Creative Interaction of Visitor and Exhibition

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Introduction

This article (see Note 1) examines the museum visitor, and conjointly, the exhibition media. It does not try to find out who the visitors are, why they visit museums and exhibitions, or their behavior during the visit. That information exists and is readily accessible. The objective here is to try to understand the concept of the visitor through trends of thought that have defined it over time.

Since the 1960s (see Note 2) in particular, evaluation methods have played a determining role in our conception of visitors, their behavior and our expectations of them. The visitor represents a social investment and is central to an exhibition's discourse apparatus. Our examination therefore looks at visitors as activated by the evaluation process, since evaluation constantly seeks to optimize, no matter what school of thought is operating. Its objective is either to maximize the intended reach of an exhibition in preparation, using formative evaluation, or to enhance its actual impact through summative evaluation, once it has opened to the public. The visitor therefore occupies a nodal position in the evaluation process. At the same time, what and how the exhibition presents are correlatively questioned. Visitor and exhibition are necessarily interrelated. And as the practice of evaluation tends to become more widespread, it goes beyond the exhibition to affect the entire contemporary museum field.

Our approach contains a reservation: it does not defend a thesis but instead raises an inquiry on one of the integrating poles of contemporary museum discourse. So, though incomplete, this work represents a contribution to the current debate (see Note 3).

Our intended procedure is simple: we will briefly sketch key moments in the development of the field of evaluation, on the one hand, while also examining how the concept of communication progressively entered the museum field. Our underlying idea is as follows: it is currently accepted that evaluation is intended to optimize an exhibition's impact on the visitor by ensuring that the information (see Note 4) offered can be decoded and assimilated in the best possible receiving conditions, so that the overall meaning of the intended message conveyed can be correctly understood and eventually appropriated. This leads us to want to characterize evaluation by the type of communication it mobilizes (see Note 5), as if evaluation and communication were dissociated. In fact, things did not happen like that. Rather it was a transformation in the perception of the role and function of the exhibition that opened a space in which communication became lodged and on which evaluation became attached as the incarnation of this discourse.

The Advent of Evaluation

Attention to the Visitor

In summary, it can be said that evaluation of museum visitors has been actively carried out in the United States for a little more than 20 years. Thus it is only recently that large American museums have developed this practice in a systematic way (Gardner, 1986). However, the concern is not new and in fact occurs throughout American museological discourse (see Note 6).

In 1916, the first article dealing specifically with visitor behavior appeared, authored by the American museologist Benjamin I. Gilman (Gilman, 1916). He applied simple observation techniques at the Boston Museum of Fine Arts to come up with comments concerning visitor fatigue and certain design problems. This initial study, conducted at the time major American museums were being transformed into public museums, falls within the debate on museum democratization (Hutchison, 1916; Dana, 1917) (see Note 7) and the introduction of educational programs for both children and adults (Ramsey, 1938).

In the 1930s, two Yale University psychologists, Edward S. Robinson and Arthur W. Melton, applied their methods to study the behavior of visitors at various American museums, including science museums. In several of their articles and works (see Note 8), they developed the concepts of an exhibition's power of attraction and retention. On questions of museum architecture, visitor fatigue, methods of installing artifacts and the accompanying means of interpretation, they created a school of thought dealing generally with visitor observation (Droba, 1929; Porter, 1938) and more specifically with the educational role of the museum (Gibson, 1925; Bloomberg, 1929; Goldberg, 1933; Melton, Goldberg & Mason, 1936). In the same period, Carlos E. Cummings' monumental study on international exhibitions appeared in 1939, representing the most extensive research on exhibitions undertaken to date (Cummings, 1940). Cummings was the first to stress the importance of the "narrative framework" (storyline) in the conceptual organization of the exhibit. This view became a major factor in the postwar era with the development of theme exhibitions and interpretation centers.

Leaving the domain of observation practiced up to then, a research team in 1943 published a study on the educational value of public health exhibits organized by the U.S. government (Calver, Derryberry & Mensh, 1943). For the first time, a study was based on visitor interviews. The first evaluations of the general audience were also done at this time. Powell's (1939) study, based on six years of monthly reports, for the first time presented attendance charts which established the distinction between a specific year (1937) and the overall average for the years studied, as well as the distinction between the local public and the tourist public (see Note 9).

Evaluation Comes Into Play

The war and post-war periods represented a turning point. Major museums, with but few exceptions (Kearns, 1940; Lunz, 1942; Nielson, 1946), seemed to become less interested in visitor evaluation. The interest shifted to theme and travelling exhibitions (Derryberry, 1941; Gebhard, 1948; Knutson, 1949) and to international exhibitions (Yoshioka, 1942). It appears to us that a rupture took place, which reversed the perspective. The question of "evaluation" replaced that of "visitors." This reversal became even more clear-cut with the work of Shettel and Screven. Influenced by the new and rising field of marketing, research resumed with studies by Arthur Niehoff (1953, 1956, 1958, 1959, 1968), done with the public of the Milwaukee Public Museum, and by Stanley K. Bigman (1955) and Goins and Griffenhagen (1957, 1958). In this same movement, David Abbey and Duncan Cameron conducted the first visitor evaluations of Toronto's Royal Ontario Museum beginning in 1959, helping to systematize the methodology (Abbey & Cameron, 1959, 1961; Cameron and Abbey, 1960). Visitor evaluation was on the agenda for many U.S. museums (see Note 10) and exhibit evaluation, distinct from visitor evaluation, was on the rise (see Note 11).

It is worth noting several main features of exhibitions since the transition of the visitor to evaluation presumes the constitution of the exhibition as object. This entails a theorization of the exhibition's communication process, since it is generally held that the exhibition engages visitors in a complex interaction of receptiveness to the information presented.

The exhibition is defined as the mode of organization of various supports (artifacts, scripto-visual texts, audio-visual devices, etc.). The exhibit is more than merely its elements: the whole is greater than the sum of its parts (Barbier-Bouvet, 1983a). As well, exhibition receptivity is basically perceived as an encounter with the dual dynamic of "seeing" and "doing," mobilized by the significant spatial juxtaposition of planes and volumes. The arrangement of elements produces a system of oppositions which gives the visitor a receptive context. In part, it directs the information presented to visitors. The meaning extracted by visitors comes from the interplay of space, time and theme. As regards exhibiting, Davallon (1986) states,

> a space is organized; objects are designated as remarkable; something is shown presented, offered to the spectator's attention. With the adventure of exhibiting and organizing the location where the objects will be placed, they present themselves to the spectator, offering him or her their inherent significance. This significance is exhibited through them. Thus the exhibit takes shape: the object is directed to the user or visitor; it is presented so as to generate a discourse with its audience. In this way, the user or visitor simultaneously become an integral part of the exhibiting process (p. 14).

Let us add two brief critical comments to emphasize the importance of production conditions on production grammar: (1) To achieve its goal, the exhibition resorts mainly to the world and imagery of the specialist. It therefore marks the exhibition's second discourse with a structural precedence. But the actual representations, a genuine system of reference points, gives the exhibition its receptive context. The reference to the specialist's domain or to the everyday world occurs by means of a communicational relationship which nevertheless remains subordinate to the overall production.

(2) But since exhibiting entails choosing, the exhibition is, "from the viewpoint of its designers, a place where not everything can be shown," as it is a place where not everything can be seen, from the user's point of view (Barbier-Bouvet, 1983b). The work of mounting an exhibition finds its meaning only in relation to a fictitious, somewhat ideal visitor who is constructed through the intuitive and subjective ideas of its designers and is called upon to conform to their system of preconceived expectations. This is well-known since Wiebe (1964) has already pointed out that the communicator reproduces "in the perceptive process of the receptor, at least an approximation of the process that the [communicator's] message renders in symbolic form" (p. 40). Note also the well-known fact that the choice of content themes and mode of presentation stems much more from interests and values of the designer's micro-environment than from needs expressed by visitors. This reaffirms the extent to which the visitor is fictitious (Moles, 1968). In this connection, exhibition and recipient are only artifacts of the viewpoint that constructs them.

It is understandable why the shifting of the debate from visitor to evaluation passes through the conceptualization of the exhibition. This reflection had not yet begun at that time, nor had the eventual role to be played by communications theory in structuring this process yet been fully realized.

The Educational Thrust

The arrival on the scene of Harris Shettel and C.G. Screven in the 1960s marked a decisive turning point in the orientation of visitor studies. Visitor evaluation, until then mainly shaped by behavioral psychology and marketing, became a special field and an issue for the educational milieu. This entry into the field of museology was partly due to the long tradition of the school visit which provided a potentially measurable learning outcome. Taking the basic data of Popham and Baker (1965), Popham (1974) and Scriven (1967, 1974) on pedagogical objectives and their verification, Screven and Shettel imposed a typical educational procedure on exhibition evaluation: the distinction between formative evaluation and summative evaluation (see Note 12). They proposed an evaluation approach focused on learning objectives ("Goal-Referenced Approach") which demands: (1) prior clarification of the cognitive and affective objectives of the exhibition, (2) a statement of practical behavioral objectives and (3) measurement of achievement of these objectives(see Note 13).

This school, which denounces vague objectives and the effect they have on the conception and creation of an exhibition, insists that goals must be formulated as measurable objectives. This position affirms the conviction that a museum is an educational milieu whose main mission, achieved by exhibitions and artifacts, is to transmit knowledge and enable learning. The museum milieu is seen as a natural extension of school and book. The fact that it utilizes different means doesn't prevent it from pursuing similar objectives and achieving them through communication strategies that optimize the learning relationship (see Note 14).

With development of the educational movement, the reflection on the exhibition is enriched by the relationship to the referent. The exhibition will now be seen as an intermediate ground between unknown aspects of scholarly knowledge (both arts and science) and common knowledge that already exists. The objective of the evaluative approach is to create a kind of situation where scholarly or scientific discourse encounters common representations to better go beyond them.

The second school which came into being in the United States is called naturalistic ("Goal-free") evaluation. Introduced by Robert L. Wolf at the Smithsonian Institution in Washington, this method attempts to discern visitors' overall learning experience by incorporating the meaning of the visit as fact (Wolf and Tymitz, 1978; Wolf, 1980, 1986). Rather than comparing what was learned with the desired objectives, this method seeks to further link visitors' descriptions with their interests, needs and the impact of the environment. This school, which has developed substantially in the United States in recent years, clearly dissociates the museum's informal learning context from the structured one of the school (see Note 15). In this regard, it differs from the approach advocated by Screven and Shettel and considers the museum milieu as a specific entity, independent of school and characterized by its own environment.

The Weight of Pragmatism

Another distinction, pertaining to school rather than method, emerged between the researchers and the practitioners. The work of practitioners (who are more directly concerned with immediate results than are researchers [see Note 16] deals mainly with visitor and summative evaluations of variables considered to be significant for certain exhibitions. While their work does provide considerable data on visitor behavior, so far it has had little effect on the organization of exhibitions. However, in recent years, partly due to the influence of the British, several American museums have set up permanent teams of evaluators (Gardner, 1986; McNamara, 1987) whose work consists mainly of evaluating exhibitions in the process of being mounted. In this sense, formative evaluation becomes a tool in decision-making during the process of creating the exhibition. Moreover, in practice, verification of the learning experience has been put aside. An exhibition's power of attraction and retention remain the most common criteria, to which are added retention of its message and its organizational setup.

If we are to point up a central trend of this issue, we would say that grasping the communication or dissemination relationship instigated by the museum, and through this the exhibition, can only be perceived as a dual evaluation effort—an attempt to describe the evolution of visitor behavior and a transformation of the notion of visitor itself. To give one small example, remember that the first audience studies basically aimed at characterizing the average visitor (see Note 17), which is no longer the case. Put simply, the matter of evaluation has gone from a description of the average audience to describing it in segments (see Note 18). It is now suggested that there is a differentiated relationship and that this differentiation is characteristic: the diverse actions no longer signify the exhibition's imperfection or erratic visitor behavior. However, evaluation is not put forth as a differentiating force, at least not yet.

Transformation of the Exhibition

The rise of evaluation and its progressive inclusion in legitimate museum practices do not solely account for the central position reserved for the visitor. In fact, it was the functional convergence of concern for the effectiveness of the exhibition and a framework for reflecting on it that created a space for the visitor.

Structuring Effect of the Communications School

The Chicago World's Fair (1934) was a turning point. It was the first large-scale exhibition to highlight the message content of the objects and artifacts being presented (Allwood, 1977). The approach was repeated a few years later at the New York World's Fair (1939-1940). Preceded by the development of "period rooms" in Scandinavia and dioramas in England, France and the United States, this new concept of the exhibition gave a context to the objects, specimens and artworks on public display. These influences joined the growing trend to interpretation in historical buildings, which began at the turn of the century.

There was therefore a rapid evolution of the traditional concept of the exhibition, long seen as a way of highlighting collections. At the risk of simplifying, we can say that the organization of the 19th century museum and its exhibitions reflected the structure of its reference discourse categories by giving them a form and space. The exhibition format was defined by the prevailing concepts of art history and science which embraced segments and classifications (Van Praët, 1989).

We observe a radical change with the concept of having an exhibition format that introduces a narrative framework (storyline). And American museologists quickly began investigating visitor reactions. This is why both the World's Fairs have been the subject of many studies (Derryberry, 1941; Yoshioka, 1942; Calver, Derryberry, & Mensh, 1943). The most famous one is still that by Cummings, previously referred to, where he states at the end, "all museums and exhibitions must tell a story." Certainly, the idea of telling a story was already in mind (Dana, 1921). But the idea of linking the storyline with the message opened up new vistas, apparently first demonstrated at the 1934 and 1939 World's Fairs. Moreover, in the two decades following World War II, there was a remarkable development of temporary and travelling exhibitions, most of which were organized around a message to be transmitted to the public and which helped create the "theme" exhibition, to use the current term.

What should be retained from this too brief analysis of the contribution made by World's Fairs? Three elements emerge from our analysis: (1) In the early 1930s, a process that began to transform the exhibition sprang mostly from outside the museum field. The museum adjusted progressively to this new concept. (2) The exhibition quickly came to be perceived as a medium of communication by the American school of museology. Henceforth, the exhibition was viewed not only as a "function" of the museum, but gained an autonomy of its own. It thus became a specific entity in the museum field. (3) This shift in perspective helped initiate a reflection on the status of the exhibition which was developing at a pace congruent with the communications field (nowadays termed "communications science").

What concerns our proposal is, on the one hand, affirmation of the status of the communication and exhibition medium and, on the other hand, the consequences that this status imposes on the conception and realization processes. We feel it is important to look briefly at the implications of this.

Once formulated as a specific medium of communication, it became obviously apparent that the exhibition had to take a close look at itself, including its own design process, i.e.: the intention of the exhibition, degree of audience interest, choice of facts and ideas, context surrounding the objects, design planning and visitor evaluation (Calver, 1938) (see Note 19). All these elements affect the transmission of the message. In 1939, Calver set out to study the language of the exhibition, trying to discern the underlying rules that govern its operation. However, observing that knowledge of this language was still rudimentary, he adopted two guiding principles, namely that: (1) the exhibition has intrinsic limitations; and (2) it was not then adapted to the narrative format (see Note 20), in the context of the debate at the time and the media's development. He therefore focused on three aspects of the conception phase: (1) defining the exhibition objectives, the content and facts to be presented, and the message to be conveyed to visitors; (2) paying attention to format (design) since this is "to artifacts what rhetoric is to language" and; (3) getting a clear idea of the target audience. Calver's process was certainly relevant and still provides the structure for current evaluations.

But to continue forward. At the same time, a second current of thought was emerging: that of the exhibition as an educational form. Shaw (1939) stated that the primary purpose of an exhibition is to educate. So, from the end of the 1930s two major trends of thought took shape, and remain with us today. They were structured around the idea that the exhibition is a medium of communication, that it must convey a message and that the main means of doing this is through a storyline—"in the form of a connected story" as Shaw says.

The message-oriented exhibition continued to develop during the 1940s and 1950s. However, its association with communications media brought the influences of theoretical inquiry into this field. This influence was clearly evident in the approach to the audience and the measurement of a message's effect, with such questions prevailing up to the early 1960s. While visitor research during the 1920s and 1930s had basically concerned itself with "visitor behavior" (Robinson, 1928; Melton, 1933a, 1935; Kearns, 1940), beginning in the 1940s these evaluations also investigated comprehension of the message and composition of the audiences. We see the full impact of the work of Lazarsfeld and his team on the persuasive function of the media, such as the biases introduced by this perspective. As Breton and Proulx (1989) point out,

> Up to the early sixties, their objects of analysis essentially concerned two themes: the qualitative and the quantitative description of audiences; assessment of the short term effectiveness of the media on individuals, namely the directly and indirectly perceptible effects of messages on the individuals considered to be receptors (p. 149).

The first generations of empirical research in communications appealed to the notions of effectiveness and manipulation. They confused influence and effectiveness, which led to a 20-year debate on the matter.

Nonetheless, it was in the wake of this inquiry into the exhibition that the expression "evaluation of exhibits" emerged, a term which is currently in use. There was a renewed approach to methodology: while the evaluations of the 1920s and 1930s were based solely on observations, those of the 1940s and 1950s highlighted interviews with visitors. Cummings (1940) would go further in giving voice to the visitors, paying particular heed to spontaneous remarks by exhibition visitors. The notion of understanding the message, previously subordinate to the persuasive effect, gained force along with increased awareness of the complexity of the communications relationship provided by interviews. The evaluation process continued to develop tools and undertook to describe the exhibition's working rules (Derryberry, 1941; Calver, Derryberry & Mensh, 1943) (see Note 21).

Audience in the Media's Sphere of Influence

The issue of the audience gained importance (see Note 22). The aim was to find out who attends (sex, occupation, education), why, what they see and how they react. These questions were to structure and limit the field of application of audience evaluation for a number of years. Note that Powell (1938) proceeded to divide the audience into sub-groups in accordance with different instances of time. It was only later that these distinctions truly became operative (Niehoff, 1953). Many museums today still point out the characteristics and evolution of their audience during an exhibition. Characterization of the socio-demographic profiles of visitors make it possible to accumulate basic data and initiate a more refined evaluation approach.

With Parr's work (1961), the communicational specificity of the exhibition, compared to other media such as the book, film and television, became better defined. He was the first to point out the tri-dimensional reality of the exhibit and draw conclusions from this, suggesting that the visitor evolves freely in the rebuilt space of the exhibition. Visitors control their viewing as well as the time they spend. The spatial relationship is part of the communications process created by the exhibition and it helps bring out the overall meaning (De Borhegyi, 1963b). In conformance with the then dominant model in the communications field, Parr concluded that this space-and-time relationship enabled exhibitions to confront each person in an individual way. He thus sees the museum as a mass medium institution.

In this perspective, we cannot omit the considerations of McLuhan. His thesis is well-known: the rapid development of mass media, especially television, revolutionized ways of communicating and thinking. He contrasts the instantaneous and ephemeral communication characteristics of electronic media with linear communications, a direct product of the book (McLuhan, 1968). This view sees the medium—the mode of communication—as more significant than the message. In this vein, Parker (1963) likened the museum to a genuine system of communication. Pushing McLuhan's thesis to the limit, he advocated outright abolition of the storyline since visitors are used to contemporary forms of communication and have altered their ways of thinking. Parker contrasts mosaic and linear culture, reiterating the concept put forward by Moles (1968). Similarly, for McLuhan's "instantaneity" which characterizes the contemporary mass media, Parker substitutes "simultaneity" to describe the work of the exhibition which mobilizes all the senses: the exhibition juxtaposes simultaneous information in the present moment.

Discourse on the Object

But the discourse on the object, a theme which permeates the entire museum field, has not been exhausted for all that. Cameron (1968) reaffirms the object's structuring role: the exhibition's communications system depends on the non-verbal language of the objects. Basically, the exhibition's scripto-visual apparatus is there to highlight the object. This is why the exhibition is more than simply a communications system. Certainly, the functions of transmission and reception continue to operate, but they cannot adequately describe the many relationships that link the visitor with the components of the exhibition. The object and the inherent meaning form a primary system around which the secondary systems gravitate. The real role of the exhibition, and more generally that of the museum, is to enhance learning of the language of the object. This mastery holds the key to the message aimed at visitors. It follows that Cameron emphasizes individual learning experience at the expense of group experience. The exhibition generates a dialogue with the visitor, thereby creating relationships and conveying a message. This return to the object advocated by Cameron is also interesting since it implicitly criticizes the linear concept of the communications process current at the time. It may be recalled that the communications relationship was then seen as a one-way effort by the transmitter to one or more receptors, involving a message conveyed by a medium. Cameron's critics (Knez and Wright, 1970) emphasize that the meaning of the object does not make itself felt on its own, that it requires mastery of a language and that this mastery depends on learning. Thus, the educational role of the exhibition came to be reformulated specifically in the context of the communication it generates.

An additional point on the question of the object must be broached here. We perceive the fascination exercised by the object in the museum field to be a good indicator of the abstract relationship with the visitor conveyed by the discourse on the object. The object is perceived as the nodal point of the museum activity.

The discourses on the object and on communications constantly cross paths. While the exhibition medium has developed considerably in recent years due to recomposition of the museum apparatus, the role of the object remains essentially unchanged in the discourse and conception of the relationship underlying the symbolic appropriation. But the object is no longer as necessary to the exhibition. It can be represented by an image, while retaining its reference. It need not actually be there. For example, a hologram can represent the sign and its referent, thus providing an abstract presence.

So, on the one hand, a certain conception of the object remains very active in museum discourse and influences many collection and dissemination activities. It is in terms of its presence or absence that an exhibiting critique arises: rejection of making the object sacred, which confines it to non-communication, or the opposite—refusing to sacrifice the object, subsumed within a story told. Both cases involve a normative critique. The well-known resistance of art museums to evaluation clearly illustrates the contradictions of this normative conception. To take the social demand into account when exhibiting an object is seen as distorting the natural relationship created by the object. This is a variant of the essentialism already analyzed by Barthes (1957) (see Note 23).

Can we envisage a kind of appropriation independent of a meaning being attributed and conditions that define the event? The answer is no, even where there is a question of the predisposition to commune with the work, so important to those who hold to the idea of genius (Bourdieu and Darbel, 1969). The meaning involves the presence of the visitor. Even in the most conservative rejection of the discourse, there is a learning process by visitors who are actively engaged in an aesthetic or cognitive experience.

Isn't it symptomatic that this "object" which provokes so much debate and position-taking still resists deconstruction? Why is this so? The discourse develops through the endeavors of those "actors" engaged in museum practice, broadly speaking. They receive it directly as is, without relating it to conditions that define its meaning. It isn't considered in terms of knowledge which would clarify both the limitations and the possibilities. Hence, this discourse is the manifestation of an ideological structure at work, and it operates on two levels: knowledge, where the discourse forms the basis of actual practice, and lack of knowledge, which defines and limits this practice. In doing so, it characterizes the mode, both real and imaginary, through which the experience of the social actors relates to the museum institution (Vergès, 1976) (see Note 24). So, while the visitor constructed by evaluation has few or no rights in the representations that the discourse on the object derives through the staging of the exhibition, he remains the focus of an unacknowledged process. All other things being equal, evaluation updates and hence deconstructs.

The Concept of Exhibiting

Besides the theoretical contribution to construction of the exhibition as object, largely due to the rise of evaluation, one must also consider the structuring role of the rationalizing processes of conception and realization of the exhibit. In this regard, the conception of staging a contemporary exhibition owes much to the work of planners and visual designers. However their contribution to the evolution of the media is often underestimated.

However, beginning in 1948, the articulation of the message to the target audience was put forward concretely by Lane and Tolleris (1948). Their stated objective is to send the right message to the right public as directly and effectively as possible. To attain this objective, three constraints must be respected: (1) Planning: set the exhibition's duration, determine its occupancy space, and know the potential audience's interests so as to better designate the integrator theme. (2) Setting up the exhibition: specify what there is to say, the overall objective for doing so, and how to say it, so as to determine content and select the exhibition's organizing principle. (3) Subordination to the message: integrate all the exhibition components so that they function together, to ensure the visitor is properly guided through the exhibition.

May we add, on this last point, that Lane and Tolleris dwelt at length on presentation strategies capable of ensuring the impact of the message: they try to make the message clear by simplifying the content format. The exhibition's effectiveness is central to their concern. With this in mind, they distinguish two elements: (1) the conception stage, where they distinguish the intention ("purpose") from the story told ("story"), adopting the idea of the storyline (see Note 25); and (2) the realization stage, i.e., placing concrete items in a space: choice of slides, color charts, typefaces, lighting, audio-visual supports, etc.

Gebhard (1948) sees things from the same angle: the realization of an exhibition is done systematically. First the planning—preparing the "manuscript" (see Note 26) which defines the operative theme and relevant subject matter, then drawing up the "preliminary sketch," which describes the spatial arrangement in terms of surface areas and volumes, and the illustrations and techniques to use—objects, photographs, colors, and so on. Note that the contemporary approach to conception and realization has optimized this planning rationalization (see Note 27).

Three elements emerge from these proposals: (1) the features of professional know-how and practice take shape; (2) the prevailing conception of the developing communications discourse expresses itself clearly in the working relationship sought between exhibition and visitor (see Note 28); and (3) an implicit conception of the exhibition is operating: a media that deliberately acts on the visitor.

It is in this perspective of rationalization of the communications aspect that the now recognized distinction between monstrative and demonstrative exhibitions occurs (Schaeffer and Patsuris, 1958). By 1936, Gregory had already proposed the distinction between factual exhibitions, those organized around the staging of an exhibition as concrete, positive fact, and conceptual exhibitions, whose objective is to explain facts in the light of their underlying theories, even if they are not definitive (see Note 29). The conceptual exhibitions try to show how facts are constructed by clarifying and illustrating the relations that support the explanatory context. This means linking scientific principles to pertinent facts. In such conditions the museum plays a dual role as an active research and educational center (Witteborg, 1958; Parr, 1958).

Schaeffer and Patsuris see two consequences as ensuing from these affirmations. First of all, concept must replace intention in planning the exhibit, without going so far as to eliminate the storyline; then the design of the exhibition must be simplified, especially in the case of conceptual exhibitions, so that visitors can concentrate on the content.

We see clearly that the rise in evaluation and planning are part of a common rationalization movement. Simply put, staging an exhibit involves a highly dynamic process of conception and realization activated by the attempt to optimize the communication relationship initiated by the exhibition. In the end, evaluation, which is basically the voice of the visitor, integrates the visitor into the planning and realization processes (see Note 30). Evaluation becomes a planning tool.

Nonetheless, two structuring instances must be dissociated clearly: The first is certainly that of planning the conception and realization of the exhibition. This depends mainly on the museum institution itself. It diversifies as its functions expand and requires the establishment of an ever-growing professional body, within and outside the institution, whose members intervene directly on the operation and progress of activities. In short, both the division of work and the ensuing development of related practices expand. Each body that is formed requires its own autonomy and exclusive right of action, as in any professionalization process. It follows that, like all large organizations, the museum institution is characterized by a constant process of logistical coordination. Staging an exhibition therefore requires that logistics be mobilized to an extent proportional to the complexity of the museum. No wonder exhibition planning and realization processes have undergone a systematization since the 1950s. Looking for ways to devise apparatus in setting up an exhibition is both the means of mobilizing and of subsuming each logic within the project it pertains to.

The second structuring instance concerns making the exhibition media autonomous and transforming the museum's traditional role. The idea of the museum has evolved: traditional research functions of collecting and conserving are no longer automatically part of an institution's description. These functions can be dissociated, carried out in isolation at specialized locations (Deloche, 1985). In fact, the public may not even be aware of them, which leaves the exhibition to hold center stage. The undefined nature of the term *museum* is an indicator of this restructuring. It is at this juncture that the visitor becomes a component of the exhibition, part of the mechanism of staging the exhibition. Strategies used to constitute the potential public in terms of actual visitors, to sustain their level of attention once on site by increasing the points of interests, are now part of the exhibition staging process. Certainly the trend is structural and the vista wide-ranging. But the idea is there: it means conceiving the exhibition in keeping with relevant practices of appropriation—the consumption of cultural objects being only one form of appropriation among others—and, by deduction, to consider the visitors, broken down into groups and subgroups, as so many potential "interactors" with the series of devices that make up the exhibition. Visitors and exhibition thus mutually converge as an integrated whole, defined by the nature of the relationships binding them.

The Part Played by Design

We cannot conclude without offering a few words on the role of exhibition design (see Note 31). The rise of design, greatly facilitated by the input of the World's Fairs, occupies a separate place in the evolution of the contemporary exhibition. New exhibition techniques, such as greater exhibit space and fewer elements displayed per square meter, help simplify the presentation of the artifacts (Witteborg, 1958). It is worth noting that this concept owes much to the Bauhaus movement (see Note 32). Design itself emerged from this movement whose primary concern was to design objects as well as urban and architectural environments that are functional and aesthetic.

For our purposes, the dissociation of the exhibition from the museum, its host context, represents a first feature. The exhibition thus directs visitors back within themselves. Simplifying plans and forms helps present the content directly by focusing on this subject matter. The second feature, directly related to the first, is spatialization: vertical planes and volumes replace the horizontal character of the traditional exhibition. Contemporary forms of exhibiting, which favor modular treatment by designing the space to be occupied as an arrangement of independent units, are a direct outflow of this. As a third feature, note that the spatial distribution opens the way for planning of traffic flow (see Note 33). The exhibition, thus designed as a spatial arrangement of planes and volumes, structurally involves the movement of visitors from one element to another (see Note 34).

The designer's primary objective is therefore to regulate the visual communication since the spaces, forms, colors and light of an exhibition create a whole through the inherent interplay of these elements. An exhibition is planned as much through the placement of information (ideas, notions, concepts, etc.) which one wishes to transmit to the visitor, as by managing the scenic devices used. This is why evaluation quickly became concerned with the subject matter of the exhibit (Parr, 1958; Fine, 1963; Parsons, 1965) and design had to be a concrete part of the planning. It is worth noting that design entered the planning process more rapidly than did evaluation. Evaluation becomes necessary when the visitor actually takes on greater importance than the exhibition.

Conclusion

The great range of media apparatus, from the TV spot to the tourist guide, is constantly mobilized to remind the public that somewhere in the vicinity there is a museum that absolutely must be visited or an exhibition that cannot be missed. And if statistics are to be believed, the public responds like obedient children, eagerly attending and staying longer at exhibits than ever before. How then do we explain the persistent view of the museum as a place that excludes the public, that we continue to present as if the public must be seduced so that its presence, ultimately observed and recognized, makes it possible to rethink the nature itself of the relationship it is directed to.

Of course, we can counter this by arguing that much has changed, that museums are open to the public, not just to attract visitors but to fulfill their expectations by presenting subjects of interest to them, and to use their presence to introduce them to unfamiliar areas, to stimulate awareness, and so on.

The contribution of museum evaluation still remains to be considered. The objective data in hand indicates that the public has truly arrived on the scene. The interest accorded the visitor has grown in recent years, mainly because the museum joined the entertainment sphere of cultural industries, and museum marketing has developed on a large scale. Both obviously involve a basic conception of the visitor and create a relationship accordingly: they express a vision and create its situation. Evaluation is also affected by these developments, and even more so because it is a vital part of this restructuration. The theorizations on all the practices and principles are affected by the dominant models. We have seen this in its links with communications and, more recently, with the impact of learning theories during the 1960s. One can safely say that evaluation generates its own practices. In this regard, the construction of the visitor that it proposes is far from complete or refined. While the traditional museum may err in having too many objects, perhaps evaluation too readily dismisses them by considering only the ends prescribed by optimum reception. When all is said and done, the history of visitors to the exhibition is basically the history of what we expect of them and the means used to induce them to act accordingly.

But it's fair to say that evaluation constructs a fictitious visitor in its own fashion. In evaluation's analysis of the exhibition, the recipient is only an artifact in the process that constructs him. So while formal analysis may be justifiably criticized as confining formal analysis of the exhibition to abstract nominalism, conversely, empirical objectivism also confines it to an abstract visitor since in turn it assumes the ideal properties of an exhibition, constructed as an underlying motif of behavioral studies. The museum field is fraught with an interplay of factors derived from contradictory discourses: evaluation demonstrates this in a compelling way. Two things, however, must be retained: that the visitor is an essential factor in the museum discourse, and is also the focus of this discourse. The contemporary museum visitor may be no more genuine than any other.

Notes

1. (a) This article is based on work conducted at CREST, including: Schiele & Samson (1989), *La Mise en Exposition de la Science: Contexte, Langage et Évaluation* (*Staging the Science Exhibition: Context, Language and Evaluation*), p. 93, duplicated, and Schiele & Samson (1992), *L'Exposition du Médium au Média* (*Exhibition from Medium to Media*), p. 38, duplicated. A major part of the documentary research was carried out by Denis Samson, directed by the author. (b) This article has intrinsic limitations. First, it deals only with the North American situation (United States and Canada). This is due mainly to the richness of the sources and the research tradition in such areas as museum field development. Second, in focusing on evaluation to discuss the increased importance of the visitor, the author is aware that other factors play an important role and merit extensive analysis. (c) This article appeared in French in the *Journal Publics et Musées*, vol.1, #2, December 1992.

2. Evaluation, of course, took place prior to this date, as referred to later in the text.

3. It would be easy to show that not only evaluation is in question and that several factors contribute to the evolution of the museum field. This being said, it appears to us that the question of the visitor is now central. This text examines the conditions of the probability of a problem and whether its formulation is inevitably imperfect. To reiterate Canguilhem (1955), "we apologize to museum-goers for the questions posed, but feel that the truly important questions are the ones that are badly posed. A question appears badly posed only upon receipt of the solution, that is, when it disappears as a question. ...Without a paradox, a question can only be badly posed." (translation)

4. Information should be taken in the broad sense to cover all components of an exhibit.

5. This also applies to summative evaluation since the findings of an evaluation are expected to be applied to the conception and realization of other exhibits so they can be more effective.

6. It would be wrong to consider that visitor discourse emerged from evaluation. Rather, it came into being coincident with the museum and joins with it. Furthermore, whether the collection is private or public does not alter any of this. It is when it is there to see, or is considered to be seen, that the object exists and a real or virtual sense can be attributed to it. Everything occurs as though the museum discourse resulted from a tension between the "Object" and the "Visitor," as if one could operate only at the expense of the other, as if the fact of favoring one over the other transformed the communication process created by the museum or exhibition. It is striking to observe that in museum discourse, both Object and Visitor are put forth as if they were already formed entities. Deconstruction of one entails deconstruction of the other.

7. On this whole matter, see Parsons (1975) and Loomis (1987, pp. 18-21).

8. Robinson, 1928, 1930, 1931a, 1931b, 1933; Melton, 1933a, 1933b, 1935, 1936, 1972 (partial reissue of works from 1935 and 1936).

9. While it is the most complete, this study is not the only one; see also Rea, 1930, and Pennsylvania Museum of Art, 1930.

10. See especially Johnson, 1969.

11. The travelling exhibitions of the U.S. government and the world or trade fairs led to more studies on the audiences attracted and on the impact of the means used to reach the public (Reed, 1957). The Seattle World's Fair in 1962 marked a turning point with Taylor's study on new exhibit forms (1963). Questions concerning the validity of information and discussions on the methods used in exhibition evaluation also became subjects of research (Leventhal & Niles, 1964; Cooley & Piper, 1968). A major influential pioneer of this period, Stephan de Borhegyi, undertook various exhibition evaluations at the Milwaukee Public Museum (1963a,1963b, 1964, 1965a, 1965b; De Borhegyi & Hanson, 1968). For an overview of the studies on audiences at trade fairs during this period, see Elliot and Loomis, 1975.

12. This distinction was established by M. Scriven in 1967.

13. See especially: Screven, 1969, 1974a, 1974b, 1975, 1976, 1986; Shettel, Butcher, Cotton, Northrop, & Slough, 1968; Shettel, 1967, 1968, 1973, 1976.

14. Note the contribution of the British, particularly of the British Museum (Natural History) evaluators. While very closely related to the American

school of Screven and Shettel, they nonetheless apply formative evaluation methods to the analysis of the exhibition's conceptual organization. Their evaluation deals less with what was learned than with the exhibition's message (Miles and Alt, 1979; Alt, 1983; Miles, Alt, Gosling, Lewis, & Tout, 1988). The extensive research undertaken at their Museum made it possible to advance the formative evaluation methods which have staunch defenders (Griggs, 1981; Griggs & Manning, 1983; Jarrett, 1986).

15. For the question of informal education put into perspective, see Jacobi and Schiele, 1990.

16. Note that the voluminous evaluations by Screven (1974a) and Shettel (1966, 1967, 1976; Shettel et al., 1968; Shettel and Schumacher, 1969) were not followed up in the museums due to lack of time and personnel.

17. It was a matter of knowing who the visitors were (socio-cultural milieu, previous history, interests, motivations, needs) to better understand how they behaved (average length of visit, route taken, stops, subjects of interest) and what they got out of it (understanding, retention). In short, the central aim consisted of tracking the "average visitor." Let us say that empiricism and functionalism blended well.

18. In this it follows the trend that characterizes the evolution of the mass media.

19. "The further advancement of the technique of exhibition likewise depends upon the recognition of the exhibit as a distinct medium for the communication of ideas with the possibilities and limitations inherent in that method, and with an appreciation of the fact that a study of the medium itself is as important as the study of the subject matter which the medium attempts to present." (Calver, 1938, p. 12)

20. "Our knowledge of these rules is still rudimentary, nevertheless there are some general principles which it is important to have in mind. First, it must be accepted that the exhibit medium in spite of its many values has certain distinct limitations. The exhibit as we know it today is not usually adapted to telling a comprehensive and detailed story" (Calver, 1939, p. 341). Note that this is also the perspective of Shaw (1939), "The basic idea of this technique is to present to visitors, in the form of a connected story, but with exhibition media, the outstanding discoveries and developments in a particular branch of science" (p. 445). Nonetheless, while affirming that the exhibition is a medium, it is identified with another growing trend at the time, the exhibition as an educational means, as he states that, "the primary purpose of any exhibit today is to educate"; he described the exhibition as "visual education" (p. 444).

21. In the years following World War II, evaluation was applied mainly to temporary exhibitions, notably at the Cleveland Museum of Health (Gebhard, 1948), at the American Public Health Association (Knutson, 1949) and to three travelling exhibitions of the Department of Agriculture, in 1949 (Robinson, 1960). In the 1950s, a government agency, the United States Information Agency, which produces international travelling exhibitions for U.S. government accounts, conducted 21 impact assessments on exhibitions produced and circulated between 1955 and 1962.

22. From the turn of the century, various American museums have compiled statistical data on visitor attendance. Some of these published results broaden the characteristics of the audience, such as by the Pennsylvania Museum of Art (1930), the Minnesota Science Museum (Powell, 1938) and the Charleston Museum (Lunz 1942), among others. In the 1950s, audience evaluations developed further and the Milwaukee Public Museum played a leadership role in this area (Niehoff, 1953; 1958; 1959), as did a research center of American University (Washington D.C.), the Bureau of Social Science Research (Bigman, 1953, 1955, 1956a, 1956b; Bower, 1955).

23. But we can be reassured that the actual practice is more pragmatic: art museums have conceived the blockbusters, those exhibitions devoted to an artist whose fame—real or imposed by an advertising venture—is evidence of mass success (Wallis, 1986; Elsen, 1986; Conforti, 1986; Noble, 1987). On the other hand, one may consider that the redirection of the museum apparatus in the area of mass media, and even more with the recent development of museum marketing, means the museum finally reserves at least as important a place for the visitor as for the object. Nothing could be more deceiving.

24. In exercising their practice, the actors acquire knowledge, adding to that already acquired through education, general experience, readings and attendance at museum productions. All this combines with and transforms the already existing system of representations from which actions are considered. In other words, for the social actors knowledge and ideology are not opposed, as if on one side there is knowledge and on the other ideological elements. The social actors give meaning to their practices through their system of representations.

25. The storyline relates and integrates information which would otherwise often remain decontextualized (Schiele and Larocque, 1981).

26. Today we would refer to the draft as distinguished from the specifications produced upon completion of the documentary research .

27. The plan, drawn up by the Royal Ontario Museum in the mid-1970s, provides for the creation of a "Communications Design Team" with a very broad mandate, including learning processes, visitor behavior, integration of design with architecture, audio-visual techniques and the exhibition design itself. This committee is responsible for developing all the museum exhibits ("responsible for the conception, development, and detailed design of all exhibits at the Museum"), with the curators, members of this committee, seeing their responsibility limited to that of experts on the subject matter. Moreover, this "team is responsible for problems of orientation and development of interactive techniques. See especially Royal Ontario Museum's (1976) *Communicating with the Museum Visitor: Guidelines for Planning, Toronto.* At the Musée de Civilisation in Québec, the process from the initial idea to the realized exhibit is divided into eight successive stages: 1) exploratory research, 2) defining a theme and producing an orientation paper, 3) preliminary research and structuring of the project, 4) refining the concept of the exhibition followed by calls for tenders, 5) documentary research, 6) exhibition scenario, 7) fabrication and realization, and 8) evaluation. All this is punctuated by four approval points along the way (at points: 2, 4, 6 and 8). For a view of the planning and management integration mechanisms, see Arpin, 1992; Côté, 1991.

28. Recall that the famous formula of Laswell dates from 1948.

29. We of course repeat the segmentations of time where indicated. It is interesting to note, in passing, that despite the theoretical work on the exhibition, they remain operant and structuring under a range of names. This subject could certainly be deconstructed. To do so, it may be useful to approach this segmentation from the object/communication opposition previously mentioned.

30. In this regard, the New Exhibition Scheme developed at the British Museum (Natural History) in the early 1960s attempted to carry out the actual integration of the planning and evaluation (See Schiele, Samson & Eidelman, 1990). Despite all the interest given to evaluation today, it must be pointed out that its full integration into the planning process is far from complete. However, one can predict that the increasing role that museums are called upon to play, particularly in regard to society's debates, will facilitate the synergy of evaluation and the devices of conception/realization. We can wager, however, that this will elicit other problems such as, for example, trivializing the debates and, its corollary, the absence of a critical perspective.

31. The term design is difficult to define. "Scenography" is probably the closest in the French cultural context. The difference, we feel, comes mainly from the profession and from North America, and hence from the actual role that it plays in the space-volume aspects of an exhibition. Thus, not only is the distinction between architects and designers well-established, but, even more so, the design profession can be exercised without the profession of architecture, even though many architects pursue the work of designer. It follows, in practical terms, that the visual processing of the exhibition springs from design.

32. Note that the Bauhaus had a considerable impact in the United States, particularly in architecture with the contributions of Gropius and Mies van der Rohe, to note but the most famous. For a general view, see Francastel, 1956.

33. Note that the Paris World's Fair of 1930 was innovative in directing the traffic flow.

34. One of the effects of the rise of design was to make the exhibition autonomous. However, this does not entirely explain it. A more extensive analysis must take into account the development of the cultural industries which link the produced exhibition to the sphere of cultural consumption. The further fact that now more than ever museums strive to increase attendance by accelerating the rotation of exhibitions is also not foreign to this process towards autonomy. Moreover, the exhibition, conceived as a product of appeal, also contributes to this process. Finally, an attempt to reproduce the whole trend must include a reflection on the contribution of the dioramas to the development of exhibition design: they have helped renew the presentation of the traditional exhibition. They have also played a fairly significant role in constituting the profession of designer, which relies on a knowledge of visual treatment without which the diorama cannot carry out the convincing reconstitution of the context that it seeks. In this regard, it is the institution which, increasingly dependent on this technical skill, will favor its emergence and specification, and especially, acknowledge it as an exclusive area of expertise. See Parr, 1962; Davallon, Grandmont, & Schiele, 1992.

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