvelles télégraphiques*, *Vélocipèdes de la Poste* (1811), and *La Femme électrique* (1846), of which the titles alone have survived, were apparently techno-futurist fantasies with a humorous twist (something sadly lacking in most of today's techno-gurus). The rapid demise of such works is quite predictable: works that exist only by virtue of technology are logically doomed to technological obsolescence. A delightful cautionary tale can be gleaned from Georges Moynet's *Trucs et décors* (1895), which describes a crowd-pulling early romantic ballet where a gauze curtain separates two identical ballerinas, one performing as the other's mirror image. The public was stunned at this ingenious feat, staged at a period when only hand-mirrors were in common use. A few years later, with industrial manufacture of full-sized mirrors, the ballet was off the repertoire for good.

Nineteenth-century lighting developments opened up new possibilities in the creation of scenic realms inhabited by characters manifesting various degrees of presence or substance. Creations such as the 'Pas de l'Ombre' in Jules Perrot's ballet *Ondine* (1843), where the heroine performs a poignant dance with her own shadow, challenged and exploited the aesthetic potential of such advances. Widespread adoption of gas toward 1820 was propitious to the ethereal hazes of romantic ballet, and also generated stronger shadows than previous oil and candle systems (mobile arc lamp projectors, first demonstrated by Foucault in 1842, triggered spectators' complaints of being blinded). Then, of course, along came electricity: the 'black box' and focusing of the spectator's gaze through lighting were made possible by this new energy. The plethora of spectacles which abused electricity throughout the latter half of the nineteenth century went out like a light, so to speak, once technological novelty wore thin and people were no longer impressed by ballerinas sporting flashing rose-hearts, heroes dueling with electric swords, fountains which turned red or green at will, and rising suns and waning moons chasing each other across the stage.

Early twentieth-century avant-garde artists, seeking to convey new space-time constructs via the immediacy of theatre, called on

into a rapid series of scenes; composers that are 'sound engineers' creating soundtracks for the action; action that is

lighting to atomise and freely rebuild stage imagery. In *Victory over the Sun* (1913), Malevich used powerful stroboscopic-like effects obtainable with Luna Park theatre's then state-of-the-art console to create a 'transrational' world of live color and shape in constant flux. Malevich is one of many leading artists for whom the performing arts medium was a remarkable catalyst: suprematism, according to the painter, came into being as a result of his stage experience with *Victory over the Sun*. I think that this point needs to be emphasised: whereas it has been claimed that theatre arts tend to follow the other arts, particularly the visual arts, because they're an amalgam, I would maintain that theatre arts sometimes take the lead for precisely that same reason. The *Gesamt-kunstwerk* quality of live performance has drawn and catalysed major creative endeavor throughout history.

To return to twentieth-century avant-gardes and use of projection techniques, Giacomo Balla's *Fireworks* (1917), commissioned by Diaghilev, required minutely timed lighting transitions to animate its futurist dynamics at Rome's Teatro Costanzi (fortunately for pre-computer days, Stravinsky's score lasts only a few minutes). Fernand Léger's *Création du monde* (1923) for the Ballets Suédois was an optical magma of stark backdrops, mobile decors, and totemic dancers, which sprang to life thanks to the metamorphic energy of mobile lighting.

Cinema technology was swiftly adopted by artists seeking to enrich the scope of live performance by injecting screened chunks of foreign space and time into the 'here and now' of the stage. Ambiguous situations where live and recorded images were indistinguishable had undeniable aesthetic and ludic appeal. In a 1925 Paris journal, cinema critic Gustave Fréjaville mentions the magician Horace Goldin who masterfully juggled with a mixture of real and filmed objects at the Opéra Music-Hall des Champs-Elysées. Robert Quinault, classical choreographer and dancer, composed a music-hall number where his live sequences were interspersed with slow-motion filmed versions of the same movements. Apart from the fact that this allowed the public to more finely perceive the dancer's virtuosity, use of film to introduce another quality of presence and motion beyond the usual human range created a singular type of spectacle, in many ways a forerunner of recent mixed-media explorations. Whereas Quinault incorporated filmed slow-motion sequences into his dances, other performers inspired by film worked on real-time slow-motion techniques: a couple of tap-dancers called 'les Titos', and the Boganny Troupe's dwarf stars were virtuoso slow-motion buffoons. Vsevolod Meyerhold, in the Soviet Union, was profoundly influenced by cinema dynamics, which he explicitly sought to transpose to the stage, notably during his 'biomechanics' years of the 1920s.

Still more recently, parallel to sophisticated uses of film (as in Svoboda's work) and lighting (Nikolaïs's exemplary creations) in theatre productions, video and sound-based technologies allowing instantaneous rather than deferred retransmission of analogue information have been rapidly taken up by the live art medium. During the '9 evenings: theatre and engineering' organised in the autumn of 1966 by Bell Telephone physicist Billy Klüver at the Sixty-ninth Regiment Armory in New York, the artists who readily integrated these techniques in their performances included Robert Rauschenberg, Steve Paxton, Lucinda Childs, John Cage, Deborah Hay and Yvonne Rainer. Medical monitoring devices literally made a show of Paxton's intimate body rhythms, and Rauschenberg turned infrared cameras

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sped up and intensified to compete with cinematic possibilities. The 'popular culture' of the cinema is infiltrating the

on the spectators to feature them in the performance site, thus dispelling differences between public and private arenas, between banal and aesthetically apprehended phenomena. Since the 1960s, frequent use has been made of directly recorded organic functions to regulate live action (amplified cardiac and respiratory rhythms have been astutely employed by performers such as Christopher Janney, Robert Ashley and La La La Human Steps).

For all their scalar richness, and their dissolution and inversion of the interior and the exterior, such systems continue to comply with the ancient (ana)logic of the mirror image. The electronic audio and visual phantoms they generate are of the lineage of shadows and reflections – i.e. obedient, homothetic derivatives of their human sources. But nascent technologies are profoundly altering the nature of tomorrow's phantom stage partners. Future electronic actors will be the products of artificial intelligence and behavioral animation, and biogame-type interactivity whereby virtual players steadily and continuously adapt to their human partners. Ondine will have a whole new register of relations to explore with her henceforth autonomous, intelligent, evolutive shadow.

NOTES

1 Jeanne Randolph, *Green Mill Papers* 1995, pp.17–35

2 For a description of this unusual example of man-machine neural interfacing, see *Visual Proceedings*, ACM SIGGRAPH, Computer Graphics Annual Conference Series, 1994, pp.178–180.

3 This information was gleaned from the historically rich work *Danser devant les Dieux*, by French dance scholar Paul Bourcier; collection 'La Recherche en danse', Paris, 1989.

'high culture' of dance; Fred Astaire, dressed in white tie and tails, executes a graceful leap from one to the other

Erin Brannigan

MOTION PICTURES

forever.

CONTRIBUTORS

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errata

Deborah Jowitt's 'Beyond Description: Writing beneath the surface' (*Writings on Dance 16*) was first presented at the 'Perspectives on Movement: Interpretation of Dance through Writing Conference', City University of New York, March 1995.

I Trevor Patrick was 'seduced' by editing. In making his film, *Nine Cauldrons*, he

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