

Indexicism

A report on CongressCATH 2005: 'The Ethics and Politics of Virtuality and Indexicality'

As a silk hat on a Bradford millionaire
– T.S. Eliot

Bradford is one of those cities that pop up in films like *East Is East* as dense enclaves of Indian or Pakistani culture, their swarming markets abuzz with saris, foreign chatter and intimidating vegetables in the mode of an immense exotic 7-11. Outside of such cinematic hyperbole Bradford is generally considered a drab, dead city, its heyday as England's wealthiest town and centre of industry (milling, that is) now a distant Victorian memory; its new life as a British-Asian 'ghetto' seemingly cemented. Little would you know from the press it gets that this marginalized town is also home to *England's leading conference venue*, at *England's most visited national museum outside London*, the British Museum of Photography, Film and Television. Needless to say I was curious and bemused to be lured off the beaten track to this place so short on attractions but so long on contradictions.

The conference¹ was the big sprawling kind, with 106 speakers tackling the topic from every conceivable angle. 'Virtuality' probably carries some meaning for most readers, whether as a concept (referencing the space of thought, language, ideas and so on) or as a set of technologies and their products. It is usually thought of in opposition to either actuality or materiality – virtuality being an incipient, prior state of pure potentiality. 'Indexicality' refers to the index, a special type of sign that can be described as having a physical connection to its object. Its most famous theorist is the American philosopher and scientist C.S. Peirce (1839-1914). Obvious examples of indexes are things like fingerprints, footprints, bullet holes, smoke ('where there's smoke there's fire') and the big one, analogue photography (especially the rayogramme). Unlike the other types of signs (symbols and icons) indexes do not re-present the thing they refer to, but rather point to it in the manner of a clue. What they share with their referent is a time and a space, not a likeness or a code.²

The more extreme flutterings of postmodernism have led some to peddle the notion that indexicality has vanished. It is claimed, for instance, that the mass media, virtual reality, hyperreality and digital technologies can only offer us symbols and icons, simulacra yielding no authentic information about reality. But that show must be over because the speakers I heard all endorsed indexical thinking as an exigency of our time (which is perhaps why I've focused on it more than virtuality here). Digital works do operate via code and are often talked of as kinds of fakes, mere imitations. But if we read them indexically we can speculate about the actual physical events that produced

them – about the type of camera or synthesizer and so on. *Ta moko*, in addition to their symbolic meanings, bear the marks of individual tattooists and offer material evidence of a ritual undergone. This has always been the case and still is. So indexical readings are certainly possible and can impart rich nuggets of insight into our world.

Of the presentations I attended some got straight down to the nitty-gritty, defining terms with obsessive compulsion. Though dry these gave me the nourishment I needed to grapple with more scintillating, obfuscating offerings. There were bad and brilliant talks on film, music, art, design and politics, and some disappointingly laboured sessions devoted to virtual reality, gaming, technology and cyberspace. Not to mention some hardcore philosophising to keep us all on our toes. Unsurprisingly some patches were patchy, so what follows is just a grab-bag of my favourite bits.³

Kris Paulsen, 'Abducting the Index'

Paulsen⁴ was concerned with the index as "not just a marker of a past event but an encounter with a sign that summons us to thought." If each kind of sign (symbol, icon, index) calls for a different mode of thought (deduction, induction, abduction), Paulsen's mission was to elevate and celebrate abduction.

To 'abduct' is to hypothesise – it involves searching our memories and guessing as to a thing's cause. We use it when all we have is a result, a clue. "The dress of a person might index a profession; a shout can index impending danger. These are empty signs directing and focusing the attention of someone present, who is called upon to fill in meaning." But why is abduction so important? Because it allows us to develop knowledge on the basis of things other than the directly observable. Even a photo-shopped Kate Moss can tell us things, but they probably won't be about Kate. Such knowledge is based on weak reasoning and operates on the level of conviction – not unlike a hunch or a leap of faith. And like these it demands explanation using the more foolproof modes of thought.

To Paulsen, abduction produces a singularly human type of knowledge⁵ "compelled by the excitation of our bodies and minds." Indexes are pointers with spatial and temporal coordinates (they appeared as the imprint of their object at a particular place and time) and they elicit material, bodily responses – our bodies 'knowing' things our minds don't. They imply a physicality of sorts. Paulsen echoed many other speakers (and Peirce himself) when she described abduction as "the sensual element of thought."

For all this flimsiness Paulsen argued that it would be dangerous to reject the index and its companion, abductive thinking. To discount our more twisty, 'intuitive', uncanny and complex paths to knowledge (or to suspicion when we catch the whiff of dissimulation) is to cling pathologically to rational calculation and clear-cut truths - whereas the age of digital manipulation "should reinvigorate a healthy response of doubt to what *appears* to be the case." Abduction permits us to suspect, to sense, to feel. And it gives us a way into "theorising embodied and sensual experiences in virtual space." I guess even the banal email carries physical traces with it, the after-images of someone plugging in, opening, typing (jabbing, caressing, convulsing), closing. And those 'traces' force our attention to matter, offering suggestions about the email's creation before its long journey through cyberspace. Would the email have been sent at all if the sender was in a different mood...?

Martha Rosler, 'In the Place of the Public (Observations of a Frequent Flier)'

I have just one note from this talk, since the lights were down and it consisted mainly of a slideshow accompanied by Rosler's wryly jetlagged and hungover voiceover.⁶ What I jotted down is this: "On the question of the circulation of bodies above the earth in a space we didn't know existed."

Rosler's photographs were all of airports, a series that has grown haphazardly over twenty years or more. The familiar signs were all there: cavernous spaces, migraine-inducing lighting, rude furnishings, displaced bodies, crumpled clothing, prohibitive notices (No sitting, No lying, No sleeping, No eating, No drinking, No photographs) and clammy staff in a cacophony of uniforms. There wasn't much to be said and Rosler's title said it all anyway. Most of the audience had passed through no-man's-land just to be sitting here. We were all too familiar with what the airport-as-index reveals about our status.

Still, we all loved it the next day when Paul Willeman postponed his own talk to rant about the frustrations Rosler's images presented. Here are some of the juicier bits from his diatribe:

Airports are best conceptualized as monuments (machines of congealed dead labour) to their money managers and to over-accumulated capital.

The public is allowed on planes to amortise the costs of VIP travel. They are known as le couchon de payon – the paying pigs... The people who symbolize over-accumulation are largely invisible except as addressees of glamour advertising. Meanwhile the paying pigs are addressed at the level of wanting to aspire to the level just above them. So, there are two spaces.

It's no longer true that the working class is excluded from airports; yet the proliferation of academic conferences is stimulated by the business requirement / enterprise culture

being imposed on academics. The gradual transformation of education into a racket is threatening to de-class us.

As for Rosler she mostly told anecdotes and made us laugh while her photographs did the dirty work of making us wince.

Paul Willeman, 'Revisiting Indexicality in Cinema'

Willeman⁷ prefaced his talk by noting the recent groundswell of documentary films on mainstream television, "this in spite of our supposedly occupying the age of the simulacrum." No, he wasn't reclaiming any realist transparency for documentaries (he added that they convey propaganda far more effectively than fiction). Rather he meant that our predilection for documentary betrays a hunger for 'reality' which even postmodernism has failed to dispel. "Baudrillard and Virilio aren't to be believed," he went on, "they are writers of the philosophical novel." Which is to say that they tell a good story (yet more propaganda since it's couched in non-fiction) but it's far from the whole story. And Willeman dismissed postmodernism itself as "the last gasp of an attempt to install global capitalism as hegemony." So Baudrillard and Virilio, with whom he disagrees, merely perpetuate the fantasy of the free circulation of capital.

Postmodernism has undoubtedly given us a useful conceptual toolkit (comprising semiotics and theories of representation) for analysing cultural productions. But, Willeman declared, it offers inadequate critique. Now that we're moving beyond the "psychodrama of simulacra" the toolkit needs updating – as the documentary revival amply demonstrates. And one of the things we've been lacking is indexicality. He stressed that there are not three different signs, but three different aspects of any sign whatsoever. And while the first two (icon and symbol) are the domain of representation,

there's also the index and this is not representational. Rather, it's a direct relation between the object and its trace. Using the bifurcation between representation and non-representation as necessary in any signification opens the possibility of tracking how the material world is present within text formation.

So we should use the index to unlock the connections between discursive formations and the historical forces that shape them. Because "the processes of industrialisation always imprint themselves on cultural production." Such imprints mark all forms of cultural production but, since it sits at the cusp between industry and culture, to Willeman, cinema is key.

His example was the film *Bladerunner*, which features architecture as star. Its giant structures are deployed in a populist, anti-authoritarian rhetoric, where they symbolise the monolithic ambition responsible for the dystopian poverty of the film's present. But whatever its narrative function, that distressed overpowering landscape is blatantly celebrated by the aesthetic of the film. As such, indexically, it celebrates the resources at the film industry's disposal.

Without exploitative, arrogant resourcing such a film could never have been made. Ultimately *Bladerunner* suggests that if you like this kind of cinema you cannot object to the social/economic conditions that allow it to be made. Aesthetics and material reality are not so easily separated. (I should add for all you *Bladerunner* buffs that Willeman refrained from judging our enjoyment, repeating more than once, “Never spit on your pleasures.”) The onus is on us to read cultural texts in every way available, and to be vigilant in our respect for what indexicality can reveal.

Someone asked Willeman after his talk about the role of the audience in sign production. He recognised the audience’s role in the reading of a text but was, he said, sick and tired of the way “the persuasion of the maker constantly gets shoved under the carpet.” Roland Barthes was no doubt turning in his grave.

David Burrows, ‘Indexing the Fourth Dimension’

According to Rosalind Krauss’s reading Marcel Duchamp’s readymades and photographs freeze a past encounter with an object. The object is abstracted from its context and revealed in its mute, opaque aspect as a loss of meaning and hence as trauma.⁸ David Burrows⁹ happily challenged Krauss’s reading, saying that Duchamp was less interested in ‘indexing’ an absent past than he was in indexing the virtual – or what Duchamp called the ‘fourth dimension’.

Here the indexicality plot thickens since for Burrows some signs can index things that have not yet been actualized. Thus Duchamp, Claude Cahun, Man Ray, Robert Smithson and others “place the virtual and indexical in tension with each other.” “Such artists sought to imagine new subjectivities, realize the abstract in the figurative or vice versa, or discover the temporality of desire in the document.” They weren’t traumatized by the failure of representation, they weren’t fleeing from the real. Instead they reveled in their ability to create (and document) future realities, future selves, future desires. Suddenly documentation seems entirely possible – but only if it *precedes* the event it documents.

Duchamp’s concern for the fourth dimension opens a hole in the indexical sign that the fourth dimension pours through. They’re ‘wrong’ indexes that affirm an erotic and subjective life...

Such ‘wrong’ indexes, likened by Burrows to the self-fashionings of Cahun and Leigh Bowery, conjure up a world that can be circulated and participated in by others over time. The photographs of Cahun and Bowery enact *forgettings* of who they really were, disregarding the actual and calling forth presences that have never been seen before. In the viewer they produce that sensual element of thought that can only ‘feel’ its way to meaning:

The images Leigh Bowery produced make it difficult to work out what we’re looking at. They’re not an act of transgression (which would mark out a border being crossed) but are closer

to nonsense, even hysteria... So what kind of world/future is Bowery indexing? Much as the urinal was a test for Duchamp, indexing a future, Bowery said the body is limitless, and that these were tests as to where it can go.

Ola Stahl, ‘Blow into the Freezing Night: John Coltrane’s ‘Sheets of Sound’ and the Actualisation of a Dissident Potential’

Stahl¹⁰ also considered aesthetics as a programme of experimentation, this time in the context of John Coltrane’s version of ‘All Blues’. This song sees Coltrane moving towards the blues (using three chords) while also modifying it (dropping the edge chord or seventh) in favour of a more subtle emphasis. Having so few chords enables Coltrane to enact a whole range of substitutions within the one piece. And in his solo he works on a multiplicity of scales so rapidly that it sounds as though

entire scales, all possible combinations and variations, are played simultaneously, in a ferocious tempo, rupturing, opening up both harmonic and rhythmic lines and patterns to a wider field of potential.

These improvisations result, for Stahl, in a feeling of intensity “like a stutter.” In Deleuzian terms Coltrane effectively deterritorialises his body, the saxophone and the music until they are no longer actualized – rather as if he desires to take the instrument out of the instrument, or to *become* the instrument. What is actualized instead is the full virtual potential of all the components – an extraordinary range of differences which, thus vaporized, disrupt classical jazz modalities. Coltrane himself said he was trying to play all the things that can be played with one chord.

Stahl’s larger, more tantalizing claim concerned the ‘actualisation of virtual potentials’ as an ethico-aesthetic strategy capable of producing new subjectivities with social and political relevance. He pointed out that ultimately Coltrane’s experiments coincided with “the emergence of more radical and militant forms of left-wing and civil rights activism.” The message? That expansions of the aesthetic field can enact parallel openings of our socio-political terrain.

Brian Massumi, ‘The Future Birth of the Affective Fact’

Massumi¹¹, who was impressive as always, put a more sinister spin on proceedings by dissecting the neoconservatism of the Bush administration. Bush and his puppetmasters react against indexicality by working to eradicate it, and thus to eradicate the elements of doubt, suspicion and fear that are the true enemies in the war on terror.

Massumi’s argument was grounded in Foucault’s analysis of the way neoliberal government encourages individuals to pursue their personal interests by manipulating market forces.¹² Neoliberalism maximizes productivity while

minimizing its own intervention in the market, and only acts when there's a strong threat to general stability and productivity.

Neoliberal governance aims to maintain the health of existence without doing anything... [It is] as productive in rest as in work.

Neoconservatism also uses the personal interests of its constituency as its *modus operandi*, but what everyone is interested in now is avoiding terror and not feeling threatened. The problem with threats, Massumi suggested, is that they're indexical. We don't know exactly what they indicate, nor how much danger we're in; we only know that we're bloody scared.

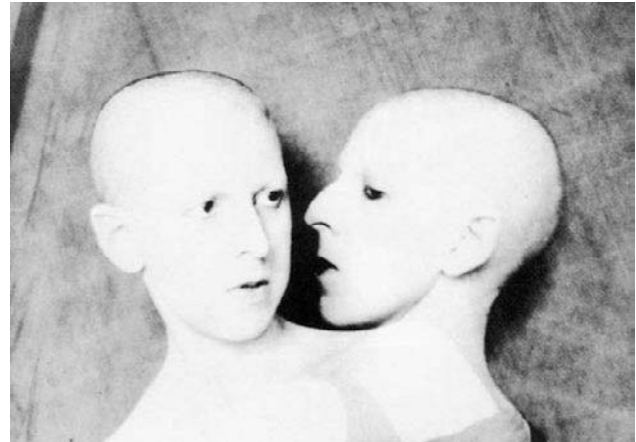
So where neoliberalism acted when necessary to *prevent* disruptions (which takes time and involves the risk of prolonging or increasing the terror), neoconservatism simply *preempts* them. Instead of wondering what might happen Bush assumes the worst and acts as though it has already happened. Instead of delaying and acting on empirical fact he acts on *affect*, on what we feel when faced with a threat (affect being stimulated by images, reports, rumours, perceptions, by indexical 'evidence' of our future danger). But in responding directly to affect, to his citizens' fear and jitters, Bush turns the threat into fact. We witness the birth of the 'affective fact'.

Thus the period of blurriness and uncertainty, the present in which guesswork and debate and decision-making would take place, is eliminated. There is no present. There must be no uncertainty. War on terror! In its place we have the lightning decision that overlays future (event) onto past (threat). The worst has indeed happened – but it's OK, we've already responded, already dealt with it, the danger has passed. So under neoconservatism the fear itself is the disruption. The smell of smoke causes a blaze yet to come. Anxiety over the appearance of white powder becomes an anthrax contamination: special forces move in, airports close, everyone evacuates, and it no longer matters that it was only flour. What matters is that we're safe. Under Bush security is an end in itself; security is freedom. And to maintain their sovereign command power all Bush et al need do is keep repeating their charge of danger until we're so terrified that it turns into fact.

In the Q&A Massumi added that this retroactive logic has become a sensibility that makes power aesthetic in basis (it certainly operates via images and signs) – and that the shift is irreversible. The best tool of resistance he could suggest was to mimic the system by inducing self-affecting affective events, "counter-affects on the affective battleground." Perhaps Cahun, Bowery, Coltrane and the rest have already shown us the way.

Mara Zoltners, 'A Space Between'

The index forces our attention to the here-and-now of



Top left: Claude Cahun, *Self Portrait in Barbe Bleu Costume*, 1929. From the Jersey Heritage Trust Collection. **Top right:** Claude Cahun, *Self Portrait, "Don't kiss me I'm in Training"*, 1927. From the Jersey Heritage Trust Collection. **Above:** Claude Cahun, *What Do You Want From Me?* c.1930. From <http://as0501.homestead.com/dewinter.html>. **Opposite:** Claude Cahun, *Self Portrait*, 1928.

perception, to what we perceive, how we process it and how it makes us feel (all that Bush aims to destroy). A number of artists took this as a starting point for examining stereoscopy, since we see here and now with two eyes whose separate reports are only amalgamated after the event into a single image.¹³ Moreover, when looking at images we aren't only in relation to an object in real space (and time); we relate also to the imaginary space inside the image whether it's figurative, surreal or abstract. Our double vision is redoubled. We don't just see stereoscopically, we occupy an entire stereoscopic space halfway between the illusionistic and the concrete. We are always amalgamating multiple viewpoints. In short, stereoscopy raises serious questions about the location of the observer.¹⁴

Mara Zoltners¹⁵ video works draw attention to the paradoxes of vision as a way of commenting on "the contingency, flux and mutability of perception in the formation of our imaginative lives." The videos capture small background moments of "visual noise" of the kind we frequently ignore in real spaces but will attend to once they're represented in art.



Leigh Bowery, *Session I, Look II*, 1988, photographed by Fergus Greer.

Their effect is intensified because Zoltners presents them in duplicate, side by side (rendering visible the stereoscopy), on a repetitive loop that allows the 'moment' to endure. The result is akin to what happens when we repeat a word until its meaning disappears and its strangeness sounds. Ordinarily we are trained by collective constraints into a goal-oriented seeing which narrows our vision: "observation as controlled blindness." In resistance to this habit Zoltners offers the continual presence of her looped background scenes which encourage an opening of observation, drawing the viewer into the event, broadening perception, and opening one to affect (yet another counter-affective strategy for Massumi?).¹⁶

I'm reversing the hierarchy of perceiving; the background now takes on a subjectiveness... When recorded these moments become abstractions of reality, fragments in time torn from their context.

The literal-ness of such image-making, which seems directly to translate theory into praxis, can often seem cumbersome. But Zoltners's works operate on a directly perceptual level and were duly hypnotic. Like assisted readymades they displace and compel all at once, forcing our attention upon the here-and-now by liberating us from everyday seeing. They mediate something strangely unmediated. And like all indexes they refer to distant spaces and times only through their absolute immediacy and presence. In this they remind me of the 'repetition' of both Kierkegaard and Deleuze, whereby the past is repeated with a difference that makes it new. (Such works highlight the importance of media-specificity: if they were digital rather than video pieces this indexical reading would not apply, though others would.)

N. Katherine Hayles, 'Traumas of Code'

I was pretty excited about hearing N. Katherine Hayles¹⁷ in person and she did not disappoint. Her talk was incisive, her manner expansive and relaxed, and she even had something of the *grande dame* about her. However my enthusiasm was still tempered with doubt. Hayles is one of the theorists of cybernetics, but I am neither a sci-fi nor a gaming freak.¹⁸ Sure enough Hayles's paper drew heavily on three works of contemporary science fiction, all to some extent about gaming, none of them anywhere near my radar.¹⁹ Nevertheless her argument was intriguing.

Hayles' basic point was that we now occupy a world (or at least an infosphere) which deploys two systems: language and code. Since most code (e.g. binary) is inaccessible to most humans we are suffering from the trauma of being alienated from our information.²⁰ She explained by suggesting an analogy between language and code on the one hand, and the conscious and unconscious on the other. The code /unconscious analogy is, she added, particularly telling when we think about trauma: both code and trauma are normally inaccessible to the conscious self; both are stored outside of language; neither can be accessed while the 'system' is running; and both underlie our conscious

narratives. This twinning of code and trauma, Hayles argued, appears in numerous artistic and literary representations. (I must confess I found Hayles's speedy move from code to the unconscious to trauma a wee bit vague, but anyway...)

Traditionally crises occur when unconscious trauma bursts through the smooth rational surface of a narrative. But in each of the science-fictions Hayles discussed "a crisis erupts when *code* breaks through the representational surface of the fiction to announce its inevitability." We witness a similar effect in more commonplace sci-fi like *The Matrix*. Code announces itself as these fictions' trauma. But the real trauma underlying all such fictions (if you go along with the psychoanalytic transference theory) is the trauma we currently face as humans: the trauma associated with being in some sense superceded by codes that are beyond our intelligence but not beyond the intelligence of our machines. Our human-only language now depends on machine cognition, with "intelligent machines spread[ing] under the surface of human awareness." Hayles writes,

in any computer-mediated communication, code interjects itself between humans and the language systems traditionally used for representation, thus staging an unavoidable encounter between humans and intelligent machines even when the human recognition of that encounter is suppressed.

We have a deep, inextricable relation to code – to something we cannot understand, something that cannot be presented in totality, something that challenges our very cultural imaginary and effectively undoes us as 'human'. This code nestled in our cultural 'unconscious' is our trauma. (Relating these ideas back to the conference theme, in each sci-fi example 'code' offered indexical knowledge about the fictional world. Hayles duly read the signs she analysed not only for what their narratives represent, but for what they reveal as direct products of our own social and cultural conditions. Paul Willeman would be proud.)

So. "Is our relation to code infecting or healing us? Are we acting out or working through our trauma?" Hayles did not attempt to answer the big questions but merely left them hanging. When she did look briefly into her crystal ball it was to promise resolutely that our machines will *not* become sentient or conscious. *Matrix schmatrix!*

*

I opened this article with a quotation from T.S. Eliot in which Bradford becomes a metaphor for culture-clash (the elegant silk hat perched absurdly on the *nouveau-riche* head). I also hinted at several other signs of the city's incongruous image (Victorian architecture versus migrant people; film Bradford versus conference Bradford). But both Eliot and I were focusing on icons and symbols. When I was physically there, on the other hand, I encountered Bradford as index and then it made perfect sense. It was present, right. Indian girls in saris and denim jackets eating McDonalds in cobbled lanes... Clues to a sensuous, complex, evocative history I can guess at but never know for sure. And though



Top left: Leigh Bowery. From: <http://www.leighbowery.com>. **Top right:** Leigh Bowery, *Session I, Look II*, 1988, photographed by Fergus Greer. **Middle left:** Leigh Bowery. From: http://www.trustthedj.com/MarkMoore/news_article.php?news_id=3743. **Middle right:** Leigh Bowery, photographed by Fergus Greer. **Bottom left:** Leigh Bowery, *Session I, Look II*, 1988, photographed by Fergus Greer. **Bottom right:** Leigh Bowery, *Session IV, Look 19*, 1991, photographed by Fergus Greer.

I may represent such encounters here they leave no real trace; because as an index itself this document says little about Bradford or the conference I attended there. It says much more about a time and a place shared by *you*, *Natural Selection* and me.

Cassandra is a writer, theorist and teacher currently in transit between Wintec's Media Arts Dept and Unitec's Design School...

Notes

1. Organised by the Arts and Humanities Research Council Centre for Cultural Analysis, Theory and History (or AHRC CentreCATH) at the University of Leeds, England.
2. The conference's original title was 'The Ethics of Indexicality Versus Virtuality'. Somewhere along the line they must have realised the mistake of polarising things in this way.
3. I'll be quoting the speakers throughout, but since all their words were subjected to my fallible note-taking skills a margin of error is inevitable – I hope they'll forgive me any skewed attributions. All quotations are from speakers' presentations or abstracts unless otherwise indicated.
4. From the University of California, Berkeley.
5. Though I wonder whether the 'posthuman' theorists – N. Katherine Hayles et al – would approve of this description.
6. Martha Rosler teaches art at Mason Gross School of the Arts, Rutgers University (when not lecturing and exhibiting around the world...).
7. Professor of Media Studies at the University of Ulster.
8. Krauss' argument is grounded in her view of photography as especially traumatic, because a photograph has no specific meaning without a caption. See 'Notes on the Index' in Rosalind E. Krauss, *The Originality of the Avant-Garde and Other Modernist Myths* (MIT Press: Cambridge, 1986).
9. From the University of Central England, Birmingham.
10. An 'artist thinking about sound' from Central Saint Martin's College of Art and Design/The University of Leeds.
11. From the University of Montreal; should need no introduction...
12. See Foucault's 1978-79 lectures on 'The Birth of Biopolitics'.
13. In a practical demonstration of this fact Gavin Adams got big brownie points and plenty of giggles for handing out 3-D specs during his presentation – the kind of light relief that should be compulsory at conferences.
14. Although the tension between illusionistic and concrete realms was applied explicitly to two-dimensional images it was implied that it extends to other sites and sights, from installations to earth works to non-artistic signification of all kinds. The point being that what we see – or think we see – depends on social, political, cultural and psychological positions as well as spatio-temporal ones.
15. From the University of Leeds.
16. I was reminded here of one of the better bits in the awful film *What the Bleep Do We Know?*, which tells the story (true or false) of Native American Indians being unable to perceive Columbus's ships on the horizon because they were simply beyond their knowledge.
17. Author of *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* and Hillis Professor of Literature at the University of California, Los Angeles.
18. I love Philip K. Dick and Kurt Vonnegut but am yet to be seduced by William Gibson's charms – despite wading through two of his novels. As for computer games all I have are juvenile, nostalgic attachments to the least zeitgeist ones around...
19. They were William Gibson's print novel *Pattern Recognition*, Mamora Oshii's film *Avalon*, and Jason Nelson's electronic hypertext *Dreamphage*.
20. I felt slightly alienated myself at this point, as I always do when psychoanalytic terminology pops up. But trauma came up a lot at this conference so I made some effort to temporarily repress my 'Avoid Freud' prejudices...