

Installations for Which Publics?

Evaluation of an Evaluation at the Biodôme de Montréal

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The demand for efficiency and rationalization that has penetrated all sectors of activity, including museology, largely explains the emergence and importance of evaluation in recent decades.

Market studies, balance sheets and evaluations are carried out throughout the life of the installation to make sure that it provides optimal response to its mission and to expectations of the visitors it intends to serve. This is in order to do things well or, at least, in the most appropriate manner considering inevitable constraints.

Under the heading of "social design of museums," Stephen Bitgood described a trend observed over roughly the past 20 years in the development and management of museums. From the very onset of planning a new installation, it consists of making rigorous studies of the means needed to install optimal conditions in order to "create or improve the human environment, from the point of view of their human users" (Bitgood, 1989).

The Biodôme is defined as a living museum of nature and seeks to innovate in more ways than one. It is thus obviously justified to pursue investigations and evaluations. Beyond optimization of implied resources, the innovation desired calls for profound and original measures. "Non nova, sed nove" – not new things, in a new way.

Its planning and materialization follow the social concept of museums. A front-end evaluation was conducted following the steps which led to its birth and which spawned its personality. The evaluation was aimed at verifying the degree of sensitivity to the interpretation project which could be found in potential clientele. The following is a first balance sheet or, if preferred, an "evaluation of an evaluation" which updates the interest in and the impact of such a step.

Based on this study, we will thus attempt to identify the objectives met by such a front-end evaluation and, in so doing, describe how the ensuing results can be applied. In order to be fully aware of the communications challenge it raises, it is first pertinent to specify the nature of the Biodôme project.

The Biodôme de Montréal: A Nature and Environment Museum

The Biodôme de Montréal, which will open in June, 1992, was born of the will of the City of Montréal to restructure and restore the Aquarium and Zoo to form a larger museum complex including flora and fauna.

The Velodrome equipment was largely under-used since the 1976 Olympic Games so the City of Montréal and the Olympic Installations Board came to a common conclusion following a feasibility study in 1988; it was both culturally interesting and economically feasible to adopt a solution of transforming the Velodrome into a nature and environment museum of international caliber and open year-round.

Pooling of resources and expertise in order to achieve this objective was immediately agreed upon by both parties.

Its Mission: Sensitization and Education

The installation's fundamental mission will have been achieved if the visitor leaves the Biodôme with the feeling that he has a better grasp of his own responsibility towards the life around him.

Sensitization and public education are therefore at the crux of the targeted goals. Getting living things, in all their diversity, importance and fragility, better known and appreciated is how the Biodôme will encourage individual conscience-taking by each and everyone. This, in turn, will give rise to true commitment to the protection, better management and conservation of our natural heritage.

The ability to think globally and the desire to act locally will constitute the impact sought.

The Concept: Living Ecosystems

The Biodôme is inspired by the approaches and presentation style of the botanical garden, the aquarium, the zoological garden and the nature interpretation centre. The collection will be live, not mounted. Fishes, birds, and mammals will evolve in habitats resembling their natural milieux as much as possible: soil, water, light, humidity, vegetation.

Unlike a zoo or an aquarium, however, the Biodôme will not present its collections in a succession of distinct exhibits. Plants and animals will live and reproduce in the ecosystem to which they belong.

The four American continent ecosystems (tropical rainforest, Laurentian forest, Marine Saint-Lawrence and Polar Ecosystem) will be sprawled over almost 7,000 square meters in the center of the Biodôme.

The Visitor's Pathway

A Biodôme visit proposes different experiences which urge the visitor to become aware of his planetary environment and to take concrete action. The pathway is therefore divided into different experience zones that will stimulate body, senses, emotions and the intellect.

The first zone, **The Ecosphere**, is an introductory area where preliminary information enabling understanding of the ecosystems is given.

The visitor next discovers the four successive ecosystems. Genuine footpaths in nature, they are meant to arouse amazement in the face of living beauty, while available information questions and feeds the experience, maintains interest and guides the traveller. Interpreters on hand in the footpaths stimulate observations in the ecosystems. They react to visitor conversations and questions and use the surroundings to interpret what is going on "live."

The visitor crosses a transition area before entering an ecosystem. The **Ecotransit** shows different ways of seeing nature, through the eyes of ethnic representatives who live in close relationship with the ecosystems presented at the Biodôme.

Situated at the center of the four ecosystems, the visitor comes upon the **Environment Place**. This is an open area where people meet to exchange viewpoints on issues, watch a movie or simply take a rest. It is a dynamic rostrum for exchanges and debates about environmental issues and aims to urge visitors to change attitudes based on global thinking.

Outside the ecosystems, on the promenade, are the **Environmental News kiosks**. Supplied here are tools and ideas for concrete action to protect the environment. The visitor receives help in stimulating action and a change of habits.

Complementary areas allow visitors to further pursue explorations about certain topics or get them committed to more active apprenticeship in an **Écolothèque** (media related), **Naturalia**, a discovery room, and multidisciplinary halls where pedagogical workshops and lectures are presented.

The Visitor Study Context

The Biodôme thus wishes to arm the visitor with a systemic vision, giving him a global vision of the planet. The goal being set, it was necessary to mark the channel to be followed by identifying the current guidelines which are the knowledge and representations, both conditioning their relation with nature.

It was deemed useful to make a front-end evaluation before elaborating a program of interpretation. The objective was identification, among other things, of previous visitor perceptions and knowledge in order to qualify the

level of popularization needed and the treatment of content to be adopted in presenting ecological notions.

Several steps in the Biodôme's materialization were already finished by this time. Concept planners had visited similar installations in order to gain from the experience of others so as to plan for the most futuristic equipment possible. On the heels of a feasibility study and a market study, the thematic and architectural concepts had already been presented to an international advisory committee.

The general goals of the study were to:

- Assess the level of current population representations vis-à-vis the ecological themes and notions treated in the Biodôme ecosystems;
- Discover the current perception of the Biodôme project and public intentions of making a visit;
- Find out what the public expects concerning the level of desired information (quantity and quality) and about museological communication measures and means.

The Survey: Choice of Methodology

A survey of potential Biodôme visitors was made. As potential visitors, we defined Montréal region residents who already frequent natural science installations. By their socio-demographic profiles and their cultural habits, these persons constitute the Biodôme's primary market. They are more likely than others to make repeated visits and they probably play the role of opinion leaders in their own circles by recommending museum or exhibition visits. This segment of clientele should be better known for more than one reason.

We obtained information about visit intentions as well as perceptions of the Biodôme project through brief interviews. The respondent was then asked to fill out a questionnaire bearing on certain ecological notions and about representations linked to nature and the environment. A few extra questions concerned the type of experience the subject would like and on preferences about means of communications. Here are the main results, with indications on programming implications.

Generally speaking the results tend to indicate that notions about ecology are fairly well understood. Respondents were able to identify the different components of an ecosystem and the relations which determine their coexistence. They performed well in associating living species with a given ecosystem. The Biodôme is therefore not dealing with a naive clientele. Expectations are high, furthermore, as to the information level and quantity. Potential visitors expect to move in an interpreted area and not to roam around in a landscaped layout, no matter how extraordinary it might be. As for means of communications, preferences observed show that

exhibits will have to be adapted to the clientele since all categories of visitors do not demand them in the same fashion.

The public surveyed was then invited to express approval of a series of statements bearing on the environment. The statements were presented in the form of lines of reasoning. Support of the arguments allowed us to conclude that this represented their own way of thinking or, in other words, their own feelings about nature.

According to this exercise, it appeared that a majority of visitors had an idyllic and detached vision of nature. If the latter was not disturbed by humans it would be in a permanent state of equilibrium. Man is viewed as an exterior component to the ecosystems and nefarious in most cases. Half of those questioned even feel that it is difficult for humans to live in harmony with nature, since humans must exploit it to survive. Even if we are dealing with a population segment which is sensitive to natural sciences (since it already frequents cultural installations dealing with same) almost 25% of them believe that scientists could preserve nature and keep it alive in artificial conditions.

The results are evidence of the Biodôme's interpretation challenge since these representations make up a sort of basic encyclopedia of visitors and the filter through which they will assimilate the messages and stimuli received. Beyond the information and knowledge to be dispensed at the Biodôme, treatment of its message but also the site layout could strengthen or reorient those representations.

Applying the Results

The most significant but also the most intangible contribution of the front-end evaluation probably lies in treatment of the information, later adopted. We will briefly summarize the nature of modifications and preoccupations which flowed from the front-end evaluation according to four levels of intervention: (1) communication objectives, (2) text writing, (3) choice of contents, and (4) choice and quantity of devices.

Some of the *apprenticeship or communications objectives* were validated, even reformulated, to adjust them according to the basic knowledge identified in potential visitors.

Considering representations linked to nature which the survey revealed, the "tone" used in *text writing* to be offered all along the ecosystems tour is a particular preoccupation in order not to widen the "man-nature" dichotomy which appeared strongly present among potential visitors.

As for the *choice of contents* for the introduction areas to the ecosystems, there is an effort at identification of harmonious links which man has developed with his natural habitat. Other cultural referents are added to possibly allow the visitor to widen his own perception of nature.

The lofty information expectations disclosed in the *choice and quantity of interpretation devices* part of the survey supported the option of spreading

interpretation devices throughout the ecosystems pathways. Originally, it should be mentioned, the ecosystems were to serve for contemplation and the interpretation devices were reserved for transition zones and other exhibition areas.

Concerning the nature of the latter, "technological" devices (such as video screens and computers) were excluded from the ecosystems so as not to accentuate distancing of visitors. Connotations affecting this type of device were effectively judged incompatible with the approach adopted. The approach finds technological support convening mediatization aspects that are more explicit than other means of communications like graphic information panels or animator-guides and it strengthens a conception of heavy, artificial, indeed irreversible, human intervention.

Had the front-end evaluation been made earlier in the Biodôme's planning process, it might have influenced the *pathway layout* a bit. The pathway was conceived as a traffic lane, raised with viewing areas as privileged sites to get closer to nature. At certain spots along the way, pathways and viewing areas favor a dominant-dominated relation by placing the visitor above the landscape and the animals. This position offers a spectacular view and encourages contemplation and marvelling by the visitor, but, on the other hand, it strengthens, even implicitly, the detachment attitude concerning nature. As earlier stated, these decisions had already been taken when the front-end evaluation was made.

Through pertinence of treatment and a judicious choice of means used, the interpretation must facilitate and encourage contact with nature resting on recognition, integration and respect.

Implications of Front-End Evaluation

In conclusion, we would like to formulate a few thoughts concerning the three following points: *objectives* of the front-end evaluation, currently-used *methodology*, and its *operating impact*.

First of all, it should be realized that a front-end evaluation is an *instrument for reflection* – an additional means taken by a concept team to correctly position the mission of a museum and to define its communication and education objectives. Of front-end evaluation it is said that it is an exploration in the feelings, interests and expectations of target clients in relation with a given project. Its operating impacts are forcibly limited, considering the *moment of intervention and the objectives pursued*. It cannot give concept planners precise recommendations about the number, type or nature of messages and means of communications to be installed. However, it identifies attitudes, certain representations and the preferences of targeted clientele. This allows concept planners to adjust and to reorient preliminary interpretation concepts if necessary in order to ensure that the mission followed is disseminated in the most propitious conditions.

The enquiry from a sampling of targeted visitors is, of course, one methodological means among others. A rigorous review of literature on the subject could also serve to enumerate the main representations apt to be encountered, or the most common public attitudes, if it concerns a field of public interest which has already been studied. The group discussion technique (or focus group) is also pertinent to investigate perceptions and values associated with a given theme. The number of group interviews required to obtain a representation comparable to individual interviews can cost comparable amounts. The trump card for interviews is that they allow obtaining information from a *well-selected target group* in a *relatively short period* and can test the *specific parameters* of the project.

In closing, a complementary fallout for the front-end evaluation can be added. Attitude questions formulated in order to explore visitor feelings can serve as a basis for designing an instrument of *formative or summative evaluation*. Such exploratory studies become markers allowing one to check if the installation has succeeded in clearly delivering the principal message.

The chief benefit of a front-end evaluation, and at the same time its weaker side, is that its true efficiency comes out during planning of the methodology. Definition of the exhibit objectives and selection of the dependent measures require careful thought. This already exposes concept planners to the different representations and to the main discourses in circulation to which potential visitors are susceptible of already adhering. This all-out exposure to the "possible" puts them in the position of better specifying or of better validating the conceptual orientation of the museum or the exhibition. There are no real "revelations" when the results come in because all possible answers are already foreseeable. The trap awaiting front-end evaluation is often this attendant "evolution" of the scenario or of the interpretation program. The concept planner's question has sometimes been modified when the results are in and they are less preoccupied with knowing "how" future visitors think and in which proportions they have selected one answer or the other, but rather with "How are we to meet the challenge we face?"

References

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