Marko Peljhan[1]

Situational Awareness

> ... the world is grown so bad that wrens make prey where eagles dare not perch ...
> William Shakespeare, *Richard III*

> ... People of Earth, hear this! The human brain until now has been hopping around on three legs (the three axes of location!) We intend to refurrow the human brain and to give this puppy dog a fourth leg—namely the axis of time! People from the past were no smarter than us; they thought the sails of government could be constructed only for the axes of space. But now we appear, wrapped in a cloak of nothing but victories, and begin to build a union of youth with its sail tied to the axis of time, and we warn you in advance that we work on a scale bigger than Cheops and our task is bold, majestic and uncompromising. We are uncompromising carpenters, and once again we throw ourselves and our names into the boiling kettles of unprecedented projects ... let the milky way be split into the milky way of inventor_explorers and investors_exploiters ...[2]
> Viktor Chlebnikov, Marija Sinjakova, Bozidar, Grigorij Petnikov Nikolaj Asejev, 1916

The works that are presented in the framework of the *Situational Awareness* series are an attempt to map the spectral landscape of the attackers, the attacked and the consequences of their activities in the territories of network-centrism.

Three shifts[3], which are fundamental to the understanding of this new situation and are central to my interests are: the shift of focus from the platform to the network; the shift from viewing actors as independent to viewing them as part of a continuously adapting ecosystem and the importance of making strategic choices to adapt or even survive in such changing ecosystems.

The method most commonly used in this mapping, creation and engineering is "conversion"[4]. Conversion from abstract to material, military to civilian, from dark to light, from closed to open, from node to network, from old to new and vice versa.

The translation of abstract data fields into useful networked information is one of the major tasks that has arisen as a result of the saturation of sensor outputs in the framework of the Makrolab (1997–2007) project. A similar task will be presented to us after we complete the initial setup of the Interpolar Transnational Art Science Constellation[5] systems in the Arctic and Antarctic. The understanding and translation of complex interrelations between the global dynamics of telecommunications, migrations and climate systems is at the core of this quest, a core that has given new potential to the redefinition of what a "third culture" could be. A culture that I define as a landscape nestled between the art of art, the art of science, the art of situations, the art of war, the art of exploration and the art of invention.

Engineering and science on the one hand, and creative arts and humanities on the other are, at their best, instrumental at setting the path of evolution of knowledge. They all feed human curiosity and vision, but together, as a synergy, they would make a remarkable planetary evolutionary force, the "third culture", which will have to be built on the experience and knowledge of the visionaries of past centuries and fuelled by our own twin forces of curiosity and responsibility.

Marko Peljhan at Ars Electronica 2007
Situational Awareness

The project series is comprised of an exhibition, a live sound/signals event and an unmanned aircraft system flight demonstration.

The *Situational Awareness* exhibition features the Ladomir Monitoring Systems unit, a display of different sensor-carrying craft developed within the project from 1997 on, models of polar systems architectures and related documentary and reference material.
A documentary film on the work of *Projekt Atol,* directed by Zemira Alajbegovic, as well as documentary material filmed on the first I-TASC expeditions to the Arctic and Antarctic in 2006/2007 by Saso Podgorsek, Amanda Rodrigues Alves and Thomas Mulcaire is presented.

SPEKTR is a three-hour performance comprised of live high frequency, very high frequency, ultra high frequency and microwave audio and video signals interception and manipulation, including an array of sensors that are part of the Makrolab sensor suite (radar, automatic dependent surveillance receivers, transponder receivers and other exotic black box systems). A collaboration between Aljosa Abrahamsberg aka Nullo, Matthew Biederman aka DelRay and Marko Peljhan aka MX.

The *C-ASTRAL CCR Flight Demonstration,* an unmanned aircraft system flight demonstration, will be the first civilian counter reconnaissance UAS autonomous flight demonstration in Austria. After the success of the System-77CCR experiments presented in Vienna in 2004, the *C-ASTRAL* system takes flight over the Danube and beyond.
Presented by the *C-ASTRAL* team, Marko Peljhan, Samo Stopar and Nejc Trost.

1 More information on the works of Marko Peljhan and texts on Marko Peljhan by Brian Holmes and Nataša Petrešin are available on the AEC website www.aec.at/privacy/topics
2 Excerpt from Khlebnikov,Velimir: *The Trumpet of the Martians* (Truba Marsia'n) 1916, published in: Khlebnikov,Velimir *Collected Works,* Volume I: *Letters and Theoretical Writings,* edited by Charlotte Douglas, translated by Paul Schmidt, Harvard University Press, 1987, pages 321–324. Original Russian version in: Velimir Hlebnikov, Tvorenija, Sovetskiy Pisately edition, 1986, (t.258), page 602–604
3 Vice Admiral Arthur K. Cebrowski and John J. Garstka, *Network-Centric Warfare: Its Origin and Future*, U.S. Naval Institute Proceedings, Annapolis, Maryland, January 1998
4 *The Anatomy of Russian Defense Conversion,* by David Holloway, William Perry, James Goody, Michael Intrilgator, Ward Hanson, Jonathan Tucker, California, Vega Press, 2000
5 *http://www.i-tasc.org, http://www.interpolar.org, http://makrolab.ljudmila.org*

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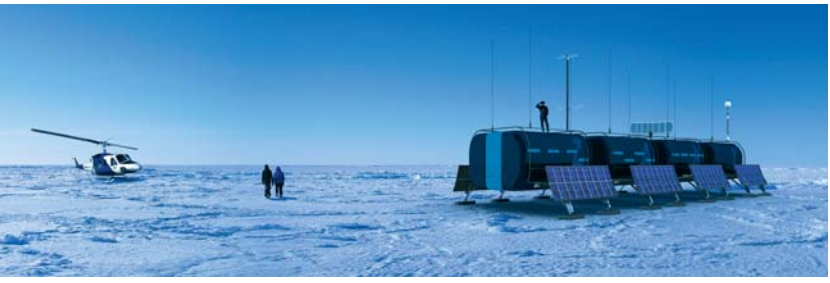


The I-TASC LADOMIR first design milestone vision; Marko Peljhan, STVAR Architects, Jan Trost, Nejc Trost, March 2006








Makrolab markIIex on Campalto, image taken by the Quickbird satellite, Campalto Island,
Venice lagoon, July 2003, coordinates: 45°27'41.30" N / 12°19'07.27" E

Makrolab markIIex during the UCIRA 2006
I-TASC exhibition setup, Pacific Ocean shore, UCSB, Santa Barbara Channel, USA, Pilot/Photo: Nejc Trost

Makrolab has started, Mjesec, Krk Island, Croatia, 1994

Makrolab mark I, Lutterberg, Kassel, documenta X, Kassel, 1997

Makrolab markIIex Campalto Operations,Venice Biennale, Campalto Island, Venice, June to November 2003

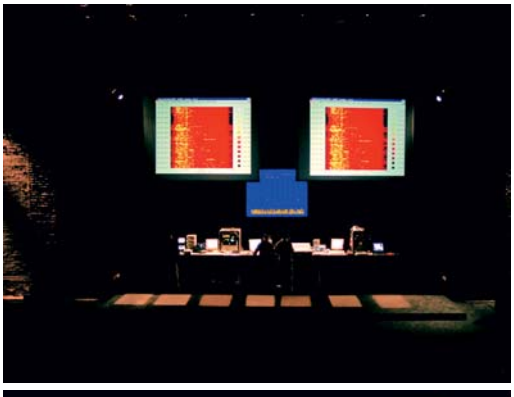
Makrolab markII Rottnest Island Operations, Home, Art Gallery of Western Australia, Australia, January to May 2000

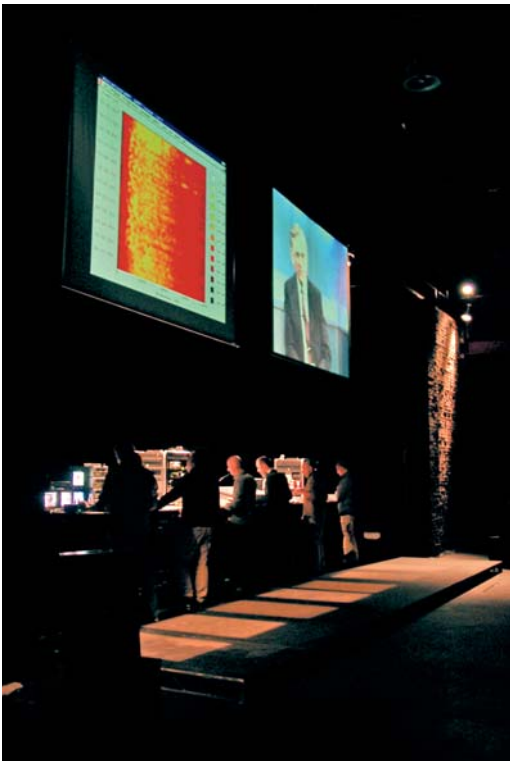
UCSB crew at Makrolab markIIex Campalto Operations, Venice Biennale, Campalto Island, Venice, June to November 2003

Makrolab markIIex Campalto Operations, Venice Biennale, Campalto Island, Venice, June to November 2003

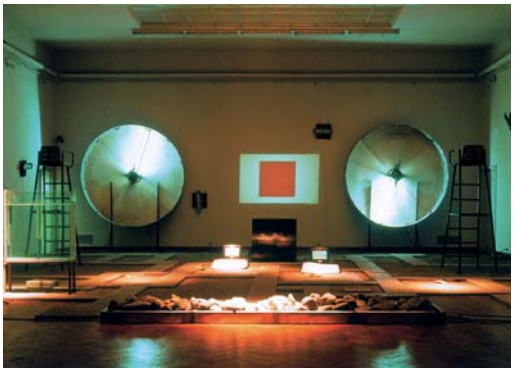
Electronic Media Monitoring Makrolab operations equipment console 2000, World-Information.org, Brussels, 2000

Electronic Media Monitoring 2000, World-Information.org, Brussels, 2000



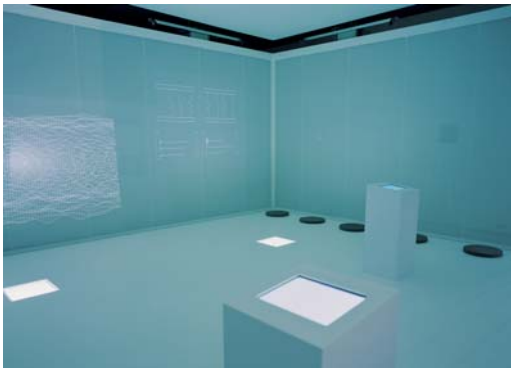


Signal Sever Transignal: Live signals interception and sound durational performance, Tramway, Glasgow, 2002



rss ATOL, performance/installation,
Moderna Galerija Ljubljana, 1993

SOLAR, performance with Raster/Noton, Pact Systems,
Nullo, Mx, Ars Electronica Linz, 1998



Polar, Artlab 10, Hillside plaza, Tokyo, 2000 in collaboration
with Carsten Nicolai

Nav lights, Makrolab markIIex Campalto Operations,
Venice Biennale, Campalto Island, Venice,
June to November 2003

SYSTEM-77 Civil Counter Reconnaissance
situation/intervention, Karlsplatz, Vienna 2004

SPECTRAL-SYSTEM TYO-ON 2005, Open Nature, NTT-ICC,
Tokyo, 2005