

> interview



Displace



Anharmonium

You started your career in computer music and programming for sound. What initially drew your interest towards synesthetic phenomena?

After my studies in Music Informatics (1990) my interests quickly turned towards the aggregation of sound and visual elements for creative purposes and composition. That coincided with the advent of personal computer multimedia technology. An awareness and interest in synesthetic qualia in both perception and artistic creation became the focus of my work and research only much later, around 2005, along with the conception of the Optofonica platform. At that time I felt it was more than just a fascination for audiovisual technology that was drawing artists to compose with sound and image/light but also an interest in their psychophysical possibilities. So too, 'space' (in terms of architectural and sculptural dimensions) was an underrated concept whose importance needed to be reconsidered in terms of the perceptual factors involved in aesthetic appreciation. Neuroesthetics definitely resonates with my research and practice today. However, I believe that we need to engage a wider conceptual ground beyond the functioning of the brain and its cognitive mechanisms. In my practice I promote an awareness of the body and the space in which the body moves, exploring where cognition emerges through the activation of the (extended) senses. As artists we now have the ability to perform with materials that affect

and interact with perceptual mechanisms in endless ways. For example we can now activate and play physical phenomena that occur outside the envelope of ordinary perception, and scale these phenomena to the human 'sensorium' in order to evoke novel synesthetic sensations.

You've given a number of lectures recently on the concept of the 'spectral sensorium'. Is this a theoretical concept or a work in progress?

'Spectral Sensorium' is a conceptual container for the current state of my research and practice. The 'spectral' part concerns all that is related to modal phenomena, in their physical dimensions and in the ways they occur both as natural and artificial events. The 'sensorium' part involves all the psycho-physiological conditions by which we access that spectral reality. Provided that all reality is the manifestation of vibrational phenomena at different rates (or frequencies), we can assume that our instruments of perception can be tuned and stretched to reach this or that phenomenon. This entails a degree of plasticity of our cognitive functions, as well as the use and creation of technologies able to access, translate and correlate the manifold vibrational events surrounding us. I think it takes an initial mental effort to grab this concept in its real potential. Once you tune into this vision, a leap in consciousness is inevitable that leads to the realization that we're still rather primitive in the way we conceive, organize and use our knowledge. This of course impacts the way we live in and treat the world.

In the past you've described your practice as moving focus from physical objects that stimulate perception towards a concern with the act of perception itself. Can you elaborate on this?

The idea here is that we can (create) work to stimulate our consciousness rather than our habitual emotional responses. This doesn't mean that we're going to create artworks devoid of emotional content or aesthetic consideration. On the contrary I believe that a work based on some 'live' phenomena inherits

a living quality that resonates with the deepest and most natural of our sensorial abilities, as such transcending the forms of aesthetic appreciation based on cultural norms, education, tastes and habits. In a way, therefore, we can look at a more 'objective' type of art, which will anyway be interpreted with the local cultural and subjective 'perspective' - so to speak.

Transdisciplinary art/science collaboration appears to be a key component of your practice. Do you believe that artistic practice can function as a mode of scientific research or enquiry? If yes, how so?

Yes. My main influence is science. Science, from the latin Scientia means Knowledge, and is defined by the dictionary as "the organized body of knowledge concerning the physical world, both animate and inanimate". If we liberate science from the dogmatic contemporary paradigm of the scientific method, we don't need to look at any 'bridge' between science and art, or any other discipline.

Last year I was invited to FLInT (Fundamental Living Technology) Lab at the University of South Denmark, to collaborate with Martin Hanczyc who is a pioneer in Synthetic Biology. We decided to help each other on respective projects, his being an investigation of the effect of sonic and magnetic stimulation over protocells or vesicles (chemically infused droplets showing lifelike behaviors under certain conditions). At FLInT lab they had no idea how to create or adapt a system for these purposes. Previously they had used a guitar amplifier to push air pressure waves over the protocells, and neodymium permanent magnets moved by hand around the microscope. After being appraised of the research projects and after an instantaneous 'crash course' in synthetic biology, I developed a system to control and transduce sonic vibrations to the petri dishes containing the protocells. I also built a circuit to pulse an air-core electromagnet at a desired frequency and intensity that could be placed at the microscope lens to observe the impact on paramagnetic-material infused in vesicles.



Both systems were based on technology I had previously designed for my artworks (Capsule, Anharmonium, TBYP) and proved extremely useful for their research at FLInT. In exchange, Martin will soon help me to identify the correct protocols and methods of research for a Bio-Communication project I intend to develop in the near future. Collaborations of this sort can and should happen. Everyone can benefit from them: artists can learn to be more rigorous in the way they explore certain scientific subjects, and scientists can learn to think intuitively and 'outside the box' and dare to explore beyond the perceived boundaries of their discipline.

You're the founder of the Optofonica lab for Synesthetic ArtScience in Amsterdam. How was the space conceived and how has it evolved? Do you have a favourite project that has come from the lab?

Optofonica was first conceived by myself in 2006 as a platform to connect artists on the basis of their common interest in Synesthetic Media creation. For about three years it functioned to promote multichannel spatial sound and video performances and surround cinema screenings. In 2008 it became a laboratory located in the center of Amsterdam and I've since collaborated with a number of experienced artists devoted to the creation of immersive environments. My favorite two projects from that time are Sonia Cillari's "Sensitive to Pleasure" and my own "Anharmonium". In 2011, after some internal

turbulence, the Lab was closed and then re-established by myself alone in another location. The scope remains pretty much the same and I'm working also with students from ArtScience Interfaculty of Den Haag where I'm a guest teacher.

Much of your work appears to emerge from collaboration. What has been a particularly fulfilling collaboration for you and why?

It's true that lots of my work finds its best expression in collaboration. Maybe that is because I particularly enjoy sharing my visions and learning from direct experience with others. If two or more people find a good 'tuning' it's like a third mind appears and rules the creative process to unpredictable extents. And for me that's the luckiest situation possible. You'll double or triple your intuition and things will emerge by apparent serendipity. My most fulfilling collaboration so far has been that with Sonia Cillari on her "Sensitive to Pleasure" installation/performance piece (2011). This piece is both a performative and immersive environment where invisible electro-magnetic interactions between two bodies are translated into sonic and electrical stimulations. I felt I could incite ideas at each time and my work on spatial sound composition has been largely influenced by Sonia's sensations and suggestions too. It's like the composition has been done with 'four hands' and with a male/female joint sensibility. If I had worked alone I could never have created such sounds! Nonetheless my

blueprint is clearly present and the artistic identity of the sound work is very recognizable. Sonia and I are like brother and sister, so that was for me a truly special collaboration. In the past three years or so I've also been working with Chris Salter on a number of projects. That's also a very stimulating collaboration.

What does the 'laboratory' signify for you in the context of artistic production? How does it differ from more traditional terms such as the studio or the workshop?

I've always been very devoted to the idea of the Lab. Before Optofonica I ran two other laboratories, Maximum Media in Rome, and SUb Multimedia in Rome and Amsterdam. My understanding of the laboratory is that of a 'double' space. The first space is closed and run by the 'labbers' who sustain it, both morally and financially, and who are all responsible for the research activities and presentations that take place. The second space is open and functions as an interface with the public. Anyone can interact and collaborate with the labbers at any time and this usually happens after a project proposition from either side. A lab is experimental by definition, but I don't think a laboratory is necessarily different from a studio or a workshop. Maybe a laboratory is easier to identify both artistic and scientific endeavors. I like that the word laboratory originates from the latin *ora et labora*, "pray and work", and I always say that a true labber must be as devoted as a monk!

> interview by Rachel O'Dwyer

Any upcoming projects?

Yes, many. One new solo A/V installation (PLASM), One new album with Clock DVA, Two new collaborations with Chris Salter (DISEQUILIBRIUM, BIOS), Two collaborations with other sound artists (undisclosed), and probably something else will unpredictably spring up too!

Maurizio Martinucci (aka TeZ) is an interdisciplinary artist and independent researcher. TeZ is the brainfather of the 'Optofonica' platform for Synesthetic Art-Science, located in Amsterdam. <http://www.tez.it>