

[FRONTIER BODIES – METABODY]

# Morphogenesis 0.0

An interactive dance performance, electro-acoustic, video and generative virtual architecture performance.

## Jaime del Val – Proyecto REVERSO

<http://reverso.org/reverso-morfogenesis.htm>

2003

### Concept and development

*“What must remain unspeakable for contemporary regimes of discourse to exercise their power?... A subject that speaks at the border of the speakable assumes the risk of redrawing the line between what is and is not speakable, of being cast into the realm of the unspeakable.”*

**Judith Butler**, *Excitable Speech*.

Morphogenesis is an interactive dance, electro-acoustic, video and generative virtual architecture performance in which the dancer's image is captured by a video camera and analyzed in real time for the production and the processing of sound, video and 3D image. The dancer's voice is captured through a wireless microphone and processed together with other sound sources, video and 3D image. The sound is spatialised interactively in four different channels, generating associations between the movement and the sound it creates. The live video image of the dancer processed, generating an abstract wash that changes in form, color, texture and density, as well as abstract pre-recorded video clips. Finally the movement of the body creates fluid tridimensional structures, spaces in process of becoming, in constant dissolution, like a projection of the body.

Morphogenesis is a concept that is used in biology to identify the formation processes of the organs in the newborn organism. In morphogenesis the extended body (post-human) is reformulated in a hybrid context of representation and language, in which the form, the matter, the body emerges as a permanent process of materialisation and dematerialisation, oscillating in the frontier of intelligibility.

Interaction is not designed in the form of strict correspondences but rather of open and often unpredictable ones, where the translation between parameters is not fully under control. A **Metabody** is thus an instrument that produces languages that cannot be completely controlled. This exemplifies the implicit mechanisms in language and media inverting the traditional account of the body, as surface and object of control. This mutant body breaks the chain of the performative reproduction of discourse to eventually become an antibody that resists and confronts the hegemonic technologies of representation revealing its implicit and silent mechanisms.

If the representation of the body, the constitution of the subject, is a process related to an objective and phallogocentric discourse we present an incomplete and inconcrete process that questions the objective status of matter and corporeality, opening horizons of infinite materialisations and dematerialisations in which any form may be but not form has to be. Although the piece is inscribed in the tradition of the amplified body, no materialist account of the body is raised. Nor is it about the dematerialization of the body, rather it is about the uncertain and broad boundary in which all materialization occurs, where the body must range along the frontier of uncertainty. The post-human therefore is resignified under the sign of the INSTRUMENT in which the substance of the body emerges as a process of complex morphological interactions and processes of sedimentation. Where the lines of foreclosure drawn by discourse are resignified everything turns out to be only frontier and process.

The process of formation of morphogenesis, is the process of formation of an instrument, a hyper-instrument or body, a **Metabody**. Yet the question is raised whether this is a body with or without organs. Which are the organs and structures of this body.

The hyper-instrument is a complex set formed by the dancer, the interactive space, the video camera which functions as a light sensor; the software and hardware, the different interfaces and the video projection, sound amplifiers without forgetting the interpreters or supervisors which control the four computers. There are at least 2 levels of interactivity, one that is immediate controlled by the dancer and the structural level controlled in the computers.

The core of the instrument is composed by four computers. The first is dedicated to analyze the dancer's image and translate it into some parameters of movement. The image is then cropped, thresholded, and finally analyzed.

The parameters currently used include position, size, speed, direction, aspect relationship and others up to fourteen different ones. The second computer is dedicated to the video processing, the third to the audio processing and the fourth to the production of three-dimensional image.

Morphogenesis is part of FRONTIER BODIES and METABODY initiatives of REVERSO Institute that study the relationships between the body, art and technology. Future projects include the development of morphogenesis as a set of netconnected immersive installations and the investigation into the concept of metalanguage, or language of languages, used as a base for non-determinist communication model with vast applications in such diverse areas as art, education, advanced architecture and disabilities among others.

Yet Morphogenesis is not a scientific study of language and representation but rather an expression of all excess in language, when the body speaks at the border of the speakable, assuming the risks of redrawing the line between what is and what is not speakable, the risk of being cast out, into the realm of the unspeakable.

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**Technical Specifications** (by Gregorio García Karman)

The instrument is made up of a system of video capture and analysis of movement that controls an environment of audio synthesis and processing, video processing and generation of 3D image. At present stage of development the instrument is displayed in four interconnected computers.

The signal coming from the video camera goes to the first computer, designed to analyze the image and the extraction of the variables that are used to control the rest of the instrument distributed in the other three computers.

The sound system is built of a battery of sound sources that includes the vocal signal of the dancer, captured on a wireless microphone, pre-recorded examples and synthetic sound sources. These materials are transformed through different processes to be projected in a spatialisation system in four channels.

As well as using the choreography as a control system, the computer dedicated to create the video projection permits the capture of video, using it as raw material to obtain a synthetic image through the different algorithms of transformation. Together with the image of the dancer the system also permits the use of video clips imported from the hard disk. Finally the fourth computer has a 3D motor (Virtools) the interactor that controls the computer system navigates in virtual space, in which the threedimensional structures are deformed and processed according to the movements of the dancer in the interactive space.

#### **Morphogenesis technical file:**

**Concept, music, visuals and texts:** Jaime del Val

**Choreography:** Jaime del Val e Iva Horvat

**Dancer:** Iva Horvat

**Computer control:** Jaime del Val and Gregorio García Karman

**MAX-MSP- jitter Programming:** Gregorio García Karman

**3D Virtools image programming:** Luka Brajovic and Ricardo Gadea

**3d Image design:** Jaime del Val, Ricardo Gadea and Luka Brajovich

**Lighting:** Silvia Kuchinow

**Dressing:** Valeria Civil

**Technical Direction:** G.G. Karman

**Direction and Production:** Jaime del Val – Reverse project

With the collaboration of the Informatics and Electronic Music Laboratory of the The Contemporary Music Center (LIEM-CDMC). Madrid, and Barceloneta Civic Center.

Aproximate duration: 60 minutes.

Premiered in Madrid in La Casa Encendida el 25<sup>th</sup> of October, and in Barceloneta Civic Center in Barcelona on the 30<sup>th</sup> of October 2003.

Emerging Technologies Award in Ciberart Bilbao 04 and Mention of Honour in Vida 6.0

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## **Generative architecture**

Morphogenesis is an instrument of generative design, interactive and abstract cinema “expanded cinema” and interactive and generative virtual architecture.

The model of fluid architecture proposed proposes a hybrid concept of space, a space-image-texture-sensation, specially in the case of immersive installations or of the enlarged architecture with virtual spaces where also the sound compositions are developed from the concept of architecture. The concept is close to Marcos Novak’s transArchitecture, though I would rather call it meta-architecture.

The instrument is an initial phase of development yet the visual results is close to the expected. In the future we will develop the stereoscopic projection of the structures in immersive spaces that envelope the interactor. The accompanying images are printscreens of images generated in real time by the interaction of the dancer.

## **Related Materials - Photography**

### **The dissolution of the multiple body – Trails**

This is a series of “pure” photography without digital or laboratory effects. The realistic and objective status of the photographic image is questioned through the abstraction of the body in movement, long exposures that capture the infinitesimal sedimentation of the body as light, (and what is it that we see of the body when we look with the naked eye it is light...)

Each photography is a choreography of ten to thirty seconds improvised by one or two “male” bodies. But what this information tells us is uncertain. In each photography there remain traces of the performance, the sedimented gesture, the body-écriture, like a Chinese calligraphy of improbable nuances in all its shades of speed and glazes of trails. There is therefore an element of action-painting that transcends the use of the body as an instrument and a canvas at the same time. Are these bodies involved in the fiery embrace of a “sexual act” or even is it some other type of embrace or fighting. Are these really bodies at all? Can we identify the gesture that corresponds to the movement? Is it one body fighting against its own disintegration? Up to what point is it relevant to know? The uncertainty of the body in the process of appearing and disappearing is equivalent to the violence of materialisation. The mute trails have taken the names away from the body, and thus dispossessed it opens up to an infinite horizon of possible materializations.

There is perhaps an *hommage* to Francis Bacon and surely none to the futurist representations, so fragmented and clear in their *effect*. Here the body is represented as liquid architecture, as trails that *exceed* it, with all the nuances of the (musical) time of the movement compressed into image. The body fights in the process of materialization, the morphogenesis that opens up to an infinite horizon of signification. A performance whose representation oscillates on the threshold of uncertainty. Even when we can

recognize it as a body this does not reduce its intriguing uncertain appearance, so evanescent and fugitive.

Fire as metaphor is not intended. The initial impulse to “paint” with the body has been enriched with other connotations found after the event. Perhaps there is a certain “apocalyptic” scent in relation to fire, in the visions of bodies falling into the abyss of non-being.

In any case the references are pictorial in the use of light (Rembrandt), transparency, expressionism and informal abstraction, perhaps surrealism even- boundary breaking of the styles, usurping, hybrid. But in this initial impulse there is also a bond with dance, with the choreographic thought that desires to understand the sedimentation of gesture. Therefore “pure” photography, and also hybrid and bastard photography at the same time.

The series gave ground to the first section of the performance and also in part to the concept of generative architecture. The three dimensional models of the third section were designed partly inspired in the photographs.

### **Microdances – Reverse landscapes.**

The series presents abstract fragments of the body, nameless landscapes that relate to a “*recherche*”, or a research of vision. The uncertainty of form is proposed in each Photography. Does this represent a body? If so, what *part* is represented?

An equivalent series of videos is used in the second section of the performance- In these to the abstraction and formal fragmentation of the frame is added the temporal abstraction of movement. The uncertain gesture insinuates, barely perceptible, seductive, in this unknow landscape of a possible body that speaks a new language that we hardly know. Is this one or more bodies? What languages do they speak? Here where the interpelation fails, the order of representation is also broken and of the subject that watches. Can we give a name to these landscapes or only accept their uncertainty? The (morpho-)genesis of form is in representation.

These series, as well as being a “personal” search for the frontiers of vision, are an answer to the objectivist technologies of representation, to the uses of the camera destined to reproduce a notion of materiality and objectivity. Where the interpelation fails the body does not reach its form completely. But in exchange develops an infinite horizon of possible bodies and trails of no-body. The anti-representation, the anti-body is a frontier territory that escapes the empire of phallogocentricity, power and representation. The no-body is also yet an *antibody*, that can assume multiple forms in the process of generating new ones, a dangerous fluid in the devastated political scenario.

Needless to say no subjectivism is proposed where objectivism fails: rather it is all about the process in which the subject itself *becomes*: in representation: always at risk.

What these images explore is the frontier of perception, of form recognition, therefore of knowledge and thought, they also explore the very process by which new forms are generated, sedimenting in complex multidimensional process, new signs, writings, morphologies, grammars.

Thus rethinking the representation of the body, as landscape and as language, has various effects: the generation of representations, of languages, of morphologies, of new uncertain *organs*, and the dissolution of the known hierarchies and territories of representation where they come into play, where they answer the interpellation by “mistake”.

**Jaime del Val.**

## **Biographies**

Jaime del Val (Madrid 1974) is an visual, sound, body, space, text artist and queer activist; director of REVERSO, the body technologies project. After a musical training as a pianist, composer and conductor in London, he dedicated to painting, etching architecture, and dance in Florence and only later started his work with photography, video, digital image, electro-acoustics, performance and interactive media. His interactive dance performance *Sequence I, for post-human body*, and Morphogenesis have been premiered in Reina Sofia Museum and in La Casa Encendida, in Madrid, the last one having been awarded in Ciberart Bilbao and in VIDA 6.0. Currently he is working on the development of a european project, in collaboration with Madrid Polytechnical University, with support from the Council of Madrid. He has given on several occasions the Body Technology Workshop, being the next one in June in MediaLab Madrid, and participated in art and electronic music festivals and congresses, such as Ciberart and JIEM. His projects are gathered under the name of REVERSO, in the form of a diversity of media.

REVERSO Project is a transdisciplinary initiative of art/theory/politics/technology production/investigation/education/action which studies political and social implications in art, body and technology proposing a review in queer and post-human discourse, in particular in relation to the implicit power mechanisms in neo-liberal society and its relation with technology production, language and representation models. The project started in 1999 with the Journal REVERSO, the first queer theory publication in Spanish, edited by Jaime del Val. After this FRONTIER BODIES and METABODY Projects were initiated, as well as Rverse of Space, a project of interventions in public space. The project also contains Reverso Institute and the Reverso Ensemble. [www.reverso.org](http://www.reverso.org)