

COMMUNITY PROJECTS
THE SPIRIT OF "LA CAIXA"

COSMOCAIXA
BARCELONA

Towards a total museology

April 21-25



THE MUSEUM
COURSES 2008



Obra Social
Fundació "la Caixa"

Course Presentation

CosmoCaixa, the new science museum of “la Caixa” Social Programme in Barcelona, opened its doors in October 2004 and in three years received some 6 million visitors, as well as recognition by the *European Museum Forum* with the prize for *European Museum of the Year 2006*. CosmoCaixa is an attempt at a new museology that meets all the challenges of 21st century society. The project is a test-bed for new techniques in employing exhibition space, methods and criteria, raised and discussed over two years at international forums and tested in both temporary and travelling exhibitions. This new museology, which we have called total museology to spur us on, is visible today in CosmoCaixa.

This fourth year of activities initiates the project evaluation process, the reason for which we have decided to offer this course, because what matters in a museum is not only that people visit it, but also that they return. The times are changing in this discipline precisely at a moment when a new profession is beginning to acquire shape and identity: that of museologist. We do not seek to establish a dogma; we simply set out to explain what we have discovered, in terms of both theory and practice, during twenty years of intense scientific museum studies. The course has been offered for the last ten years by the University of Barcelona. This is the third year of its presentation at the international level, restructured and adapted to the Museum’s new resources and facilities.

Course director

Jorge Wagensberg

Physicist at the University of Barcelona and Director of the Department of Science and the Environment of “la Caixa” Foundation

Course Glossary

Theory classes

- The three forms of knowledge: science, art and revelation.
- The three phases of acquiring knowledge and the forms of transmission.
- Images to transmit knowledge.
- The beautiful and the intelligible. A conversation between art and science.
- What is a museum? Definition of a modern science museum.
- Architecture for a museum.
- Exhibitions. Basic principles of modern scientific museology.
- Scenography.
- Activities. The museum as a citizen's university.

Workshops

A museology for the 21st century. The making of the "Vive la Différence!" exhibition. The entire process, from the first idea to the complex task of evaluation. From the accessories (texts, audiovisuals, drawings, storyboards, multimedia) to the complementary activities.

Work in progress; exhibitions: Remodelling of the Permanent Exhibition Hall of CosmoCaixa Madrid, and "Climate Change".

Field work

- Museum exhibition halls: a first encounter between theory and museology.
- Collections at the museum: conversation-object-phenomenon, object-phenomenon-scenography.
- Geological Wall, Flooded Forest.
- Visits to the museographical infrastructure.
- Visits to the prototype and testing rooms

Workshops

Presentation of museum workshops for the general public.

Concert by BA.O.BA.B (Baschet Orchestra Barcelona-Brussels) in the Physics and Music exhibition.

Course program

Monday 21 April

10 am **Introduction to the course by Jorge Wagensberg**
*Director of the Department of Science and the Environment of
"la Caixa" Social Programme*

10.15 am **THE THREE FORMS OF KNOWLEDGE: science, art and revelation**
Jorge Wagensberg

- Scientific knowledge. The scientific method: Principle of Objectivity. Principle of Intelligibility. Dialectical Principle. Universality of scientific knowledge. The progress of scientific knowledge.
- Artistic knowledge. Principle of the communicability of art. The beautiful and the intelligible. Understanding versus intuiting. The scientific intuitions of artists. The artistic understandings of scientists.
- Revealed knowledge. Intuition and belief. Understanding versus believing.

11 am **Coffee**

11.15 am **THE THREE PHASES OF KNOWLEDGE ACQUISITION
stimuli, conversation and understanding**
Jorge Wagensberg

- Stimuli, the guarantee of a vital necessity. The physical world of stimuli. The physiological and cerebral world of stimuli: perception and the five senses. The cultural world of the senses: mental joy as a midpoint between offence to and frustration of the brain.
- Conversation, the exchange of ideas between a mind and something else. Conversation in science. Conversing with reality: seeing, looking, observing, experimenting and simulating. Conversing with oneself, pondering. Conversing with another. Conversing in art. Conversing with beliefs. Theory, experience and simulation. Emotion versus understanding.
- Understanding in physics: laws and equations. Understanding in geology: reconstructing the past. Understanding in chemistry: transformations and structures. Understanding in biology: mechanisms and innovation. Understanding in history, sociology, economy, politics... The gaps in the scientific method are filled in with the paste of ideology.

12 midday **Conversation**

12.30 pm **A CONVERSATION BETWEEN ART AND SCIENCE. THE EXHIBITION AS
CONDENSATION, RADIATION AND INTERPRETATION**
Rosa Martínez
*Director of the Venice Biennale 2005 and Chief Curator
of the Istanbul Museum of Modern Art*

2 pm **Break**

3.30 pm **EXHIBITIONS: THE METHOD**
Hernán Crespo
Architect

4.30 pm **Conversation**

5 pm **Coffee**

5.30 pm **EXHIBITIONS**
Jorge Wagensberg

The real object. Degrees of reality of an object. The real phenomenon. Degrees of reality of a phenomenon. The dialogue between object and object (the "hyper display case", a new concept). The dialogue between object and phenomenon. The dialogue between phenomenon and phenomenon. The object-phenomenon-exhibit design dialogue. Three-way interactivity (manual, mental and cultural). The object-phenomenon-exhibit design-visitor dialogue: an approximation to a special dialogue: sudden understanding. Long-term exhibitions. Short- and medium-term temporary exhibitions

Tuesday 22 April

10 am **ARCHITECTURE**

Robert Terrades

Codirector of the Arquitectes Terrades studio, the firm responsible for the CosmoCaixa project, Hernán Crespo, Jorge Wagensberg

Architecture as the result of dialogue between museologists and architects. Spatial hierarchies as they affect a single visitor, a group that can converse amongst themselves... up to the entire audience present. Museographic emblems. Museum exteriors. Relation between interior and exterior. Art in the science museum.

11 am **Conversation**

11.30 am **Coffee**

12 midday **EPHEMERAL ARCHITECTURE (provisional title)**

Dani Freixes

Interior designer and winner of the National Design Prize 2001

1 pm **Conversation**

1.30 pm **Break**

3 pm **THE MAKING OF "VIVE LA DIFFÉRENCE!"**

Workshop

Augusto Saavedra

*Architect, Director of the *Ámbito 0* studio*

Jorge Wagensberg

How is an exhibition conceived, planned and produced?

The players: the museologist, the expert, the exhibit designer, the technical designer, the graphic designer, the producer, partner companies.

Progressing through dialogue.

- Writing the script. Overall approach, structure of sections, scientific guidance
- Design, conceptual approach
- Towards the final design
- Developing prototypes for interactive experiments
- Design: graphic image
- Production: technical complexity

5 pm **Coffee**

5.30 pm **The museum as a building: general services**

Joan Bayona

Director of the technical department. Hospital Pere Virgili

6.30 pm **Visit to the prototype room**

Laureano Agout

Production department of the "la Caixa" Foundation

Ignasi López, Álex Pérez, Carles Schnabel, Marta Solsona

Wednesday 23 April

10 am **COLLECTIONS**

Marta Solsona

Geologist, curator of collections, Department of Science and the Environment of the “la Caixa” Foundation

Why a collection? How are our collections created? Scientific research in a museum. Museological innovation. Educational science research. “Jorge Caridad”

10.30 am **FIELD WORK IN THE COLLECTIONS**

Conversation-object-phenomenon, object-phenomenon-exhibit design

Marta Solsona and museum guides

11.15 am **Coffee**

11.45 am **THE GEOLOGICAL WALL AND THE FLOODED FOREST**

Marta Solsona, Álex Pérez, Jorge Wagensberg

12.45 pm **FIELD WORK: visit to the Flooded Forest and the Geological Wall**

Marta Solsona, Álex Pérez, Jorge Wagensberg and museum guides

1.30 pm **Break**

2 pm **ST. GEORGE’S DAY**

Afternoon free

Visit to the city on the most beautiful day of the year

Thursday 24 April

10 am **WORK IN PROGRESS**

Remodelling of CosmoCaixa Madrid

Jesús Moreno

Architect and director of the Jesús Moreno y asociados studio

Jorge Wagensberg

11.30 am **Coffee**

12.30 pm **CosmoCaixa in the World**

Jorge Wagensberg

- Project of the National Museum of Science and Technology, Beijing, China
- Project of the Antarctic Museum in Punta Arenas, Chile
- Project of the Transport Museum, Malaga, Spain
- Project of the Museum of the Future, Rio de Janeiro, Brazil

1.30 pm **Break**

3.30 pm **Texts in a museum / Publications**

- Texts: the exhibition text as a new literary genre in itself. Audiovisuals.
Ambrosio García Leal
Biologist and science writer
- Publications: the leaflet guide and the exhibition catalogue
Ignasi Fernández Segade
Graphic Designer, director of the Excèntric Comunicació studio

5 pm **Coffee**

5.30 pm **Theatre in the Museum**

- Performance of a sketch from the work *It's Identical But It's Not the Same*, about Darwin, currently forming part of the programme at CosmoCaixa
Mireia Chalamanch
Actress
- Conversation between Mireia Chalamanch and Jorge Wagensberg

6.30 pm **Conversation**

Friday 25 April

10 am **New museographic resources:**
- **The scientific metaphor**
- **Accentuating reality**
Jorge Wagensberg

11.30 am **Conversation**

12 midday **Coffee**

12.30 pm **From the scientific project to the museographic project:
the underwater acoustic map of Catalonia**
Michel André
Biologist, Institute of the Laboratory of Applied Bio-Acoustics, UPC

1.30 pm **Conversation**

2 pm **Break**

3.30 pm **The museum as a citizen's university**
Jorge Wagensberg

Creating public opinion. The museum as meeting place. The museum as tool for social change. The museum as shared space for four social sectors: the scientific community (where science is created), the production and service sector (where science is put to use), society (where science is enjoyed and endured) and the administration (where science is managed).
The concept of the auditorium and other meeting rooms.
Presentation of various examples. Lecture seasons, symposiums, courses, seminars, debates...

4.30 pm **Coffee**

5 pm **CLOSING LECTURE**

TRUTH AND BEAUTY IN MATHEMATICS

Sir Michael Atiyah

*Mathematician, Honorary Professor of the University of Edinburgh,
Fields Medal 1966, Abel Prize 2004.*

*Ex-president of the Royal Society, former professor at the Universities of
Oxford, Cambridge and of the Institute for Advanced Study, Princeton*

7 pm **Closure of the course**
Concert by BA.O.BA.B (Baschet Orchestra Barcelona-Brussels)
in the Physics and Music exhibition

Lecturers

Rosa Martínez

*Independent curator, Director of the Venice Biennale 2005
and chief curator at the Istanbul Museum of Modern Art*

Dani Freixes

Architect and exhibition designer, winner of the National Design Prize 2001

Augusto Saavedra

Architect and exhibition designer

Jesús Moreno

Architect and exhibition designer

Robert Terrades

Architect

Michel André

Biologist, Institute of the Laboratory of Applied Bio-Acoustics, UPC

Ambrosio García Leal,

Biologist and science writer

Ignasi Fernández

Graphic designer

Mireia Chalamanch

Actress

Joan Bayona

Technical

From the “la Caixa” Foundation

Laureano Agout

R+D

Hernán Crespo

Architect

Ignasi López

Physicist

Álex Pérez

Biologist

Marta Solsona

Geologist

Jorge Wagensberg

Physicist

Registration

On-line registration: www.laCaixa.es/Obrasocial

Price: 46 euros

Reduced price: 31 euros

COSMOCAIXA

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VISITOR SERVICE

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OPENING TIMES

Open Tuesday to Sunday 10 to 20 h.
Closed Mondays (except public holidays) and
December 26 and January 1 and 6

ENTRANCES

Ronda de Dalt between calle Císter and
Avinguda del Tibidabo (exits 6 and 7).
Calle Quatre Camins, 89.

TRANSPORTS

 17 | 22 | 58 | 60 | 73 | 75 | 

 Ferrocarrils de la Generalitat de Catalunya
(Avinguda del Tibidabo station)

 Tramvia Blau (Blue Tram)

 Entrance on carrer dels Quatre Camins, 89
Coaches: Ronda de Dalt opposite CosmoCaixa

MUSEUM SHOP

Laie-CosmoCaixa

CAFETERIA-RESTAURANT

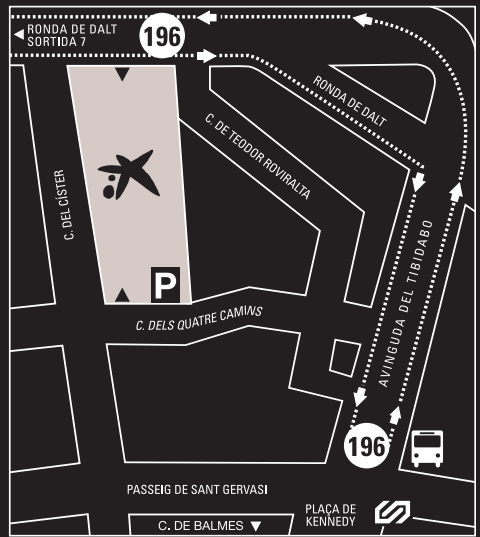
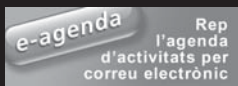
Arcasa-CosmoCaixa

Free access to Plaça de la Ciència,
the Cafeteria-Restaurant and the Museu Shop

INFORMATION SERVICE

OBRA SOCIAL FUNDACIÓ "LA CAIXA"

Phone (+34) 93 495 39 45
Monday to Sunday 9 to 20 h
www.laCaixa.es/ObraSocial



COURSE INFORMATION

PRICE

46 euros - Reduced price 31 euros

REGISTRATION

www.laCaixa.es/ObraSocial
Places limited
There will be simultaneous translation

Free entrance to the museum with the course registration
(valid during the course)

