

Marcel·lí Antúnez Roca - Texts

TRANSPERMIA DOSSIER

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Written: Barcelona
Date: January 2004
Topic: DEDAL microgravity experience & Transpermia prototypes
Category: PERFORMANCE
Work: Transpermia

The Transpermia theory offers prototypes for extraterrestrial life-that is, for extending the limits of the biosphere and thereby improving our world. This Transpermia arose as a result of the Dedal experiment and its circumstances. Dedal consisted in a series of zero-gravity micro-performances held in the spring of 2003 in Star City in the Russian Federation.

The parabolic flight technique is one of the few techniques allowing zero-gravity experimentation on earth and is the one that comes closest to the microgravity of space. There are three agencies in the world that carry out this type of flight: NASA, the European Agency and the Russians at the CGTC (Yuri Gagarin Training Center). The Ilyushin is the aeroplane used by the CGTC for this type of flight. This aeroplane, originally a freight transporter, has been adapted for this work; it is diaphanous and has a padded floor.

On each parabola, the aeroplane flies at an angle of 45° from 6,000 metres to 8,000 metres, before dropping back to the original height. During this time, which lasts more or less one and a half minutes, passengers' bodies experience half a minute of double gravity, or 2G, twenty-five seconds of microgravity, or zero-gravity, and another thirty seconds of 2G. This type of flight usually lasts a total of about one and a half hours. While making Dedal, we had to make two flights, on 10 and 11 April, with six and nineteen parabolas, respectively.

The zero-gravity experience is tough. The evolution of the human body is influenced by the gravity factor, so that if it increases or disappears the body experiences a different, unfamiliar feeling. Microgravity produces, amongst other things, a diachrony between the actions of the limbs and one's position in space, makes self-perception disappear and changes the pressure of body fluids. Experiencing zero-gravity takes training; this is why these flying laboratories have been built. The first flight is a revealing experience and in our case this epiphany conditioned the decisions and form of the second flight.

The micro-performances were organised around two devices: the Requiem bodybot (bodily control robot) and the dreskeleton (corporal interface of an exoskeletal nature). The actions were produced during the periods of zero-gravity. Taken as an experiment, the micro-performances had varying results.

On the six parabolas during which I was inside Requiem and moved by its pneumatic sequences, the paradoxical floatability we had foreseen was not achieved. The bodybot was hanging by its head from the roof of the aeroplane with its feet tied by ropes. In Requiem's six parabolas it floated timidly due to over-zealous control by the CGTC instructors, so that instead of becoming a metaphor for lightness, the experiment became the paradox of control. However, the nineteen parabolas of the dreskeleton interface were more satisfactory. These actions used the reading by some of the Dreskeleton sensors during the weightless movement, producing an almost involuntary interaction with the films and the softbot, all of them elements especially produced for this experiment. On the basis of the conclusions from the first flight, we included in this interactive experiment the extraordinary weightless choreography of my floating body driven by Boris, one of the instructors.

This experiment led the first reflections to focus on the absence of gravity. But as I went deeper into the results, my interests extended to other aspects of the conquest of space.

Scientists say that certain remains (stromatolites) show that life originated on earth more than Three Thousand million years ago, but the mechanism that gave rise to it is unknown. Amongst the different hypotheses is the panspermia theory. This theory suggests that asteroids with biological material crashed into the earth, giving rise to life. According to this assumption, then, we can say that the strategy of organic evolution, the evolution of life, is returning, after this million years, to where it came from: space. We can therefore speak of an inverse Panspermia-that is, Transpermia.

The ephemeral existence in space of cosmonauts (also astronauts, taikonauts...) is possible thanks to the sum of biological evolution and culture. One of the consequences of evolution has been to engender an organism capable of using abstract intelligence: Homo sapiens. As a result of this, culture has arisen. Culture is in the last instance one of the manifestations of the biological evolution of life.

But most life forms in space are extremophiles, and conditions for man are also extreme. Space is radioactive, gravity-free and anaerobic. It is therefore necessary to build the basics of an artificial device to embrace life outside the earth. Extraterrestrial life, as well as living beings, needs science and technology, culture, in order to exist and reproduce; natural life as we understand it on earth is not possible in space. In orbit around earth artifice and nature merge, and I see it as the place where everything is conceivable, everything is possible, everything remains to be done. This Transpermia is the space for utopia.

I think extraterrestrial life should not be something just for soldiers and scientists, like it has until now. In this artificial, cultural, biological Transpermia there must be a bit of everything. We must not obviate the methodologies of art; they may be useful in this process. Artistic practice free from the empirical rigours that bind science might contribute new hypotheses, new visions.

For me, Transpermia is the driving and amalgamating force behind a large part of the concepts my work involves. My prototypes, such as robots, corporal interfaces and systemic software, find a new frame of definition in Transpermia. I have organised this utopian hypothesis under four headings: interface, robot, identity and creation.

Interface. New models for perceiving and intervening in the world.

Robots. New models as metaphors for life.

Identity. Other identities and experiences as the setting for new knowledge.

Creation. Models of creation activity in Transpermia utopia.

INTERFACES. CHAPTER ONE

1. 01- Dreskeleton. Corporal interface of the nature of an exoskeleton. The interface is worked by various manual switches and sensors that interpret the movements of the body.
2. 02- Neurohelmet. Cerebral interface. Reads the neurone connections. Allows remote action on things. In the future this will be a very popular interface and will come in a range of models.
3. 03- Tactile net. Reproduces tactile sensations thanks to vibrators located in the epidermis that provide tactile stimuli.
4. 04- Taste-ball. A small ball that emits chemical molecules and sends taste information to the taste buds on the tongue.
5. 05- Magneto. An interface that controls the sense of self-perception. It controls the carbon crystals of the inner ear and produces sensations, of turning, leaning and giddiness.
6. 06-Telexotica. Prototype translator of exotic perceptions. It allows, for example, the acoustic vision of bats.
7. 07-Telesensor. Prototype for a complete bodily tele-experience. The telesensor includes a tactile net, nasal spray, tasteball, headphones, screen glasses. The telesensor is connected to the bio-electric information of a rabbit, a donkey or a fly.
8. 08- Hand totem. Variable behaviour interface that manifests itself, through sound, texture, consistency and temperature through touch.
9. 09- Kissing gloves. Gloves with mechanical tongues. Kisses and sucks.
10. 10- Licking machine. Wheel with warm, moist tongues. Provides massages of variable intensity.
11. 11- Biting machine. Flying interface with mechanical jaws. Bites of varying intensity.
12. 12- Lecherlab. All-in-one emotive prosthesis. Includes Tactile net, Kissing gloves, Screen handle, Licking machine, brush, Taste-ball.
13. 13- Vocalometer. Translation interface. Symbiotic mechanism made up of collar and neurohelmet that allows the wearer to speak any language.
14. 14- Fat-2-energy. Transcriber interface that converts human fat into electrical energy. Used to power light bulbs, cell phones, laptops, cars.
15. 15- Ultrainterfaces. Global system of automatic interfaces without human intervention, allowing control of the climate and of over-exploitation of planetary resources.

ROBOTS. CHAPTER TWO

Machines are metaphors for organic life and robots are their prime exponents. Mechatronics and transgenics may combine to produce a new type of robogenic organism.

1. 16- Stigamabot. Robots with symbolic functions, for artistic tasks like vudubots or Soundbots both developed for Marcel.Ií in his performances Afasia 1998 and POL 2002.
2. 17- Biobot. Robots incorporating features from bacteria and fungus. One example of biobot will be "Vitalizer" machine how vitalises plants and animals.
3. 18- Parazitebot. Parasitic robot. Applied externally to the body of a living organism, it can make it move. Useful for controlling pets like dogs. New forms of public transport and the helping handicapped people. Marcel.Ií has developed several parazitebots who control human bodies like Requiem 1999 and Epizoo 1994.
4. 19- Endomuscular net. This suit monitors the bio-electricity of the muscle and makes use of its energy. It allows the wearer to experience gestures that are very difficult to learn, like certain forms of dancing.
5. 20- Molecular printer. Post-industrial robot capable of manufacturing any object from a scan of its molecules.
6. 21- Robogenics. Mechatronic transgenics. Robots that hybridize genetics and mechatronics. A new evolutionary pathway.

EPHEMERAL IDENTITIES. CHAPTER THREE

New forms of identity

1. 22- Biofashion. Live clothing. Clothes from organic cells. Post-fashion of varying appearance. Flowers, butterflies, snakes, fish, eye tissue, termites.
2. 23- Domotic systematurgy. A device allowing systematurgic methodology in the domestic sphere. Experience of multiple strange identities. Systematurgy is systemic software developed for Marcel.Ií in his mechatronic performances, that permits control and synchronise with dreskelentons and others sensors different medias like robots, interactive sounds and images, lights...
3. 24- Protein gun. A pistol firing enzymes that change certain characteristics of body tissue.
4. 25- DNA spray. Alters or adds new sequences to the human genome. Ephemeral body rebuild of classic mermaid, centaur, goat, harpy.
5. 26- Red Molecule. Emotive identities, genetic mechanism allowing the body to change according the mood: flowery body, prickly body, hairy body.
6. 27- Pharmastics. Fantastic pharmacy. New generation of transperimia pharmacy, new states of conscience. No side effects, no addiction.

7. 28- Flowersex. The garden of delights. Sexual practice inspired in the strategies of floral sex. Post-sexuality based on hybrid identities allowing orgies.
8. 29- Chimeric sex. The new hybrid identities allow bestiality.
9. 30- Mushsex. Multisexual strategy taking advantage of the multiple sexual shapes of mushrooms.
10. 31- Teleidentities. A connection from the neurohelmet to foreign identities. Mood feedback.

NEW CREATION. CHAPTER FOUR

The transpermic utopia presents us with a world in which work and money disappear. Creation is the chief human activity. New forms of artistic creation.

1. 32- Bioelectric dance. A new form of choreographic creation.
2. 33- Butopolis. Creation of fantasy cities by means of a mega molecular printer and the neurohelmet.
3. 34- Plug drama. Interface connecting computer theatrical scripts to actors' brains. No rehearsals.
4. 35- Pharmasound. Fabulous pharmaceuticals allowing the user very specific musical or dramatic experiences.
5. 36- Kaironetics. Random seed creator. Creation system with impermissible consequences.
6. 37- Transpermia. Creator of bacteria for sending into space to populate new worlds. New organic evolution.