

The Museum-Observatory, a new idea

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Knowledge without criticism is much more dangerous than criticism without knowledge, so I will start with a criticism of a frequent subject today: “eco-museums”. Generally speaking, they are museum facilities that support understanding with “in situ” slices of nature: a forest, a natural park, a landscape. The criticism is directed towards the most frequent class of eco-museums, from which certain cases may be considered exceptions. In short, eco-museums are often disappointing, aesthetically displeasing and have a worrying tendency to be simple centres providing information about the history, geology, and flora and fauna of the zone in question. Most often, you will find images and texts displayed on a wall (or perhaps a book or brochure provided to read while walking around), screens where you can watch a video or interactive multimedia show; landscapes, geological and plant structures, or animals reproduced so that they no longer bear any resemblance to the real thing (think magnified insects or tiny dinosaurs); display cases with dried or dissected real biological species; the list goes on. All of this reflects the refusal to develop and use museographical language. The problem lies not in using these imitations of reality to explain reality, but in using them as a replacement for reality. I would even go so far as to say that it is a matter of outright museum incompetence.

The error consists in taking language from other modes of communication and refusing to develop a language proper to the field. You are offered a small book, one whose pages age poorly and turn yellow with each passing day. Or perhaps you are told to watch a screen (something we spend most of our day doing between our computers and televisions), a video or a multimedia show guaranteed to be worse or more out-of-date than anything you can see on television or online. Or maybe you are sent to walk among taxidermy animals or dioramas like those in dusty, old-fashioned natural history museums. The result is that if the eco-museum visit happens before the nature visit, the visitor will tend to go running for door, impatient to breathe in the real outdoors; if the opposite happens, and the eco-museum visit follows the nature visit, the disappointment is unbearable, like drinking lemon juice before eating a white truffle.

The first solution is the following list of working hypotheses. A nature museum should

- a) Encourage a sense of excitement about the nature visit.
- b) Suggest a unique manner of seeing and observing.
- c) Assume that nature can speak and seek to understand it.
- d) All of these things should be carried out with emotion (to increase intellectual delight), using a genuine museographical language based upon all possible combinations of real objects, real phenomena and museum metaphors [01].

The sign that all is going well is that visitors will be excited and motivated when they leave the museum to begin the nature visit, and inversely, after the nature visit, visitors will have an authentic thirst for understanding and exploring the museum.

Before continuing, I can say that the urgent need to resolve this problem comes at a time of multiple crises (economic, climatic, environmental, natural resources, global health, etc.). We urgently need to change our behaviour. Crisis is how uncertainty makes us change our way of doing things. Until now, the way we brought about change consisted in dictating rules, regulations, and laws. Now, during this century – which is already one-tenth over – it is time for a new method that has never been tried: treating individuals as capable adults who can determine on their own what needs to be done. In other words, it means assuming a different working hypothesis: the conviction that individuals change their behaviour because they *have understood*, incomparable to simple punishment by moral or criminal laws. That said, how do we accomplish that? What should the museographical language of an eco-museum be? How do we weave an authentic fabric of emotions favouring harmony between Humans and Nature?

In the CosmoCaixa museum in Barcelona (2004), certain ideas are being tested. Some of them are already standard and can be clearly seen in projects at three nature museums: 1) the Museum of the Antarctic in Punta Arenas, Chile, financed by the Instituto Antártico Chileno; 2) the Museum of the Landscapes of the Mexican West in Guadalajara, Mexico, financed by the Universidad de Guadalajara, and 3) the Museum of the Woods in Sant Celoni, Montseny region, Province of Barcelona, financed by the Municipal Council of Sant Celoni. In these three examples, the objective is to foster knowledge and, by doing so, a genuine love of three natural areas: the Antarctic continent, the six major landscapes in the region of Jalisco in Mexico (Mountains and Volcanoes, Temperate Forest, Tropical Forest, Coastal Plains, Lake Systems and Urban Landscapes), and the 31,000 hectares of the Natural Park of Montseny Mountain in the Province of Barcelona. The three projects share the roots of a new idea, the Museum-Observatory.

First, we must note that, in the case of a Museum-Observatory, the design of the content (museography) and the design of the container (architecture) are, more than ever, interdependent. The work of museologists does not begin where the work of architects and builders ends. Here, especially, they must ensure that part of the museology of a museum is architecture and that part of the museum's architecture is museology [02]. The careful consideration between architects and museologists happens through teamwork. This is the only way that the following museological-architectural program is possible. The museum has an *inside* and an *outside* that are intimately related for understanding (searching for and finding the similar among what is different) and observation (searching for and finding the different among what is similar). The *outside* has two possibilities: “in situ” reality (a glacier or an Antarctic penguin) and the reality available outside the museum itself (a tree, a pond). In the first situation, with adequate technology, we can observe strategically firsthand (for example, the inside of a vulture's nest perched on a cliff or the birds in a wetland). In the second situation, we can observe from inside the museum or just near it (the tree outside can be examined from the leaves to the roots, either inside the museum or from the ground outside). The *inside* allows both: observation (what happens outside the museum and in the separation from “real” reality) and understanding (inside the museum through “Total Museology” [03]). Two good examples of this object-phenomenon combination can be seen at CosmoCaixa in the Flooded Tropical Forest (1000 square metres) and the Geology Wall (100 linear metres) {fig 01} and {fig 02}.

In the search for harmony between Humans and Nature, there is one more significant point to be made concerning the term “observatory”, which is that the centre also becomes an observatory of coexistence between humans, as well as a point that generates public opinion. This means planning meeting spaces designed specifically for the exchange of ideas and to deal with current themes. Thus, a network of Museum-Observatories will play a very special role in the ever-approaching globalization. There are nearly 2400 science museums in the world today with a total of 290 million visitors, who we can assume are already interested in the scientific method of understanding reality and who make up a critical group for the important changes we face.

Second, we must consider the design of the contents dedicated to understanding in the museum. This includes the concept of the *showcase* (designed to protect both visitors and display items, allowing visitors to use only one of the five senses), which is experiencing its own revolution through the concept “Hypercubic Showcase of Sudden Comprehension” in which hundreds of objects literally converse with each other without needing to use spoken or written words [04]. For example, three criteria are chosen for three axes (for instance, shape, size, and composition) where 200 pebbles are presented, so that they literally “speak” to each other {fig 03}. Traditional museums only have objects, “interactive museums” have only phenomena and no objects, but Total Museology has both “in conversation”, along with metaphor and beauty.

Third, in an environment of high-quality museography, credible activities take place. In the neuralgic centre of a Museum-Observatory, there are activity halls and auditoriums {fig 04}, ideal places for the different actors in society to create a credible exchange of ideas, with debates, conferences, and other activities. In other words, the creation of scientific opinion, a requirement of the democratic system that we have chosen for the near future.

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References

[01] “The Total Museum. A Tool for Social Change”, J. Wagensberg, In: *Beyond the Turnstile. Making the Case for Museums and Sustainable Values*, Selma Holo & Mari-Tere Alvarez, Altamira Press – University of Southern California, p 146-148, 2009

[02] *Hacia la museología total por conversación entre museólogos y arquitectos*. J. Wagensberg, Actar, Tusquets editores, 2006

[03] “Science Museums in the Age of Globalization”, J. Wagensberg, *Ecsite Newsletters*, 67, 06, 2006

[04] “Opinion. The Hypercubic Showcase”, J. Wagensberg, *Museum Practice*, 11, Autumn 2009

Illustrations

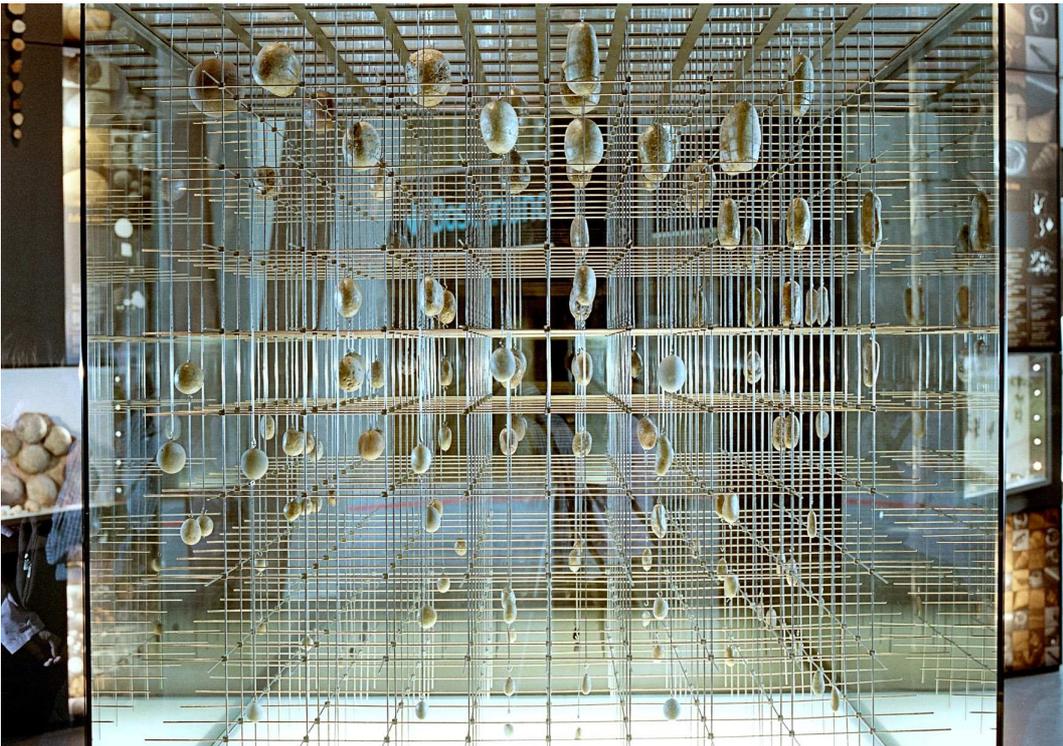
{01} Total proximity in the Flooded Tropical Forest at CosmoCaixa Barcelona



{02} Object-phenomenon conversation on the Geology Wall at CosmoCaixa Barcelona



{03} Hypercubic Showcase of Sudden Comprehension with pebbles classified by shape, composition and size



{04} Auditorium for idea exchange

