









FAR AND IDE

BY LANFRANCO ACETI AND OMAR KHOLEIF

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Far and Wide

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This catalog is a LEA production with FACT (Foundation for Art and Creative Technology). It follows the first major retrospective on Nam June Paik in the UK with an exhibition and conference organized by Tate Liverpool and FACT. The exhibition Nam June Paik, December 17, 2010 to March 13, 2011, was curated by Sook-Kyung Lee and Susanne Rennert.

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THE GLOBAL PLAY OF NAM JUNE PAIK

THE ARTIST THAT EMBRACED AND TRANSFORMED MARSHALL MCLUHAN'S DREAMS INTO REALITY

What else can be said of Nam June Paik and his artistic practice that perhaps has not been said before? My guess is not very much... and while I write my first lines to this introduction I realize that it is already sounding like a classic Latin 'invocatio,' or request to assistance from the divinity, used by writers when having to tread complex waters.

Nam June Paik and Marshall McLuhan are two of the numerous artists and authors who inspired my formative years. If one cannot deny Paik's love of play and satire imbued in popular culture and used to disguise a real intellectual and conceptual approach to the artwork, neither can easily be discounted McLuhan's strong advocacy of the powerful tool that technology can be, so powerful that is able to obscure and sideline the message itself in the name of the medium.

"Marshall McLuhan's famous phrase 'Media is message' was formulated by Norbert Wiener in 1948 as 'The signal, where the message is sent, plays equally important role as the signal, where message is not sent." 1

The construction of this hybrid book, I hope, would have pleased Paik for it is a strange construction, collage and recollection, of memories, events, places and artworks. In this volume collide present events, past memories, a conference and an exhibition, all in the name of Nam June Paik, the artist who envisaged the popular future of the world of media.

Paik remains perhaps one of the most revolutionary artists, for his practice was mediated, geared towards the masses and not necessarily or preeminently dominated by a desire of sitting within the establishment. He also challenged the perception of what art 'should be' and at the same time undermined elitisms through the use, at his time, of what were considered 'non-artistic-media.' Some of the choices in his career, both in terms of artistic medium and in terms of content, can be defined as visionary as well as risky to the point of bravery or idiocy, depending on the mindset of the critic.

That some of the artworks may be challenging for the viewer as well as the art critic is perhaps obvious – as obvious was Paik's willingness to challenge the various media he used, the audience that followed him and the established aesthetic of his own artistic practice. Taking risks, particularly taking risks with one's own artistic practice, may also mean to risk a downward spiral; and Paik did not seem to shy away from artworks' challenging productions and made use of varied and combined media, therefore re-defining the field of art and placing himself at the center of it.

In the following decades, Paik was to transform virtually all aspects of video through his innovative sculptures, installations, single-channel videotapes, productions for television, and performances. As a teacher, writer, lecturer, and advisor to foundations, he continually informed and transformed 20th century contemporary art.

Therefore, it seems limited to define Paik as 'the father of video art' when his approaches were to resonate in a multiplicity of fields and areas.

Paik's latest creative deployment of new media is through laser technology. He has called his most recent installation a "postvideo project," which continues the articulation of the kinetic image through the use of laser energy projected onto scrims, cascading water, and smoke-filled sculptures. At the beginning of the twenty-first century, Paik's work shows us that the cinema and video are fusing with electronic and digital media into new image technologies and forms of expression. The end of video

and television as we know them signals a transformation of our visual culture.

When Mike Stubbs and Omar Kholeif approached me to create this book, the challenge was to create a structure for the material but also to keep the openness that characterizes so many of Paik's artworks and so many of the approaches that he has inspired

I found the best framework in one of Paik's artworks that was presented for the first time in the United Kingdom, at FACT, in Liverpool, thanks to the efforts of both Stubbs and Kholeif.

My fascination with the Laser Cone's re-fabrication 4 in Liverpool was immediate and I wanted to reflect in the publication, albeit symbolically, the multiple possibilities and connections that underpinned the Laser Cone's re-fabrication and its medium, as well as Paik's and McLuhan's visions of the world to come, made of light, optics and lasers.

The word laser is actually an acronym; it stands for Light Amplification by Stimulated Emission of Radiation. Nam June Paik undertook a residency with Bell labs, who were the inventors of the laser. It was here that he created his 1966 piece Digital Experiment at Bell Labs, exploring the stark contrast between digital and analogue and his fascination with technology in its material form. His work with Bell set the precedent for artists and musicians to start using technology creatively in a new way. 5

This catalog became a tool to mirror and perhaps 'transmediate' the laser installation "made of a huge green laser that [...] conjoin[ed] FACT with Tate Liverpool. Travelling 800 metres as the crow flies, the beam of light [... made] a symbolic connection between the two galleries during their joint exhibition of video artist, pioneer and composer Nam June Paik. Artist Peter Appleton, who was behind the laser which joined the Anglican and Metropolitan cathedrals in Liverpool during 2008 Capital of Culture, [was] commissioned by FACT to create the artwork, Laser Link, which references Nam June Paik's innovative laser works." ⁶

The catalog is in itself a work that reflects the laser connections, the speed of contacts, the possibilities of connecting a variety of media as easily as connecting people from all parts of the world. In this phantasmagoria of connections it almost seems possible to visualize the optic cables and WiFi that like threads join the people and the media of McLuhan's "global village" and the multiplicities of media that Paik invited us to use to create what I would like to define as the contemporary "bastard art." 7

Lanfranco Aceti

Editor in Chief, Leonardo E Director, Kasa Gallery

A NOTE FROM THE EDITOR IN CHIEF

For me personally this book represents a moment of further transformation of LEA, not only as a journal publishing volumes as in the long tradition of the journal, but also as a producer of books and catalogs that cater for the larger community of artists that create bastard art or bastard science for that matter.

ENDNOTES AND REFERENCES

- 1. Nam June Paik, "Cybernated Art," in *The New Media Reader*, eds. Noah Waldrip-Fruin and Nick Montfort, 229 (Cambridge, MA: The MIT Press, 2003).
- 2. John G. Hanhardt "Nam June Paik, TV Garden, 1974," in Permanence Through Change: The Variable media Approach, eds. Alain Depocas, Jon Ippolito, and Caitlin Jones, 72 (New York and Montreal: Guggenheim Museum Publications and The Daniel Langlois Foundation for Art, Science, and Technology, 2003).
- 3. Nam June Paik/Nam June Paik Studios' official Web site, "John Hanhardt's essay," http://www.paikstudios.com/essay.html (accessed January 10,
- 4. Laser Cone, 2001/2010, Nam June Paik in collaboration with Norman Ballard.
- installation view at FACT. Photographer: Stephen King.
- 5. FACT, "Laser Cone," FACT, http://www.fact.co.uk/projects/nam-june-paik/ laser-cone/ (accessed January 10, 2013).
- 6. FACT, "Laser Link," FACT, http://www.fact.co.uk/projects/nam-june-paik/ laser-link/ (accessed January 20, 2013).
- 7. Art as a bastard is interpreted, in this passage, as something of uncertain origins that cannot be easily defined and neatly encapsulated in a definition or framework. "Art is often a bastard, the parents of which we do not know." Nam June Paik as cited in Florence de Meredieu, Digital and Video Art, trans. Richard Elliott (Edinburgh: Chambers, 2005), 180.

The Future Is Now?

Far and Wide: Nam June Paik is an edited collection that seeks to explore the legacy of the artist Nam June Paik in contemporary media culture. This particular project grew out of a collaboration between FACT, Foundation for Art and Creative Technology, and the Tate Liverpool, who in late 2010-2011 staged the largest retrospective the artist's work in the UK. The first since his death, it also showcased the premiere of Paik's laser work in Europe. The project, staged across both sites, also included a rich public programme. Of these, two think tank events, The Future is Now: Media Arts, Performance and Identity after Nam June Paik and The Electronic Superhighway: Art after Nam June Paik, brought together a forum of leading artists, performers and thinkers in the cross-cultural field together to explore and dissect the significance of Paik within broader culture.

This programme was developed by a large group of collaborators. The discursive programme was produced by FACT in partnership with Caitlin Page, then Curator of Public Programmes at Tate. One of our primary research concerns was exploring how Paik's approach to creative practice fragmented existing ideological standpoints about the visual arts as a hermetically sealed, self-referential canon. Drawing from Bruno Latour, Norman M. Klein and Jay David Bolter, among many others - our think tank and, as such, this reader, sought to study how the visual field has proliferated across disciplines through the possibilities that are facilitated by technology. At the same time, we were keen to examine how artists now posses a unique form of agency – one that is simultaneously singular and collective, enabled by the cross-embedded nature of the current technological field. 1

These positions are explored throughout the reader and our programme and in this special edition of the Leonardo Electronic Almanac. Here, the artist who goes by the constructed meme of the "Famous New Media Artist Jeremy Bailey," tracks Rosalind Krauss's influence and transposes her theoretical approach towards video art to the computer, examining the isolated act of telepresent augmented reality performance. Roy Ascott gives a nod to his long-standing interest in studying the relationship between cybernetics and consciousness. Eminent film and media curator, John G. Hanhardt honors us with a first-hand historical framework, which opens the collection of transcripts, before further points of departure are developed.

Researchers Jamie Allen, Gabriella Galati, Tom Schofield, and Emile Deveraux used these frameworks retrospectively to extrapolate parallels, dissonances and points of return to the artist's work. Deveraux and Allen focus on specific pieces: Deveraux discusses Paik and Shuya Abe's Raster Manipulation Unit a.k.a. 'The Wobbulator' (1970), while Allen surveys a series of tendencies in the artist's work, developed after he was invited to visit to the Nam June Paik Center in South Korea. Galati and Schofield stretch this framework to explore broader concerns. Schofield considers the use of data in contemporary artwork, while Galati explores the problematic association with the virtual museum being archived online.

It is worth mentioning at this stage that there were many who joined in contributing to this process, who did not partake formally in this reader or the public programme. Dara Birnbaum, Tony Conrad, Yoko Ono, Cory Arcangel, Laurie Anderson, Ken Hakuta, Marisa Olson, all served as sources of guidance, whether directly or indirectly through conversations, e-mails, and contacts.

Still, there remain many lingering questions that are not answered here, many of which were posed both by our research and organizational processes. The first and most straightforward question for Caitlin and I was: why is it so difficult to find female artists who would be willing to contribute or speak on the record about Paik's influence? It always seemed that there were many interested parties, but so very few who were eager to commit to our forum.

The second and perhaps more open-ended question is: what would Nam June Paik have made of the post-internet contemporary art scene? Would Paik have been an advocate of the free distribution of artwork through such platforms as UbuWeb and YouTube? Would he have been accepting of it, if it were ephemeral, or would he have fought for the protection of licensing? This question remains: could an artist charged with bringing so much openness to the visual arts, have been comfortable with the level of openness that has developed since his death? There is much that remains unanswered, and that, we can only speculate. Far and Wide does not offer a holistic biography or historical overview of the artist's work or indeed its authority. Rather, it serves to extract open-ended questions about how far and wide Nam June Paik's influence may have travelled, and to consider what influence it has yet to wield.

Omar Kholeif

Editor and Curator FACT, Foundation for Art and Creative Technology

1. See: N. M. Klein, "Cross-embedded Media," in Vision, Memory and Media, eds. A. Broegger and O. Kholeif (Liverpool and Chicago: Liverpool University Press, 2010).

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The Future Is Now / Nam June Paik Conference / FACT and TATE Liverpool

ROY ASCOTT KEYNOTE SPEECH

This text is a transcription of a speech from:

Nam June Paik Conference

The Future Is Now: Media Arts, Performance and Identity after Nam June Paik presented by FACT and TATE Liverpool

Friday 18 February 2011

It's a real honor to be talking with you in this context of a very great artist and a superbly curated exhibition, or rather exhibitions. At any rate, being of a similar age, I suppose I am working in parallel with Paik. So I thought before we get into the discussion with Mike, which I am looking forward to, I would just give you an idea of where I am coming from.

This is in Korea, where I have spent guite a lot of time since 2000. This is a shaman, as you might have gathered. It seems to me this is rather fitting and I hope we will be talking more about it this afternoon. I am not a scholar and I am not here to speak precisely about Nam June Paik's work, but I would like to discuss what I see as two key aspects of his practice. One has to do with contemplation and the way in which the eye, or in this case video-camera, homes in on something, contemplates it and then speaks to contemplation. The other one has to do with consciousness, and for me that is the supremely important aspect of this world. He brought to us, in some cases in advance of them arriving with media, altered states of consciousness; new ways of being in the world in relationship to images and what they convey. That aspect of his work interests me very much.

In terms of career, I have had a lot to do with a media arts center called Nabi, where I serve on the advisory board. In October last year, Nabi hosted a large festival of digital art in Incheon, where I had the privilege of having my retrospective. This here is a little account of my initial relationship with Korea. On the right, we needed a new piece, I will be talking about La Plissuré du Texte, which is a collaborative piece we originally did online many, many years ago. We did it again for this show in Korea. The idea was that you could come online and enter into this second life world, which was a text world. a world made completely of text and, using your mobile, you could bring your words into that space.

On the left you see the cello, which is actually – although I am not guite sure if this is the same one that I know - a monument to Nam June Paik's original home, which was the site of the first Nabi center. It is sort of anecdotal, but it's important to me. This now stands in the fover of the SK Telecom building. Finally, there in the middle is a book where I, very kindly, had some of my writings translated into Korean; which has been a bridge to many Korean artists and institutions over the years.

I would first like to say, and I think again in the spirit of this conversation, reductionists stay away! Artists are prepared to go anywhere, absolutely anywhere. This is true even in this day and age when we are heavily encouraged to team up with scientists and so on. We are actually prepared to go into any space, any direction, any orthodoxy,

any way up, which I think is a spirit upheld in the present exhibition. This is how I see where we are now but I know I have been asked to address the future, which is the context of this conference. The way we are now is, I think, telematic. I think we are all agreed upon that: we know how telematically related we are and that it is not simply through Facebook. We have seen the wonderful effects of these connections in Egypt and so forth and on every sort of level.

The media is moist, it is a convergence of biological systems and dry computational systems; dry and wet make moist. The mind is technoetic, which simply means technology and consciousness coming together. We have extended our sensorium, that does not need any explanation. However, I will want to talk about secondary senses, which we have ignored since the Enlightenment. Our identity is multiple, we are making avatars and we are in a state of single selfmutation. We make many selves and they appear distributed in many presences. The body is transformable. The arts are syncretic. The reality is variable. The substrate is ultimately nano, which is vibrational. I could go on, but the most urgent necessity we have is in fact the reinvention of ourselves, never mind the reinvention of the state. That reinvention is fortunately going on in the Middle East, and we could certainly do with doing that in the West.

Before we get there we need first of all to reinvent or rediscover ourselves, which I think is also an old Buddhist principle. This syncretism is a useful tool but it could become a methodological imperative. It comes out of the history of Crete – syncretism – where, in classical times, Crete was full of all these warring tribes with all these different ideologies; then the enemy was at the gate and as a country they were being challenged. So they decided to come together to defeat the enemy, but without losing their separate ideologies. That is where I think we are right now in terms of spaces, cyberspace, so-called real space, actual space; in terms of time, asyncronic time, as well as linear time; and in terms of the self. We want to bring things together on so many levels but we want to maintain the differences. This is what syncretism is all about. But I'm not going to read all this out to you, it would take too much time.

But I must say that the most important work of Paik that we are looking at now has to do with consciousness, it seems to me that is the agenda for the next twenty or thirty years. We have spent a century looking at the body, examining it in every way: up, inside, and out. Now I think it is the turn of the mind, the turn of the consciousness. I have to say that I go to, for example, Max Planck and to many other scientists who say that first there is consciousness and then there is matter. That stands absolutely opposed to the whole American MIT scientific establishment, in which they say no, first there is meat and then there is consciousness. My view is completely different and I think it produces a slightly different attitude to one's, to our, practices. So technoetics, I have explained that. Hyper-cortex, is another aspect of the self that I think we should be thinking about. Now, I was very interested to learn this morning about the interest – I knew it already, but had it made apparent – in cybernetics. This is a field which I have been very much involved in since the early 60s; my friend and my guru was Gordon Pasque, who some of you may already be familiar with. He worked on the Fun Palace, with Joan Littlewood and he was very active in the arts, in *Cybernetic*

Serendipity, working with intelligent systems and so on. But he introduced many other aspects of cybernetics that I had got from F. H. George in Bristol and Ross Aspey and so on. Cybernetics and quantum theory have been useful not just to me, but to my generation. There were no theories, we had to theorize our practice; we had to theorize interactive art. That's why set up a PhD program to do it; because there was no one out there writing about it, no theories, no historians – God knows at that time there was no history yet. To explain the things we turned to, let me quote from John Wheeler:

We used to think the world exists 'out there,' we used to think that art, that art works exist 'out there'; with we the observer hidden behind a slab of glass. We would sort of stand back and learn in classes how to look at art. However we have concluded that isn't the way the world works. We have to smash the slab of glass and grab in.

You know that one of the principles of physics which we have inherited, one that is used a great deal in interactive art, is that the viewer becomes the user; becomes the person who shapes what is happen-

So these were the kind of things I was thinking about in the 1960s; about programming, about genetic code, about chance, all these sorts of things. I worked in London when I produced my statements about all these things in the 6os. The issues I was talking about then were about trying to define this new art and it's concerns, which I



If you printed this, shifted it a little bit and reprinted it a million times you would see something like the connectivity that we have in the world today.

think are still shared today; concerns with behavior, with identity, with chance, change, process, systems, participation and interac-

On the right you see some of my students in London back in those days trying to create mind machines to get away from this idea of the art object as being a thing that just sits on the wall. So, very briefly, my first one man show produced a handbook, which was trying to explain how cybernetics relates to society and to the individual. There was a lot of analog work, for example change paintings, where the viewers had to slide the picture to see the resolved image. After that, in the 70s, I was working in San Francisco for a number of years and was introduced to what was going on along the West Coast with computers, particularly with what was called computer conferencing; what would later be called telematics by the French. I became involved with that absolutely, I gave everything up and just got completely immersed in telematics systems. This is my statement of what happens when you become totally immersed in telematic space: the sense of self is changed.

If you printed this, shifted it a little bit and reprinted it a million times you would see something like the connectivity that we have in the world today. [Ascott is showing a picture on the screen.] But this was how one system that we used in Canada actually worked, running off the back of ARPANET; the military infrastructure for telematic communications.

Of course the great attraction was the asynchronous nature of communication. Its not like a telephone you pick up in real time. You put the message out there, it floats out there and the recipient pulls it in at any time, any place. The piece that I did tried to work with that, it was called the Pleating of the Text, essentially what we did was write a fairytale from networked nodes; computers in disparate locations around the world connected to a single network. It came out in Paris initially, developing a new online text every three or four weeks. I think there were fourteen of these nodes in total taking on various fairytale roles: the prince, the princess, the wicked witch, and other traditional figures. This was the remake of it in Incheon in Korea last year, where we actually built a textual world that had textual interactions within it.

I was on the design board of Ars Electronica, the first new Ars Electronica building, not the more recent one. That little chart over there tried to talk about the levels of activity that might go on in the building, where you force the director of the museum to look at the top floor and to gauge when what was happening on the top floor should come to the vitrine on the ground floor. This meant that they couldn't really go to sleep once they got the job – which of course they never do, but some might do. All of this was intended to encourage that kind of activity. I designed the lift initially as a bit of fun, not to be interactive, but to be a tool that people could create content for; which many people have done over the years. Then I did this little piece at Ars Electronica, in the picture that is the old building up there with big flower-beds all around it; under that flower-bed we had a railway built. I put out a call to all kinds of places using fax and online, such as there was, for images and text about Gaia, about the Earth. You could lie on this trolley and float through the text coming up on screens, listen to the sound being played or you could look down on a map of images that people had sent.

Sorry, I am rushing this, but there we are. This is how I see the shift, we are talking about the future after all. We had moved out of the modern period for quite some decades and then we had that rather interesting postmodern turn, which didn't really last very long did it? Still, I think it was very important at the time: it shook us up and you can see how artists moved from presenting content to providing context. The content, the experience could be made by the user through participation. It was a shift from the interest in objects to the interest in process, a rejection of perspective and the fixed view of the world, to the idea of becoming immersed in worlds. So the point of view shifted dramatically, dynamically. Paranoia about secrecy, privacy and so on was replaced by telenoia. It was an attempt to move towards an understanding of field theory, which I think the understanding of is incredibly useful in informing our practice.

The only other thing I would like to quickly pull out from there is the idea of a shift from behavior of forms, to forms of behavior. But then also a shift from the first the representation and then the construction of worlds, now to seeding; it seems to me that the idea of planting seeds that grow according to changes in the environment is an important one. At the show in Graz when I announced my idea of moist media, that was a kind of manifesto. I tried to apply this idea of the coming together of biological systems and dry silicon systems to fields of practice including architecture, building, engineering and so on. Since then, of course we have moved on so moist media is no longer a really useful term. All these things; neuro, geo, chemico, cogno, nano, all of these media are being explored by artists. There is a great proliferation of interest right across the board in ways of looking at media that crosses the spectrum of wet and dry, natural and artificial, embodied and distributed, tangible and ephemeral, visible and occult. Such as you have to ask 'so what was left out?'

I used to talk about the three VRs. One was virtual reality: we all know what that means. The second was validated reality, which you learnt at your mother's knee: apples fall from the sky, buses go over cliffs if you don't put the breaks on, this real reality that we are all very familiar with. Then lastly there was vegetal reality, which came out of my experiences with Ayahuasca and from working in Brazil; visiting many, many times and relating that to the synchronism of their religious and spiritual thinking. Out of all of that is this understanding that psychoactive technology – plant technology so I can get another VR – was pharmaceutical instrumentality, in terms of

changes of states of consciousness. All those realities which used to be separate, that you used to be able to see individually, are now seamless. Now, my iPhone is there all the time, I'm going in and out of different worlds all the time, as you are. So it seems to me that we are now in a variable reality.

I'm also interested in biophotons, I think that light is at the bottom of everything; and it was of course the transmission medium of Nam June Paik. Within the body light, in the form of biophotons given off by DNA molecules, sends messages to various parts of the body. There is some parallelism between understanding the communication systems in the body through biophotons and the communication systems across the planet through photonic and electronic exchanges. Let us look very quickly at where we are with the senses. There are four kinds of approaches to the mind; organization of matter with thought processes; a silent speech interface; body swapping; and of course the big problem in consciousness that faces not just neuroscientists but philosophers, that is where is consciousness located and how do we account for the quality of experiences of smelling, arousal and so on? How do we deal with that in the meat? Equally then, the relationship between the brain and the heart is of great interest to us now.

We have eyes at the bottom at the sea. We have this robot being produced, this slime mould robot over at Bristol University. This seems to be the question of the time, a question about an architecture that thinks for itself, that grows itself and cares about us. It's

an entirely intelligent architecture that we've got to look towards. We have nanotechnology developing in forty or fifty years time. This means that we will grow, we will make the materials, we won't adapt the materials. We will make materials to behave in any way that we want material substances to behave. In my view, at that time we need to be poised ready to understand how architecture will be something which is grown, which adapts and changes like biological organisms do. Tom Ray, who made *Tierra*, is the great guru in this field.

Looking around, many of you are not old enough to know about it, but it was one of the key computer art projects of its time. You can see, I have described how it was working. About six or seven years ago in Tucson – where every two years there is a major conference on consciousness – he shocked everyone by showing, by proving that there are many, many more receptors in the brain than neuroscientists or those dealing with the chemistry of the mind had any knowledge about. For me, it is both interesting and significant that he shifted from the purely digital to the pharmaceutical. So here you go, this is something about Ayahuasca. The chant is the misleading bit, it is assumed that it is something primitive out of the jungle However, it is actually an incredibly precise application of chemistry, pharmacology and botany. It is something that has been ignored in the past and only now is increasingly being examined. I think it leads us to re-think many practices, behaviors, attitudes and beliefs of cultures that are apparently alien to us. We've been so locked into this model that it is strangling us. I think Allan Watts, the Buddhist, very interestingly said that really these are instruments of heightened perception. On the left of the image I am showing you is one work that I think is particularly interesting, where this French group are actually painting Ayahuasca loaded pigment onto the body. The body then absorbs the Ayahuasca so there are not just as it were visions on the body, but also internal visions formed as part of that practice.



We are rebuilding the self and I think that is an important function of art practice. We are in a very ambiguous place at the moment: we don't know what the self is we don't know what our identity is.

So these second order senses briefly, we know what the first order were, Aristotle has laid it out for us, and neuroscience has produced the other ones; pain, balance and so on. For me technoetic systems, whether you use techno or somatic systems (Yoga, pharmaceutical products), are designed to enable us to traverse, to further our reach, to other sorts of senses, and to other psychic states. I have used those words 'second order senses' because that is what second order cybernetics is about: the individual being within the system. These are words by the way, if you needed the warning which I am sure you don't, that you would be kicked out of any faculty meeting, any business meeting, any governmental meeting, just immediately asked to leave the room, if any of those words entered your vocabulary. They are absolutely banned, subject to ridicule or extreme disinterest, but I think the time has come to re-examine them with the new kinds of tools that we have.

This is so in Brazil, as it is daily in Korea. In Korea I have been to a number of such occasions – well actually only three, but I know that there have been many – where a company has opened a new

building and two or more shamans came to restructure the psychic space. This is a real living thing that going on, it is not a sort of empty ritual. For us to try to understand the way that imagery, that interaction, that physical posture, that environment can change states of consciousness is really something worth examining. In this scientists really need our help. I always try to echo Kennedy: 'Ask not what science can do for art' – which is the current model – 'but ask what art can do for science.' Science is in a bad way, there is so much that it does not know: it doesn't even know what makes up 96% of the universe. I think this is a relevant theme because so much money, where there was any money until two years ago, was going to people coming up with these so-called art-science projects, which were largely only illustrative. They were 10% inspiration and 90% imitation or illustration of scientific principles; they were not creative, which is a real shame.

So finally to talk about this end of the single self organism. I think we are more permeable and transparent and we are only going to see much more transparency. Older generations cannot understand why

eighteen year olds are quite happy to share everything on Facebook. They will say, "You know in a few years you'll be going for a job and the chief executive of the company will know that you got smashed every Thursday night," and their reply will be, "Yes, but by the time I'm there we'll all be transparent"; and I think they are absolutely right. We are rebuilding the self and I think that is an important function of art practice. We are in a very ambiguous place at the moment: we don't know what the self is we don't know what our identity is.

A final point about the hierarchy of people in the world who have influenced us; Duchamp for me goes right at the top of the list. Then there is Cézanne, who was hugely important in terms of the different types of relationship to the picture, even within a painting you had to figure out how everything goes together. After Cézanne comes Pessoa, the national poet of Portugal, who created the concept of the heteronym. When he died he left twenty eight thousand documents in a trunk, which were mostly written by seven, but in all over seventy, different characters. John Gay once said he cracked the whole Western notion of the unique self, just blew it apart. They were not simply characters or aliases, they were total persons who he inhabited. In relating this to second order senses, we can see that he was open to these other kinds of personalities and these people invaded him. Think what you will about that, but I think we are seeing now, through Facebook, not just a self-determination of what one is, but of the many that one can be.

So my final message is this: while matter certainly matters, for we are all dealing with the material world, the mind has yet to be mined. If there is an agenda for art, and I wouldn't be presumptive to say 'there is an agenda for art'; but if there were be one at all then for me it would be consciousness. So that forms a kind of map of where I am now and how I see the world. I think that reality is syncretic and it's unstable but in the most favorable, in the most fruitful, creative sense. I have probably gone over the twenty minutes that I was allowed to use, so let us talk and thank you very much for your attention.

