



# Introduction

Raw 00 is a new proposal of the Colectivo Anatomic that investigates in the scope of the new concepts and scenic sorts, in *mestizage* with the new technologies.

In March of 2005, after the *premiere* of Rotten (performance presented the 17 of February of the 2005 in the Mercat de les Flors, Barcelona), the Colectivo Anatomic seted out the investigation in scenic formats. In that sense, Rotten was another contribution because although we never could say that it is outside the theatre discipline, but within this scope it has a very novel format.

The Colectivo Anatomic was focused in looking for a new format mixing the concert with the performance in its more classical sense and applying to this one, the new technologie s with the experience acquired in his first Rotten performance.

Now we think that the project is in the optimal point to be produced, because we have all the investigation about the format and we have yet presented the performance with public. The answer of the people has been so good. Great part of the technical issue (software) is already developed and it has been possible to prove some of the ideas that it will appear next.

RAW00 will be composed by two performers, a noising musician and a guitar musician.



# rawall

## Colective Anatomic

Colective Anatomic is a platform of investigation dedicated to the creation of new tools to give support to complex multimedia systems.

It born of the necessity to interrelate artistic and technical disciplines, but adding common creativities and not subordinating one to the others. A land of common investigation taken to both fronts simultaneously and of almost indisociable way.

The group is formed by different profiles: computer science engineers, multimedia engineers, multimedia creative, infographics, designers and videocreators. All of them with restlessness on existing software in the market for the media's mixture and with a long trajectory in the world of the visual development. The deficiency in the market of one more functional tool, cradle in the modularity of open systems gave as a consequence the development of the new software. Rotten was the first experience in which this type of management multimedia is gotten up successfully.

In the scenic part, Colective Anatomic account with the participation of Semolina Tomic from the L'Antic Teatre and Lidia González from the company Amaranto.

## Antecedents

Rotten was released in February 2005 in Mercat de les Flors in Barcelona. This performance had a great welcome from the press media. Nevertheless the final scene (a concert from the PDA's like instruments) could not be developed as the creators have imagined about.

The tools had been able to develop but not the scenical part nor the musical part. For that reason the following objective was to develop an event in which this new technical support worked on to be able to obtain an optimal result in comparison with the theoretical conclusions that we ourselves we had established.

In this case the group considered to go a little further on and to start the creation of new instruments that are related to the human body of a very singular way, by the physical way they are related to the different elements also by the own physical fact. Now the subject is more developed than in Rotten, because in addition to the PDA's, a new development of artificial vision exists which we will use in one of the parts of RAW 00.

# rawall

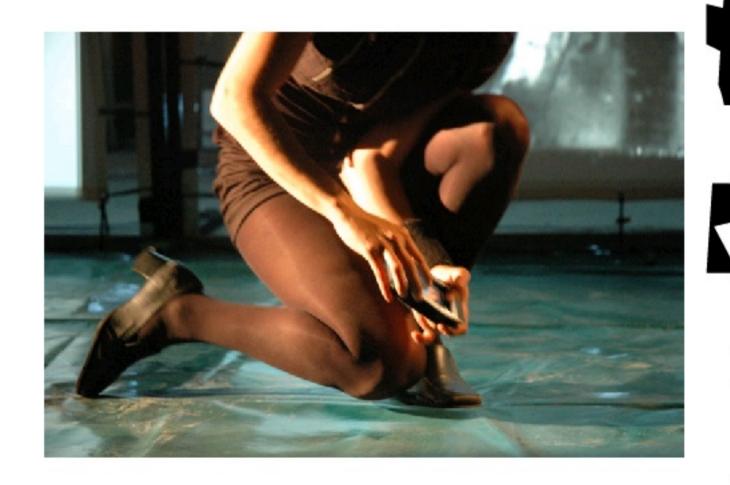
One of the reasons for which the collective bet of in a more integrated way is in the generation of new formats. Finally we have found a format that we think that it works (by tested) and will work in the future. The truth is that the present format allows that Raw 00 fits in airplane cabin and it's only necessary move four people to execute it. When the performance would be finished and totally produced, the load will increase of a not very significant way. This is a very important element for us, because every day we report more than our work has one more important acceptance in the international markets than in the own Spanish state or the Catalan country. With Rotten it has been thus and we suppose that with Raw the acceptance will even be greater because it would be a more developed format and also very simple to transport.

# New musical multimedia interfaces

All the interfaces that are described next try to give a psychological concept of the movement of the body. They are thought to amplify small movements and to amplify his psychological potential through the technology.

# - Physical Interfaces

The technical team of the Colectivo Anatomic is developing a new line of interfaces that will turn common objects or situations in musical interfaces and audio-visual content managing interfaces.



# Traw.o.

4,

These interfaces can as much be physical as virtual, thanks to the system of artificial vision that is being developed within the group. Our intention is to make a scene totally integrated with the management system in such a way that we pruned to do significant anyone of the actions that the performers make.

## - Face sensors

One of the movements that we are interested so much is the face movements. Then we start the creation of face interfaces that will allow the guitarist of Raw 00 to make distortions of the sounds he executes through face movements (chin, eyelids, eyebrows...). For that, we try to develop a system as the one used in the cinema for mecatronical animation of personages in films like Alien, etc.

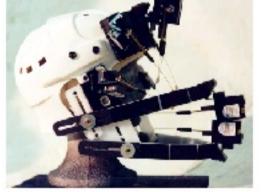
# Artificial vision: tracking of the pupil of the eye for generation or distortion of the sound

Another one of the instruments that we try to develop is an ocular musical instrument. The system of artificial vision we have is developed to notice changes of movement and is closely to could be developed to do tracking (pursuit of objects by means of the analysis of the image). In this way we will be able to make tracking of the pupil of the eye and thus generate distortions and modulations of the sound with the movement or positioning of the eye.

# - Positioning of the head

Within this range of new interfaces to develop, another interface is also predicted. This one will gather the movements of the neck and thus to be able to take advantage of the ranks that are generated through the sensors that will read this movement. With these data we will be able to make something that we call synthesis of increased reality in real time.





# Situation 1 - Guitar concert

Concert in solo of guitar. Screens in white. They ignite and die out in a regular interval. We still are working about the system of synchronization of the screens with the sound of the guitar. It is necessary to still work on a sound module of analysis integrated into our system of control so we will be able to carry out all kind of multi-media control (light, video, animation, etc.) with the sound.



# Taw. Tow. Was

# Situation 2 - Increased reality

We work for the moment with a system of increased reality which uses only one camera. The idea is to develop a module for two or several cameras in order to be able to generate a real time video synthesized image from several sources. This system is with the video image the same as the cubism is with painting. It is one of the most interesting points of the project.



# Situation 3 - Concert of PDA

In the structure of all the concert, it is included a duet of PDA. The end of Rotten (the last concert) did not make possible to show the effectiveness of this kind of interface and its musical potential. It is for this reason we want that this new instrument has an important place in the performance.



# Situation 4 - Artificial system of vision

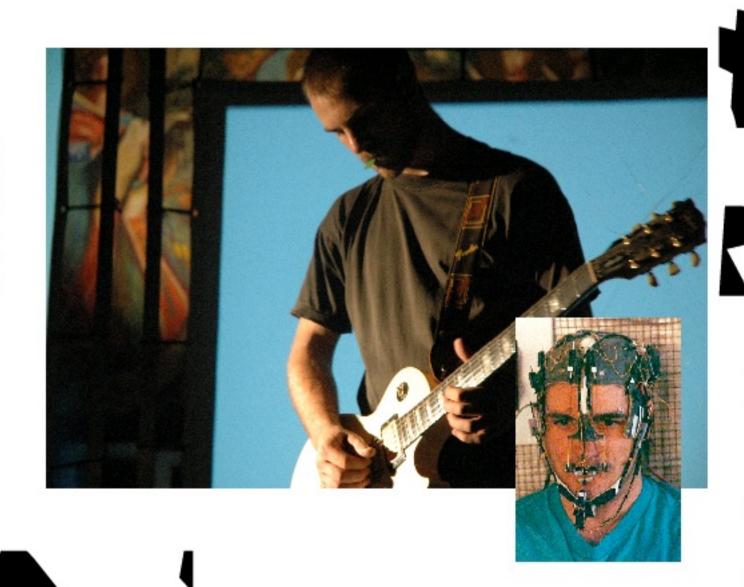
This part of the concert uses as instrument the proper movement of the performer on the scene. Through a system of one or more cameras and an image analysis module, the movement could be detected and thus to know on this one several parameters like its position in space, its intensity or its speed. We use these data to create a sound space in a direct relationship to the actions of the performers. They become a musical instrument by their own actions which generates or modulates the sound. It remains still work in what is the training of the body like musical instrument. It misses to develop the system able to recognize separately each performer in a video image and also able to work with several cameras. The system is still in an embryonic state.





# Situation 5 - Guitar Concert with increased reality

One of the most interesting parts of the project is the interface able to detect small movements and to increase or transform their psychological significance. We will use for the guitarist several interfaces like the ocular vision system or detection of neck's position or the facial system of recognition, so that the guitarist could control creation and modulation of the sound thanks to the movements of his head, his face or his eye's pupil. In order to support this part in its psychological side, the images will be built from the video sources necessary to different detection interfaces used (eye and mouth images, etc).



# Taw.o.

# Situation 6 - Final concert

We want to finish the concert on a topic which integrates all the multimedia speech developed throughout the performance. It is a work which requires so much time of repetition. After the experience with Rotten we learned that a new interface requires, just like a new musical instrument, a time to be able to understand and develop its artistic potential. The integration of several of the interfaces will require a main effort to obtain a good result.



Budget and work calendar I a 00



# 74,

### WORK CALENDAR

### STAGE 1 OF THE PROJECT

### PHASE 1: DESIGN 1 (march - may 2005)

- Creativity
- Infographic creation
  Backgrounds illustration
  Image creation and preparation
  Animation sketches
- Documental and graphic preparation.
  Presentation to the producers, sponsors and institutional grants.
  Representation travel costs

## PHASE 2: PRODUCTION 1 (june - september 2005)

- Software Implementation Test
- Scenography design.
- Technical material adquisition: computers, PDA, control box DMX, cameras, graphical accelerators.

### PHASE 3: AUDIOVISUAL PRODUCTION 1 (september – november 2005)

- Scenography and atrezzo construction.
- Audiovisual creation works Ilustration, Animation, Video Edition Video Postproduction Multimedia tasks

### PHASE 4: TECHNICAL ESSAYS 1 (november - december 2005)

- Actoral essays Technical testing during two months Essays place renting
- 2. Light design and test
- Wardrobe design and test



# · — —

### STAGE 2 OF THE PROJECT

(to see the letter)

PHASE 5: DESIGN 2 (january - february 2006)

- Updated documental and graphical preparation. Project presentation to the producers, sponsors and institutional grants. Representation travel costs
- Tour preparation

PHASE 6: PRODUCTION 2 (february - march 2006)

Software:

New prestations and software moduls implementation Test

Technical material adquisition in order to make the tour: laptops, projection system, technical material adapted to the transport

PHASE 7: AUDIOVISUAL PRODUCTION 2 (march - april 2006)

- Ampliation and creation of new contents
- Integration of the new software material

PHASE 8: TECHNICAL ESSAYS 2 (may - june 2006)

- New essays with the actors everyday to integrate the new ampliation.
   Technical test during a month
   Essays place renting
- New light design test.
- New wardrobe and scenography test

PHASE 9: BEGINNING OF THE TOUR (july 2006) (referring the tour plan)

# Taw. Taw.

# 74,

# BUDGET

### STAGE 1

PHASE 1: DESIGN 1	(march - may	(2005)
-------------------	--------------	--------

1.	Creativity	
2.	Infographic creation	4000
3.	Documental preparation, Presentation and Representation travel costs	2500

### PHASE 2: PRODUCTION 1 (june - september 2005)

1.	Software	5500
2.	Scenography design.	2500
3.	Technical material adquisition:	10500

### PHASE 3: AUDIOVISUAL PRODUCTION 1 (september - november 2005)

1.	Scenography and atrezzo construction.	3500
	Audioval exaction works	
۷.	Audiovisual creation works	7500

### PHASE 4: TECHNICAL ESSAYS 1 (november - december 2005)

1.	Actoral essays	9000
2.	Light design and test	2250
3.	Wardrobe design and test	2600

### STAGE 2

## PHASE 5: DESIGN 2 (january - february 2006)

1.	Updated documental and graphical preparation.	3000
2.	Tour preparation	3500
3.	Préparation de la tournée	3500

## PHASE 6: PRODUCTION 2 (february - march 2006)

1.	Sofftware	10000
2.	Technical material adquisition in order to make the tour	17000

### PHASE 7: AUDIOVISUAL PRODUCTION 2 (march - april 2006)

1.	Ampliation and creation of new contents	7500
2.	Integration of the new software material	2500

# PHASE 8: TECHNICAL ESSAYS 2 (may - june 2006)

1.	New essays with the actors	8000
2.	New light design test.	3000
3.	New wardrobe and scenography test	2500

### FINANCING PLAN

INAEM - Ministerio de Cultura 25000	
Generalitat de Catalunya 20000	
Coproducer - ARS ELECTRONICA 18000	
L'Antic Teatre - Barcelona 12000	

TOTAL	106850

# TOTAL 106850