

## Reflections on the Lux Scientia Science and Art Meeting, 10, August 2011, Skyway Festival, Torun, Poland

Simeon Nelson

"Cherish those who seek the truth but beware of those who find it." ~Voltaire

This meeting was between the three artists, Dominik Lehman (Poland), Leonardo Meigas (Estonia) and myself of the Lux Scientia project and three scientists from Nicolas Copernicus University, Torun. It was chaired by Janek ?, a very engaged young Polish astrophysicist and conceived of by Mario Caerio, the Lux Scientia co-curator. It was one of the art and academic discussions on the nature of the relationship between science and art that will occur in each city for Lux Scientia and which will culminate in a conference in London in 2012. This text is a reflection on some of the conversations that occurred, it is not exhaustive and is not a report as such but is my interpretation of the other two artists work, an explanation of my work and a response to issues and ideas that resonated with me personally.

After getting off to a slightly late start as the artists had not had much sleep after the opening festivities the night before Janek, the chair asked each artist and scientist to introduce themselves and their practice and research. Vigorous discussion quickly ensued and the most interesting aspect of the morning for me was the exchange between **Leonardo Meigas** and the three scientists. Leonardo's work for *Lux Scientia* consists of a visually engaging sculptural rendering in vertical clear acrylic sheets of the Hartmann Grid, a hypothetical energy field that covers the entire earth on a 2 meter grid. It is interesting to note that the explanatory panels accompanying Leonardo's installation are written as if the reality of this grid is established. Leonardo asserted that the grid was electro-magnetic in character which was met with deep skepticism from the scientists who pointed out that electro-magnetic grids can be measured to a vanishingly tiny degree and that there is no experimental evidence at all that such an electro-magnetic phenomenon exists. Importantly they stated that they remained open to the possibility that something like this grid may exist but that it would not be electro-magnetic in character. One of the nice aspects of this meeting was the sense of openness and willingness to engage from all participants. Too often there can be closed-minded inability to do so.

Leonardo demonstrated a copper wire rod divining apparatus that looked like half a large wire clothes hanger that he believed indicated the intersections of the grid by swinging directionally when influenced by its presence. He paced the floor space within the circle of our chairs and the apparatus did indeed swing at one point which he said established the location of a grid intersection. I am open minded to the idea of divining, there is no current scientific explanation but this does not mean that it or other such forces and influences don't exist, in fact I am quite temperamentally attracted to a cryptic world of forces and purposes outside the domain of current mainstream science. I intuit deeply that the world is animate, that there is purpose and intentionality imbricated in nature at many levels and that this may be transmitted or communicated via fields and media as yet undetected. But I have never been convinced by performances such as this; the movement of the wire could be explained by subconscious hand movements. I watched his hands closely as he paced the floor and I felt I saw his hands moving autonomically, i.e. the wire was responding to an internal stimulus not an external one. I may well be wrong and even if I am not this does not mean that something external was not going on. Perhaps Leonardo himself was transmitting something

external to the wire? But the point is that this is all totally speculative conjecture, there is no basis for a position of believing or disbelieving. Belief in a particular thing or phenomenon is a different species to faith in a world view, it is possible that Leonardo and my world views are in broad agreement regarding the vitality, intentionality and animatedness of nature, but I remain deeply skeptical of particular manifestations or demonstrations of connection to it for the reasons outlined in this report.

I found myself agreeing wholeheartedly with the scientist's skepticism. I asked how the geometry of the Hartmann grid worked pointing out that when a square mesh is wrapped around a sphere its intersections are no longer 90°. If claims to the objective actuality of something are made it is essential that they are backed up by an interrogative process of testing and thinking. I became impatient and suggested that we move on as it was not productive to have on one hand an assertion the existence of something and on the other not.

What the discussion between Leonardo and the scientists did not do was illuminate relations between art and science, because it was focussed on something that was neither art nor science. By asserting the 'truth' of a phenomenon which is unproven the phenomenon falls into the category of pseudo-science. Discursive contemporary art practice is another matter; art illuminates reality in a metaphorical and symbolic way, it makes no assertions as to the ontic, the empirical nature of objective reality (though hopefully it will enhance our understanding and insight into reality); making an assertion about the existence or non existence of a particular thing is not within the domain of art. It is in the domain of science, but remains testable as a falsifiable statement. Should artists be defending a particular 'truth'? Artists need to be radically open and my personal opinion is that the factually incorrect 'positivism' of the Hartmann Grid installation is making a compound category error, confusing or conflating science, art and personal belief system. The knowledge the work purports to contain or to reveal is illusory and subjective. Art in its essence and by definition is useless, functionless; it can serve the needs of a belief system (one only has to look at historical religious art) but in a post-modern era can it be part the construction of that belief? Art begins where doctrine leaves off. Artists suspend belief (and disbelief), to make space for their work, otherwise the work is suffocated, its meaning compressed to being merely an illustration of something. Leonardo practices as a designer so his work for Skyway fits the definition of design better in that its purpose is to reveal the reality of something the designer believes to be real. But it seems to me that there is little evidence of critical self examination in this work. Belief, what one believes, feels like believing, feels passionately to be true can collapse into a brittle mental construct of little intersubjective or discursive value if unexamined. It is important to step outside the construct of ones belief to take a critical look. The route to genuine interdisciplinary discussion and collaboration lies in this direction.

This encounter raises questions for me about the nature of belief. When a claim for the existence of a specific physical phenomenon or thing is made that cannot be empirically established what is going on in the mind of the claimer? Do they believe that there is actually evidence despite the lack of it, are they misunderstanding the nature of empirical evidence? Do they think that what they believe while perhaps not being true in an absolute sense is a cipher for a world view they are passionately committed to and therefore worth defending? Do they feel that admitting doubt will destroy the edifice they have constructed? Are they avoiding a rigorous process self scrutiny that would threaten their belief system? I have run these arguments within myself as someone who holds particular world views not in some

important ways aligned to modern scientific secularism. I recently asked a relative in Australia who holds some pretty far-out 'New Age' views if they interrogate their own views, stand outside them and ask if they are valid. They were shocked at the notion, why would one do that to oneself they asked, what point is there, if I believe it, it must be true. Are closed epistemological loops, impervious to discussion or contention productive of use in interdisciplinary debates?

The conversation then moved to *Plenum*, my work for Skyway and I talked about it in terms of a suspension between science and myth, I am interested in the complementary aspects of the different accounts of creation found in science and religion. I am not interested in a narrow definition of art interacting with science, but in a broader more inclusive model.

*Plenum*, my projection on the late Baroque front of the Holy Spirit Church was conceived of as a creation myth, an account of the unfolding of phenomenal reality from cosmic egg or primal point. This is a work which plays 'live' each time it runs, it is an algorithmic and iterative, the code on which it is based will unfold in different ways. Through it I am trying to communicate what I consider to be the theistic implications of complexity theory - that the way that the world has unpacked itself and grown in complexity from a unified initial condition; that the inherent creativity and increasing degrees of freedom in the natural world that have evolved ultimately into us are an indication of a creative substrate, an undivided whole, an underlying purpose that in a sense wants us to be. All phenomena are seen as manifestations of this undivided whole. I see this creative substrate as cognate in some ways with the Vedic notion of Brahma, Paul Tillich's notion of God as the 'ground of being' and David Bohm's implicate order, a sub-phenomenal matrix from which both consciousness and matter manifest. Much of this inspiration comes from Pierre Teilhard de Chardin's ideas about the evolutionary self-becoming of nature. In my work not looking for proof that anything in particular is so, I hope that my scientific and theological understanding is sufficient to avoid committing the sin of solecism - getting basic facts wrong. I am not asserting any particular truth or trying to persuade anyone of it.

*Plenum* could be appreciated and interpreted without any of the above metaphysical issues so important to my world view. I like to keep its readings as open as possible so that both religious and secular interpretations are valid. What I would hope is that the organic expansions, contractions and perturbations of *Plenum* pose questions regarding the structure of reality to the viewer and create an open contemplative space where uncertainty can hover.

"well-being and ill-being always contain a certain measure of their own opposite, hence they always-already inhere in a hybrid relational space of liminality, an interactive territory of the middle concerned with the processes of relationship and mediation rather than with linear causality, certainty and purism."

Monia Brizzi

I attempted to recount my thinking on theodicy, which is an integral aspect of *Plenum*. Theodicy is the explanation of how a loving God can allow evil, suffering and calamity to occur. My theodicy sees calamity, suffering and evil as a necessary and integral aspect of (human) nature. The above quote from psychologist Monia Brizzi states elegantly the intertwined nature of problem of suffering and joy on a human, subjective level. *Plenum* is trying to say that the created order of the natural world is necessarily free so that evolution and higher life forms like us can come into being and become creators ourselves. The laws of nature have provided the conditions for us to exist that include plate-tectonics, dynamical weather systems,

tsunamis, tornadoes etc. Plenum attempts to apprehend the sense that our intelligence, our autonomy, our free will is our gift to use for good or ill and the calamitous history of humanity and the fact that the individual can suffer is the price for that freedom. Creative freedom cannot exist without risk.

**Dominik Lehman** spoke very differently of his painterly video practice. He was not making claims as Leonardo was nor was he loading his work with metaphysical meaning as I was. He stated that his aims as an artist were modest, to set situations up and see what happens. Interestingly for a painterly practice, his work for Lux Scientia was stretched to the limit into the 3rd dimension by his capturing of skydivers trying to form cathedral geometries fleetingly in the few minutes they had in their fall. It was projected on to the relatively culturally neutral external wall of the Contemporary Art Centre

As a sculptor I was fascinated by the inherent contradiction of compressing such a vast vertical distance into a 2d picture plane. His parachutists were trying in a couple of minutes to capture the vastly different timescale of a cathedral and by so doing for me to see even the seeming permanence of the cathedral as a fleeting symbolic manifestation at a the greater-than-human cosmic timescale. For me Dominik's work was a highly succinct poetic meditation on human finitude as well as the nature of time and space at different scales and dimensions, and also on the sadness of our attempts to attain the divine, to apprehend what is beyond human apprehension.