

GESPENST / WIDMO / SPECTRE

self-replication of pathogen

new work by **ROBERT B. LISEK** of Fundamental Research Lab
at LETO Gallery, Warsaw

opening reception:

Friday, October 17, 2008 7-9 pm

exhibition:

17.10 - 12.11. 2008

GALERIA LETO

ul. Hoza 9c

00-528 Warszawa

022 499 59 16, 0501 696 440

www.letto.pl, galeria@letto.pl

opening event in conjunction with the exhibition:

GGGHOSTS - crash happening & live noise_jazz concert

Gerard Lebik /Foton & Erase

Robert B. Lisek /Fundamental Research Lab /

Michal Trela /Erase

Avabaf & Noise Devastation

Friday, October 17, 2008 9 pm

STSW

ul. Lubelska 30/32

Warszawa. www.stsw.org

The '**WIDMO /das GESPENST/ SPECTRE**' project, a result of research by the artist at the Molecular Biology Laboratory of Wroclaw University, explores the relationship between bio-molecular technology, code and issues arising from network technologies. With reference to the emerging practice of 'biotech-art', the artist aims to represent the self-replicating behavior of bacteria in order to draw out its wider bio-political significance in an imagined scenario of bioterrorism.

For the exhibition, the data from the process of self-replication of DNA is represented in a visual projection and sound installation. As depicts the process, a singular stream of light and sound grows into a wall of light and sound. 'Noise' and errors of micro-interferences proliferate. The exhibition also comprises luciferase-mediated bioluminescent bacteria, fluorescent plants (using GFP), paintings and diagrams, photographic and video documentation from the artist's research work.

Lisek's research was initially concerned with the self-replication process of the isolated

gene of Escherichia Coli bacteria. Through a fast and inexpensive technique sometimes referred to 'molecular photocopying' (or more commonly 'Polymerase Chain Reaction', PCR), small segments of DNA are amplified in real-time. The speed of the self-replication is exponential - after just one cycle there are two new DNA, and after 30 cycles over a billion in a few hours.

The artist's intervention is to imagine a scenario in which a new strand of bacteria 'E-coli 1XkZF' is created that can reproduce itself in water. The bacteria is augmented with a gene that produces a protein harmful to humans and is modified to glow. The scenario is translated into a map representing the process of contamination of a city's water supply. The map provides an understanding of how 'pathogens' (in this case the artist's E-coli bacteria) spread and the connections between multiple biological and communicative networks. In graphic terms, a narrative of bacterial infection demonstrates how easily new dangerous bacteria strands can be grown and how quickly they might spread in a metropolis such as Warsaw.

Lisek's artwork reflects his long interest and previous work involving graphs and networks, such as his project 'FACE' and current project 'NEST', for which he received a prestigious ARTE 2.0 Vocento prize at ARCO International Contemporary Art Fair in Madrid (2008) ("<http://fundamentalresearch.org/FACE/face.htm>"). It is possible to draw comparison here with the wider field of software/generative art that often refers to the influence of biology and emergent behaviour. Software can be seen in terms of 'genotypes' (DNA in cells) as machine code, and 'phenotypes' (the higher level form of behaviour) as what happens when it runs. The authoring process is directed towards a genotype as the specification of a process, and when this process is executed it generates the phenotype as the experience of the artwork. It is worth noting the position of the artists in this description are responsible for the DNA of the artwork in the perpetuation of a 'creationist' myth whereas other external factors are at work in creative production in art and biology. Biology, like technology, is clearly caught up in complex cultural narratives of power, knowledge and subjectivity. This is reminiscent of the ways in which Michel Foucault theorised the body and technology as bound together in the construction of power – what he refers to as 'bio-power'. The human genome project is a good example of the ways in which knowledge and bio-power serve the interests of institutions over individuals. The human genome surely belongs to the 'common heritage of humankind' rather than individuals or corporations, whereas the tendency is for code to be forced into the property regime.

Issues around property, privacy, security and the invisible architecture of the Net are consistent concerns. With the new work, Lisek explores further interests in the connection between self-reference and recursion in logic and self-replication in biology and nature. Experimentation in the biotech realm situates Lisek's artistic practice in close connection to the work of Eduardo Kac who controversially produced a transgenic artwork called 'GFP Bunny', the creation of a green fluorescent rabbit, in 2000. The media attention arising from this project, and the ethical issues it raised, were taken to extreme with the unfortunate episode of artist Steve Kurtz (of Critical Art Ensemble) who was arrested by the FBI in 2004 on suspicion of terrorism. In turn, are the bioterror alarm bells ready to sound for 'WIDMO /das GESPENST/ SPECTRE' as words spread like a virus about the possibility of a bioterrorist attack on Warsaw?

Text by Joasia Krysa and Geoff Cox (KURATOR)



Robert B. LISEK is an artist, mathematician and founder of FUNDAMENTAL RESEARCH LAB working at the intersection of arts and media. He is involved in the number of projects focused on radical art strategies, hacktivism and artificial intelligence. Drawing upon conceptual and software art, telepresence, robotics, meta-media, criticism of new media art, and introducing numerous additional influences from mathematic, his work intentionally defies categorization. His visionary combination of AI and telepresence explores the possibility of building distributed intelligent entities. He is also a scientist connected with the Department of Logic of Wroclaw University specializing in the theory of partially-ordered sets. He exhibits, lectures, and conducts workshops worldwide. His projects include among others: FLOAT – Lower Manhattan Cultural Council, NY; WWAI- Siggraph, Los Angeles; Falsecodes - Red Gate Gallery & Planetary Collegium, Beijing; GENGINE- National Gallery, Warsaw; FLEXTTEXT- CiberArt Bilbao, Medi@terra - Byzantine Museum, Athens, STACK- RunMe-Moscow, Ars Electronica- Linz; FLEXTTEXT - ACA Media Festival, Tokyo; STACK – ISEA 02, Nagoya; SSSPEAR –17th Meridian, WRO Center for Media Arts, Wroclaw, HAPPY NEW FEAR – FluxusOnline, New Horizonte; ODER- Graz, Dusseldorf, Athens, Paris, Tokyo, Palermo, Istanbul.

<http://fundamentalresearch.org>

<http://www.freeconcept.net/>

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