THE 6TH SWISS BIENNIAL ON SCIENCE, TECHNICS + AESTHETICS
6. SCHWEIZER BIENNALE ZU WISSENSCHAFT, TECHNIK + ÄSTHETIK

Consciousness and Teleportation
Bewusstsein und Teleportation
January 22 - 23, 2005 / 22. / 23. Januar 2005
Swiss Museum of Transport and Communication, Lucerne
Verkehrshaus der Schweiz, Luzern

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Drawing consciousness and teleportation together as the topic of this, the sixth Biennal on Science, Technics and Aesthetics organised by René Stettler, was certainly an inspired move. Artists, philosophers and scientists were gathered up in a relatively harmonious intellectual setting, in which each was prepared to meet the other on their own ground. Of the three hundred or so who attended each day, about 60% were artists prepared to follow some complex maths, while the remainder appeared to be scientists open to the more speculative and philosophical aspects of their work. In a two day event Stettler assembled a programme of 17 speakers, chairpersons and presenters from Australia, Germany, England, Holland and Austria, the U.S. and Switzerland which was organised along the lines of an extended seminar and drew out some key issues in consciousness studies, quantum theory and philosophy. There were of course no conclusions, no manifestos, nor any plans for future action, but there was an intense and informed focus on the interface between science, philosophy and art which transcended the usual intellectually amorphous consensus clawing at the idea of collaboration as a some sort of WASP moral high-ground. For this refreshing rupture, if nothing else, Stettler should be congratulated. But in the intellectually relaxed and open atmosphere his topic of teleportation revived the hunt for a new kind of science — a parascience based on a no-less rigorous methodology - which includes in its investigative remit 'that which is without matter'.

On the down-side however was the absence of any discussion of the schlock fantasy promised by the poster. Leonardo Nimoy, (the half human/half Vulcan Dr Spock), who stared out from behind a 35mm ribbon of portraits of the presenters evoked the Hollywood vision of full body teleportation. Instead, with the exception of some visionary presentations from Karl Pribram and Roy Ascott, the overwhelming hegemony of positivist science could only guarantee the teleportation of very small things, and even then it would be constrained by the speed of light. Despite this prosaic interpretation relative to the blockbuster adventures on the Holodeck, thinking small did bring into focus one of the most important implications of quantum-teleportation - that is the implications for consciousness studies. It seems that the favoured way of reconciling one of the problems that positivism presents is to acknowledge that the predictions of classical physics fail at a particular resolution and, at a certain scale, new laws seem to apply. As it happens, there are elements in consciousness which appear to be governed by both laws of physics. So although a thrown ball follows one law, the system that allows us to catch it follows another. This is not simply because our sensory system works so slowly that we could not possibly 'see' the ball in time to catch it, but that telling our hands an arms to move would involve an infinite chain of command between brain and hand that would never actually connect. Using the logic of a quantum physics which is

blessed with ideas such as 'enchantment' and 'entanglement', however, consciousness and matter can be connected at the micro-biological level without too much loss of face for the classicists. The persistent exegesis of this notion (whatever its worth) was followed in the papers at the cost of the *idea* of teleportation as an expression of the widespread dissatisfaction with monorealism: an idea that effortlessly flows from *The Cloud of Unknowing* to *Star Trek* galvanising a resistance that has often threatened to destabilise the dominant discourses of power (both sacred and secular) and shaped the history of ideas for two millennia. This particular view of consciousness as a sub-atomic materialist process open to explanation seemed to be generally accepted, (even among some artists and philosophers who had no investment in the classical world view), that is until Karl Pribram deftly shifted between reductivist views of science and holistic philosophical assertions to perhaps come closer than any of the other scientists to deal with teleportation on a human scale.

With charm and modest grace Pribram expressed an essentially Epicurian view, inflected by holography, as a metaphor for how consciousness might be a constituent part of a spectral realm accessed by human sensory organs. As he revisited the foundations of scientific materialism and drew attention to the consistency of human receptivity to waves, he suggested how we could understand ourselves as interpreters (rather than inquisitors) of the cosmos. In doing so he also rolled back science to a pre-Baconian state and, in a simple demonstration showed how we might visualise consciousness as something 'out there' which we tune into. Finally taking an interpretative stance in respect of Einstein's famous reduction e=mc2, he argued that the 'equals' sign merely meant that energy *could* become matter, and the impulse to 'thingify' everything had overwhelmed more viable theories about fields that were developed in the 19th Century. If one thought in terms of overlapping fields then 'meaning' (in all its devilish disguises from nonsense to metaphor) could, in Pribram's view be understood as a trick of evolution used to compensate for the lack of formal capacity. Catching a ball in a field of consciousness becomes quite a simple matter.

Ascott, as the only artist, to address the issue of consciousness and teleportation drew a similar line starting from the direct experience of the world liberated (as far as possible) from the constraints of suffocating reason. As always his argument was challenging and demanding, drawing on a wide spectrum of apparently disconnected discourses only to finally reconcile them at the micro-level of the individual as a fully connected 'being' in an ahistorical and undifferentiated ether. The coherence with which the various strands came together and yet retained identity was symptomatic of his thesis developed over two decades that has embraced the "science" of consciousness as a legitimate and urgent concern for the artist in a connected world. His rhetoric of association, reminiscent of Aby Warburg's methodology of the *Mnemosyne*, may have contrasted with the strict sequence of the earlier maths and science, but only in this way could his conclusion liberate new directions in consciousness studies, as it also suggested that artists and scientists might work together in a synergy of benign divergence.

Paradigmatic of the synergy of benign divergence was the final speaker who exploited the visual realm and the partiality of perception in order to undermine much that had been presented as fact in the previous papers. Jack Pettigrew, a hardcore neuroscientist delivered a paper, based on experimental evidence, which drew us away from quantum mechanics and back to the idea of consciousness as a quality in the world that we inhabit. Concentrating on involuntary inter-hemispheric switching mechanisms in humans he argued that endophysics displaced the universality of light with the universality of gravity. This geographically variable force, he suggested had bearing on the pulse of individual switching

(evident in hemispheric rivalry, breathing etc) and affected 'spring-loaded' entities at the sub-cellular level. The exciting implication of this was that as these sub cells snapped shut, energy was returned by 'gravitationally driven consciousness' to the material world. With more than a nod toward Feynman, Pettigrew suggested that consciousness was shared and governed by a 'world clock'. Not only did his findings form a powerful triad with Pribram and Ascott, but through experimental science he began to establish the link between world consciousness and desire in a way that artists might understand without invoking Jung.

There were many other dynamic contributions over the course of the conference, some were familiar reiterations of earlier research, others new insights based on current thinking. The full list of presenters and abstracts can be found at: http://www.neugalu.ch/e_bienn_2005.html and it is worth visiting to understand the range that Stettler brought together. And while it seems a little unbalanced not to refer to more of them here, in some ways the significance of the three contributors discussed above goes beyond the putative topic of the conference. There was no spectacle and no Hollywood, no rejection of the dominant discourses of power in an inexplicable act, because in some ways Stettler's intuition drew us to the brink of something too serious: the crisis that science (like history) is facing. Its epistemological strategies are now so transparent that it can no longer satisfy the imperative from which it emerged. That is not for one moment to suggest that the intellectual achievements of four centuries are to be dismissed, on the contrary, as *Consciousness and Teleportation* revealed it is through the very enterprise of science that the limits of reason become daily clearer.

It would be premature to announce the death of science, and in any case cultural inertia and economic determinism will guarantee a long life for it as an epistemological institution. But *Consciousness and Teleportation* showed just how much science was stumbling in its efforts to satisfy its own intellectual demands in certain areas, and compared with *Star Trek*, how much it was failing to engage with the radical possibilities that science had offered to the population as a whole in earlier centuries. Before the exclusion of telepathy, life after death and other psychic phenomena, (something which Pettigrew disarmingly acknowledged as a fact), science fuelled the imagination of a broad constituency ranging from the humblest working man to the most privileged intellectual. Once it bracketed the immaterial however, it was forced along an unnecessarily complicated road constrained by fact and certainty, in which there was no method to allow for the co-existence of contradiction. By the beginning of the twentieth century, it seems, everything in science became ineffably complicated, and as a consequence the spirit took exclusive residence in the arts where, alas, for the most part it has been trivialised in the reification of the cult of the individual.

If there were no conclusions at *Consciousness and Teleportation* there were revelations. In the first place it revealed some of the asymmetries between the arts and the sciences; how the arts need to attend much more to methodology if they are to escape from the redundancy of simply inventing the familiar and avoid confusing insight with idiosyncrasy. In a reverse angle, the unsustainable obsession with science as an uninflected epistemology validated by method needs more people like Pettigrew, Pribram, and Bierman who are prepared to be amazed and to take risks with their public credibility by acknowledging the inexplicable anomalies that they discover in the laboratory.

If nothing else *Consciousness and Teleportation* stoked the flames of the debate between art and science. But in my view, the materialist were given the better pulpit, and perhaps, as confidence grows in this discussion, by 2007 more petrol can be cast on the fire from those in the arts and humanities, who have persistently engaged with the problem of an

overbearing monorealism. In the meantime artists could return to the book stacks and work with scientists like Pribram and Pettigrew reminding them that, like many earlier investigators of the spirit world, artists such as Cézanne, Boccioni, and Duchamp, together with art historians such as Warburg, Stafford and Krauss have, arrived at similar conclusions about 'gravity and the pulse of vision' using a methodology exemplified by Ascott. Together we might also pick up some of the themes of this conference and look at the history of the spectral domain as a 'festival of notions' (Pribram): an irresistible flow of ideas and emotions, which, if we allow it, the "lens" of our consciousness can reveal.