

**RESEARCH IN MUSEUM EDUCATION
A DESCRIPTION OF SOME INSTRUMENTS TO
STUDY EXHIBITIONS AND PROGRAMS**

MUSEUM EDUCATION

- Museum is an institution, and education, one of its functions.
- It has the seven following characteristics.

1) Usually a museum does take charge of only one aspect of the educational function of the society in which it is integrated: the development of its members

2) The main resources devoted by a museum to its educational function are its collections, the knowledge it possess on these collections, its professionals, their knowledge and competences

3) The museum utilizes these resources to carry out a series of activities that is much wider than the services usually offered by a department of education.

4) These activities address especially the persons who visit the museum, but also the ones that he catches up through its outreach activities.

5) These museum activities offer a whole range of benefits, learning being only one of them.

6) The major educational production of the museum is its exhibitions, which are based on its collections or on collections that it borrows.

7) The function of the programs should mainly to enrich the content of the exhibitions presented or to adapt it to the needs of special publics.

RESEARCH ON MUSEUM EDUCATION DONE AT THE UNIVERSITÉ DE MONTRÉAL

RESEARCH ON THE EXHIBITION

- Basic research
 - 10 stratified samples of 90 visitors each in permanent and temporary exhibition
 - Analysis of 200 permanent and temporary exhibitions
- Applied research
 - 15 projects offered by Montreal museums

MAIN RESULTS OF THE BASIC RESEARCH ON EXHIBITION

- What is the psychological functioning of a visitor, and what can be called an optimal functioning?
- How can one access the psychological functioning?
(Research done with 10 stratified samples of 90 visitors each)
- Are there principles that could help a curator to device an exhibition that sustains an optimal functioning? If there are, what are they?
(Systematic analysis of 200 permanent or temporary exhibitions

What is the psychological functioning of a visitor, and what can be called an optimal functioning?

- The **psychological functioning** is the mental activity of a person. This activity appears under three forms that are conventionally called *cognitive*, *imaginative* and *affective*.
- The **optimal functioning** is the richest activity that a visitor could produce when he is visiting an exhibition.

When one observes some optimal functioning, one also observes:

- 1) A rich mental activity;
- 2) This activity is produced by a constant go back and forth between what the visitor observes or what he reads, and what he himself produces;
- 3) This activity is self-stimulating;
- 4) It ends up in an important quantity of meaning making;
- 5) The production of meaning is greatly personal, so it entails a real appropriation of the exhibition content.
- 6) Because of this appropriation, the exhibition contributes greatly to the psychological development of the visitor.

How can one access the psychological functioning?

Tracking the visitor, questionnaires or interviews used when the visitor is leaving the museum offer poorly reliable data.

If one wants to obtain information of a good level of validity, one should catch the psychological functioning as it happens.

A new mean, the "Thinking Aloud" method adapted for the museum setting presents a good level of validity.



" I like this, It sounds interesting. But I do not understand how it works and there is no way I could."



- : "[Visitor reads: Le pont de glace. Clarence Gagnon, 1881-1932.] *I do not see any bridge. This does not make sense. There is a ferry between Quebec and Levis. I took it this morning. Unless in the olden times, there was no ferry, and... Ah yes, during wintertime, one did not break the ice as we do now. It should have been thick, very thick. And it should float over water. (S.5) It looks like it, and (S.3) ah yes, the small spruce trees, they should have been planted to signal where the bridge is supposed to run. Yes, because ice should not have been thick all over the place, and it could have been dangerous. (S.8). I do not understand why I did not see that right from the beginning! Damn!*
- *Still today, there are things like that. Ice is strong enough to bear cars that travel over it. Like when they go fishing through ice. (S.5). But these are not real ice bridges. They are like, but not exact bridges.*

(S.5) means a five seconds silence.



My grandfather used to live in Quebec. Him, he certainly was using the ice bridge. (S.2) I would have liked to be with him while he was travelling across the ice bridge, smoking his pipe. They had big fur coats in the olden times. They did not feel cold. The snow should have looked beautiful, pink and blue like that. With beautiful pink and blue shapes like that... One is obliged to look at for a long time, because horse is not fast. There is nothing else to be seen. But this is not boring. It changes all the time. There are no two lumps of snow that look alike!

I should unharness. (visitor laughs) I want to see others. But long time... is good! As slow food! In the olden times they had slow time. They could not do otherwise. But us, we have to do a great effort to get it. Things have greatly changed!"

**Are there principles that could help a curator to device a temporary thematic exhibition that sustains an optimal functioning of the adult visitor?
If there are, what are they?**

A list of nine principles that could lead a curator's work

1. To secure the psychological and physical comfort of the visitors.
2. To deal with a subject matter that represents a high level of unknown for the visitors.
3. To locate the subject matter in time and space.
4. To provide a context for the subject matter.
5. To underline the importance of the subject matter.
6. To write texts in a concrete rather than abstract language.
7. To write texts in an explanatory rather than simply affirmative form.
8. To give objects maximum importance.
9. To build a coherent exhibition.

Principle 1: To secure the psychological and physical comfort of the visitor.

Principle 2: To deal with a subject matter that represents a high level of unknown for the visitors.

Principle 3: To locate the subject matter in time and space.

- Example: We are in year 4 A.C. The Han are the dynasty in power. China is a huge empire. It stretches to the south until actual Vietnam, to the west and north until Central Asia steppes, and to the north-east until Korea.

Principle 4: To provide a context for the subject matter of the exhibition.

Example: To create an empire is a gigantic undertaking. To maintain it is another one, because the governors of the regions distant from the central power are tempted to free themselves. Many sovereigns have used a powerful army to prevent it. Others have used peaceful means.

This exhibition explores two of these non military means used by a Han sovereign: firstly distributing princely gifts, and secondly sending portraits of the emperor all over the territory.

Principle 5: To underline the importance of the subject matter.

Example: Utilized in a complementary way, one will see that these two means will be of a surprising efficacy, and that a policy of peaceful rather than warlike practices used in an astute manner will have a greater impact than constraint and military demonstrations.

Principle 6: To write texts in a concrete rather than condensed language.

One should prefer the first to the second text.

- *First text* (already seen): To create an empire is a gigantic undertaking. To maintain it is another one, because the governors of the regions distant from the central power are tempted to free themselves. Many sovereigns have used a powerful army to prevent this. Others have used peaceful means.
- *Second text*: Maintaining an empire is as demanding as creating it, as its margins intent to get free. This trend has been mastered either by a powerful army or by astute peaceful means.

Principle 7: To write texts in an explanatory rather than simply affirmative form.

This means that the text is written to introduce the "hows" and "whys". So one should prefer the first to the second text.

- *First text:* To create an empire is a gigantic undertaking. To maintain it is another one, because the governors of the regions distant from the central power are tempted to free themselves.
- *Second text:* To create an empire is a gigantic undertaking. To maintain it is another one.

Principle 8: To give objects the maximum of importance.

Each time that it is possible the discourse of the exhibition (its content) is created by the objects, their relation in space, and their succession.

Principle 9: To build a coherent exhibition.

A principle of coherence

“The discourse of the exhibition is strong and rigorous. It possesses a structure that is evident and progressive for the visitor. This is also a perfectly continuous discourse, that is a discourse without any gap or element in excess.”

Three types of coherence

- 1) Its *horizontal* coherence, or the link between its sub-themes;
- 2) Its *vertical* coherence, or the link between its main levels of information (object, label and sub-theme panel);
- 3) Its *textual* coherence, or the link between the sentences of a text.

Horizontal coherence

- **Rule 1** (focuses on the relation between the sub-themes of the exhibition): “The relation between the sub-themes is articulated according to a rigorous (logical) progression; it is rapidly, clearly expressed in order to facilitate the anticipation of the sub-themes with the unfolding of the exhibition and the strolling of the visitor.”
- **Rule 2** (focuses on the relation between the design of the exhibition and its sub-themes): “Each sub-theme physical space, that is each conceptual part of the exhibition, is clearly marked by some design details.”
- **Rule 3** (focuses on the relation between the objects presented and the sub-themes): “The progression of the objects - their visual characteristics at least - is parallel to the progression of the sub-themes.”

Vertical coherence

The vertical coherence aims to create a perfect link between the three levels of information represented by the objects, their labels and the section panel of the exhibition.

It is expressed through three rules

Rule 4 (focuses on the object-label continuity): "The information contained in the label should enable the visitor to identify the object. If an elongated label is used, it should focus the attention of the visitor on observable aspects of the object, then enlarges the significance of these aspects in agreement with the discourse of the exhibition."



Wine cup

Lacquered red wood, gilded bronze, gold and silver

China, First century A.C.

British Museum collection

On the base of the cup, one sees a series of Chinese characters.

These are the names of the six craftsmen who contributed to its production, and the seven supervisors who checked this production. This detail suggests that the production of such objects kept busy a great number of craftsmen narrowly supervised, and that the objects that they were producing were of an exceptional quality.

Rule 5 (focuses on the continuity between the content of the labels and the content of the sub-theme panel): “The information contained in the sub-theme panel recalls the general signification of the sub-theme and details it. Moreover, it frames and integrates the content of the entirety of the labels contained in the exhibition part corresponding to the sub-theme.”

A peaceful mean: gifts worthy of an empress

For 30 years, successive Han emperors will not be in a position to exert power. The Grand Empress dowager Wang will do it in their place. One of the principal means that she will use to maintain the integrity of the empire will be to distribute each year princely gifts to the governors of her immense territory. Lacquers, bronzes or jades objects of an exceptional craftsmanship and value will honour the ones who receive these objects and attach them to the Han dynasty.

Rule 6 (focuses on the link between the exhibition design and the objects): "The elements of the exhibition design that surround the objects of a part of the exhibition should be used firstly to set them off and to sustain the ideas that the curator wants to express through them. Eventually the design elements will give prominence to the objects that present the major ideas of the exhibition."

Textual coherence

- **Rule 7** (focuses on the coherence of the sentences of a text): “The succession of a text sentences is logical. It does not suffer from any lack or excess of information that would jumble the chain of ideas.”

Research strategy that led to the elaboration of the nine principles; its steps

- 1) Study of the psychological functioning of visitors in a series of permanent and temporary exhibitions;
- 2) Production of a photographic document for each exhibition;
- 3) Localization of exhibition units where visitors deal with few objects or read few texts, and/or produce very short discourses;
- 4) Identification of any problem that could explain the poor functioning of the visitors, and verification that it could be caused by a lack of coherence;
- 5) Verification that the problem appears in many of the exhibitions studied;
- 6) Elaboration of a principle aiming to solve the problem;
- 7) Verification that when a part of the exhibition obeys the principle, the psychological functioning of the visitors is much better;
- 8) Investigation to find out other exhibitions than the seven studied in order to check how these exhibitions comply with the principle;
- 9) Investigation to find out exhibitions that comply with all the nine principles to check what they look like.

MAIN RESULTS OF THE APPLIED RESEARCH ON THE EXHIBITION

HOW TO PREPARE AN EXHIBITION THAT PROMOTES THE OPTIMAL FUNCTIONING OF VISITORS?

- Documentation of the exhibition subject matter
- Its characteristics
- Its preparation to write exhibition scenarios

Documentation of the subject matter, its characteristics

- It exceeds the information necessary to deal with the theme, so it could offer it a context.
- It is sufficiently detailed, so one could write an elongated label for each object entering in the exhibition.
- These three levels of information corresponding to the theme, its context and the extended labels should present a strong continuity.

Preparation of the information used to elaborate exhibition scenarios

- 1) As soon as all the information on a sub-theme is collected, a synthesis is prepared.
- 2) On the first page of the synthesis, in a special space, one identifies all the links that the sub-theme has with the other sub-themes of the exhibition.
- 3) On the same page, but in a different space, one identifies all the links between the aspects of the sub-theme and the aspects of all the other sub-themes.
- 4) One creates a data bank with all the objects that could enter in the exhibition. For every object, one identifies all the aspects of all the sub-themes that it could accompany.
- 5) With a Mind Map (or Freemind) program, one draw a schema where are located:
 - the theme of the exhibition,
 - the sub-themes and all their aspects,
 - the set of relations between the sub-themes as well as the set of relations between the aspects of the sub-themes,
 - the objects and the aspects of the sub-themes to which they could be associated.
- 6) Using the Mind Map schema, one elaborates five or six possible scenarios.
- 7) One examines each one, criticizes them with a series of criteria including the nine principles that promote the optimal functioning of an adult visitor. The most satisfactory is retained.

RESEARCH ON MUSEUM EDUCATION REALIZED JOINTLY BY PROFESSORS OF THE UNIVERSITÉ DE MONTRÉAL AND THE ÉCOLE DU LOUVRE

APPLIED RESEARCH ON EDUCATIONAL AND CULTURAL PROGRAMS

- It consists in developing a grid to analyze educational as well as cultural programs, then to have this grid validated internationally by experts and professionals.
- The main aims of the grid are threefold:
 - 1) To induce the professionals to work in a more systematic way when they are elaborating a program in order to improve its quality;
 - 2) To ameliorate the methods that the professionals already utilize to render them more efficacious;
 - 3) To identify the types of research that should accompany the planning, the implementation and the evaluation steps of a program.

CONTENT OF THE GRID

PLANNING

- Origin of the project
- Rational and relevance (scientific rational, social relevance, institutional relevance)
- Collaboration with partners
- Beneficiaries
- Goals and objectives
- Resources
- Content of the program
- Mediation tools
- Expected participation
- Tool-content-participation coordination
- Management (time, people, staff)
- Communication
- Studies on the program (on its communication and management for instance)

IMPLEMENTATION

- Preparation of the implementation
- Implementation as such
- Modifications

EVALUATION

- Results
- Reports
- Remediation

Three types of research related to the various items of the grid

- 1) *Simple collection of already existing information*, like when one inquires about the requests of services sent to the museum.
- 2) *Collection and synthesis of already existing information*, for example on the characteristics of the population of the region.
- 3) *Collection and synthesis of new information*; this type of studies includes evaluative research, but also all sorts of other investigations.

PERSPECTIVES