12 RETHINKING THE SITUATION OF COMMUNICATION THROUGH THE SCIENCE EXHIBITION[1]

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ABSTRACT

Contrary to what we often read, the characteristics of communication used in a science exhibition are very different from those of pedagogical communication. This present paper tries to give an initial inventory of these differences. The main point is undoubtedly that the mediatic dimension of the exhibition places great importance on the visitor. Unlike the learner the visitor possesses a competence in science that he has already developed outside the exhibition. One of the consequences of this particularity of communication used in a science exhibition is the modification of the public's expectations: the latter expects not so much factual knowledge as an intellectual framework which would allow him to conceptualise the place of science and scientific discoveries in society.

The comments made about planning or renovation suggest new ways of considering museum institutions of science and technology and how they function. Long perceived as complementary, even alternative, tools to schools, these institutions now tend to be viewed as cultural tools. The clearest sign of this new "cultural" attitude and new more "cultural" role may be seen in the increasing tendency to definitely place them alongside cultural institutions (libraries, theatres etc.) and the media as well.

The idea which I wish to defend is that research into museum institutions of science and technology (science and technology museology) is wholly justified in paying the greatest attention to these developments and taking the opportunity to cast a new look on how the institutions that already exist are operating and *a fortiori* on those which are undergoing renovation.

As a means of sizing up the impact of the pedagogical concept in the matter, it is useful to come back to the social process which is central to the debate, that is, communication. It is not necessary to dwell on the analysis formulated by theoreticians of social communication by which communication is seen as a simple process of transmission of information (I) between a transmitter (T) and a receiver (R). Nowadays it is recognized that this model of information circulating between two poles (T-I-R) is hardly applicable to the exhibition [v.g. Schiele, 1987; Davallon, 1989, Hooper-Greenhill, 1991, McManus 1991]. Yet this model tends constantly to be referred to within a certain pedagogical concept of the transmission of knowledge which serves as a basis for the approach to science and technology exhibitions.

[1] This paper is a part of a chapter entitled "Promoting science at the museum", pp. 509–561 in Bernard Schiele & Emlyn H. Koster, *Sciences Centers for the Next Century*, Québec : Éd. Multimonde, 2000 [1srt ed. "Cultiver la science au musée, aujour-d'hui ? ", p. 397–434 in *La Révolution de la muséologie des sciences* / sous la dir. de B. Schiele & E.H. Koster, Lyon: Presses universitaires de Lyon, 1998].

CHARACTERISTICS OF THE SITUATION OF PEDAGOGICAL COMMUNICATION

What must be understood by *situation* here is a systemic social unity serving as the location for social practice. This unity occurs at the juncture of the relational and the institutional aspects. The *relational aspect* describes the interaction between individuals or groups involved in the practice whereas the *institutional aspect* concerns social structures, norms and values which are the background of organizations, representations, statuses and roles.

In the case of the pedagogical situation, what part is given to the relational aspect and what to the institutional aspect? The interactions between a teacher and a group of students which belong to the *relational* aspect, is dependent on specific data related to the individuals present (the protagonists participating in the interaction), as well as an interplay of interdependencies between these individuals, or between these individuals and others to be found within their social environment (i.e., in respect to solidarities or to the community).
On the other hand, school is an educational *institution*, just as museums, the media or the family. It has its role in the training of the social subjects and in their socialization (integration into society, the acquisition of values, norms, etc., the acquisition of ways of thinking and doing, that is, of culture in the anthropological sense of the term). But school carries this out by setting up scenarios for the acquisition of knowledge and procedures to control learning, by defining roles related to these scenarios. For its protagonists, it presupposes ways of doing, behaving, thinking, establishing values, and so forth. So in this way it differs from museums, the media and the family, even though the acquisition of knowledge may take place within these other educational institutions. Nonetheless, any given classroom (or any given school), as an actual entity serving as the location for a singular social practice between interdependent social protagonists, thus constitutes *a situation* articulating the two aspects mentioned above. The singularity of this situation is that it is highly *institutionalized*: its characteristics are indeed defined prior to and from outside the interaction between the protagonists, even if the interactions between the protagonists, (for example, the relations between teachers and students) are by no means foreign to the achievement of the objectives of the institution and may indeed

either contribute to the optimal functioning of these objectives, or may hamper them, in such a manner as to bring about long-term modifications of the institution. In the short term (i.e., during the time of interaction in a class), the relation must remain sufficiently clear within the institutional framework so as not to modify the balance of forces overall and to ensure proper functioning.

If we consider this situation from the angle of situation of communication, three points emerge:

1). *The content of communication* (as such, the content taught) is defined a priori in a precise manner. This point will be reviewed in greater detail shortly.

2). The *relation* (the teaching relationship) is characterized by a functional dissymmetry: the respective status of the teacher and learner is dissymmetrical, in the sense that it is the teacher who "knows" while the latter "does not know". The finality of this relation is the reduction which will be more or less significant depending on the aspect of teaching, of this dissymmetry by increasing the knowledge or skills of the learner. The latter must submit to the learning procedures laid down by the former, even if the objective is to minimalize the difference (that is, that ultimately the two will share the same knowledge), the attaining of this objective is based on an institutional constraint exercised by one of the two parties, to ensure among other things the systematic character of acquiring knowledge. The interaction therefore takes on the form of a transfer of knowledge or procedures (courses, practical work, etc.).

3) The school constitutes a closed system (isolated from the rest of society) and therefore represents a continuity of world between teacher and learners. The latter are installed (institutionally, physically and symbolically) in a *common world* which is in fact that created by the teacher because conceived as a sort of extension of the world of knowledge.

THE COMMUNICATIONAL FUNCTIONING OF THE SCIENCE EXHIBITION

Transposing the pedagogical model of the exhibition implies *a priori* a similitude between the characteristics of the situation of pedagogical communication and those of the communicational situation of the exhibition. Let us examine again the three points mentioned previously: the content of the exhibition, the form of the relation and the autonomy of worlds.

CONTENT OF THE COMMUNICATION

It is evident that in both types of communication this content is defined, (it may even happen to be the same): the teacher, like the exhibitor, knows what he chooses and wants to be communicated. However, this content is not defined exactly in the same manner in the two cases. To point out, in the case of pedagogical communication that the content is defined, suggests that the lines upon which this content will be developed, delivered and subsequently acquired, have been previously formulated, planned and structured (the *curriculum*). Such a definition is hardly possible in the case of the exhibition, if only because of the possibility left to the visitor to pause for longer periods over certain items, to bypass others, in short to construct his own visit. For this reason, the exhibition is generally considered as a form of "informal" education.

But this relative freedom of the exhibition visitor is not the only difference between the two situations. It is customary to emphasize this to such an extent that it monopolizes all our attention, and perhaps leaves us thinking that the rest is just similitude. Consequently, we are led into considering the dissymmetry between the exhibitor (the scientist or representative of the scientist) and the visitor in much the same way as we might observe the teacher and learner. Above all, we are led into implying a certain continuity of the world between that of the exhibitor and the visitor — and more, quite often postulating that a continuity also exists between science and the world of the exhibition. It is however precisely on these points, as we hope to demonstrate, that an analysis accounting for *situation* will highlight considerable differences between the two forms of communication.

This will be clearer if we first distinguish the world autonomy of the exhibition before dealing with the question of the form of the relation.

WORLD AUTONOMY OF THE EXHIBITION

This is often considered along similar lines as the world of school. What is raised here is the split between the everyday world and the world of the exhibition, similar to that observed between the everyday world and school. The existence of a split is undeniable, however, to consider this in these terms can only lead us into neglecting two other very significant divergences in the case of the exhibition: that which separates the world of science from the world of exhibition; and that of a mediatic nature, which on the one hand separates the relation that the exhibitor has with the exhibition from the relation the visitor establishes with the same exhibition. In the case of school, as we have seen, the former of these two divergences is in fact integrated into the process of producing the contents to be communicated (process of didactic transposition) and the latter has taken on the form of an organizational given (the split of the class, or the school with its social environment). In this way the world of the class is found to constitute an autonomous, crystallized, instituted world. This however is not the case for the exhibition.

The communicational situation of the exhibition is characterized by the creation of an intermediary world between the everyday world and the scientific world. It follows that the world of each exhibition constitutes a *world under construction* which can only be the result of the setting up of two limits between itself and the two others, that is, the scientific world and the everyday world. The most immediately striking consequence is that the relation of the visitor to the content is a mediatized relation (by means of a device) and is not intersubjective (with a person). This communicational situation is in the strongest sense a *situation of mediation*, a mediation which, as we shall see, possesses a double dimension: 1) a *mediatization* of the visitor's relationship to objects presented in a space and bearing meaning (the exhibition as mediatization device); 2) a *placing* of this device within a social space (the exhibition as social and cultural activity). Many of the arguments set out in the next sections of this paper draw upon this particular feature of the situation of communication through the exhibition as situation of mediation.

To ignore this particular feature of communication through the exhibition as situation of mediation will lead to restrictive conceptions which in turn

engender misunderstanding. It is easy to understand that the scientific world should desire continuity between itself and the world of the visitor. This is occasionally achieved, but at the cost either of selecting those it wishes to address (tightening the circle of the visitors' world to "students", and hence future scientists), or via a delegation of its representatives, as is the case at the Palais de la Découverte in Paris, who will act as animators or better still as "demonstrators" for visitors. In both cases, the exhibition tends to align with educational communicational functioning.

On the other hand this search for continuity between the world of the exhibition and the world of science may follow alternative paths, no longer by seeking to construct a situation of mediation along the lines of the educational communicational model, but by referring to another communicational model, one which is in fact current within the world of science itself. This model possesses all the desirable elements for direct simple communication since it is characterized by a symmetrical relation and a common world. In a sense this is a question of "addressing one's peers". The interaction is one of an exchange of information, discussion of results or even debate over methods. Yet experience has shown that the transfer of this scientific communicational situation to the exhibition is hardly any more adapted than the pedagogical communicational situation. Except by effectively addressing one's peers, or by allowing the general public into the laboratory in order to become scientists, it is difficult to imagine how continuity between the world of the exhibition and the scientific world might be guaranteed, and still less how relational symmetry between the visitor and the scientist might be initiated. This transfer then places us in a very paradoxical position since it specifically proposes to do without the construction of a situation of mediation. We are reminded just how much these transfers of communicational models borrowed from the educational world or the scientific world are, with certain exceptions, potential sources of disillusion and difficulty. From the scientific point of view, it will be the limits of the exhibition in relation to pedagogical communication which will be missed, to say nothing of the limits regarding scientific communication itself. As for the visitors, they will be placed in an inferior position and also cut off from his world.

FORMS OF RELATIONS

Let us now examine the *forms of relations* that characterize the communicational situation of the exhibition. In the exhibition, the relation, understood as communication on communication, is dependent on two mediatic characteristics which characterize the exhibition: the absence of a destinator and the mediatization of the object.

Even if visitors accept the dissymmetrical character of the relation since they don't have mastery of the knowledge, and even if they are prepared to become involved in such a relation in the hope of reducing this dissymmetry and acquiring knowledge, they remain as much objectively (not in thought or representation) in command of the relation. It is possible for them at any time, to leave it, reject it, modify it or simply to bypass it. However, such a possibility does not introduce a simple relinquishing in a communicational situation which would be essentially pedagogical — a pedagogical relation which would still be imperfect due to its particular features. What it does suggest is its fundamentally different nature, a nature which is in reality intrinsically characterized by what the sociologist considers as "weak usage" [Passeron, 1991], or, what in semiotic terms, may be called the "opening up" of the exhibition in that it calls upon the visitor's cooperation [Eco, 1979]. Or, to put it another way: a first relation which is *dissymmetrical* is *symmetrically* accepted as such.

In effect, the relation is necessarily dissymmetrical between the destinee who knows and the visitor who does not. The latter, in recognizing this difference in terms of knowledge, may visit or not, read or not, produce meaning or not from the exhibition, cooperate or not according to the criteria and pre-determined period of time for the visit. Acceptance by the visitor is not fixed for all time at his entrance to the exhibition, but is something negotiable at all times, confronted by each new element on display. This second relation is to the visitor's advantage, in that it is enacted through interaction between himself and the object proposed by the destinator and in effect thus re-establishes symmetry between the destinator and the visitor. As we can see, the communicational situation of the exhibition can be seen to be the source of *a dual complementary relation*. And the second relation no longer aims at knowledge as its main objective as does the first (i.e., scientific content with what it assumes to be

relational dissymmetry), but it bears on the exhibition itself and as such, is constituted by the content and by the relation manifested by the content.

Hence, to be ultimately understood, the science and technology exhibition requires that a distinction be made not on two but on three levels: that of *content* (knowledge), that of *relations* (dissymmetry), and that of *situation* (acceptance). This distinction opens up the path towards an analysis of the interplay between the expectations of the destinator as to how the visitor will act (the destinator aiming, for example, to retain the attention of the visitor or else to guide him through the contents) and the responses developed by the visitor.

However, before pursuing our distinction between the three levels to give us an understanding of science museums, let us summarize the main differences that can be noted between the two situations of communication. [**Table 1**]

THE EXHIBITION AS SITUATION OF MEDIATION

If the situations of communication proposed by Science and Technology institutions neither correspond to a pedagogical situation (characterized by an imposed dissymmetrical relation), nor to a situation of communication in the scientific world (characterized by a statutory symmetrical relation), how might these situations be understood? How are they part of the changes within these institutions?

To offer some response to these questions, it would appear useful to examine what constitutes the specificity of communication by exhibitions, not so much via what differentiates it from pedagogical communication as we have just done, but through the exploration of its own specific characteristics.

With this in mind, the first point to be made is that the difficulty encountered by any science or technology exhibition to "transmit" knowledge is not merely as is often thought, a problem of a technical nature. This difficulty is not just related to the fact that the very subject matter of the exhibition (objects, images, space, etc.) necessitates visualization, editing, decontextualising, indeed a reduction of scientific content. Examination of the communicational

Table 1

COMPARATIVE CHARACTERISTICS OF SITUATIONS OF PEDAGOGICAL COMMUNICATION AND COMMUNICATION THROUGH THE EXHIBITION

Type of communication	Pedagogical Communication	Communication through the exhibition
Content of communication	Defined *a priori* including in the transmission procedures	Defined *a priori* but the transmission procedures remain open (visitor intervention)
The form of relation	Teaching dissymmetry — taught in terms of content (knowledge) Interactions between protagonists aim to reduce this dissymmetry However, the communicational structure remains *dissymmetrical* due to the institutional framework (the structure is an institutional device)	Exhibitor dissymmetry — visitor in terms of content (knowledge) Interactions take place in a *mediatic structure* providing the visitor with the possibility to accept or reject the communication at any given moment. In consequence, the structure reestablishes *symmetry* (acceptance of *dissymmetry*)
The social organization of the communicational situation (as an autonomous world)	The framework of interactions is defined institutionally as a common world among protagonists. In fact, this world is put forth as an extension of the world of knowledge (passage from one to the other corresponds to a transposition) On the other hand, it is cut off from the everyday world.	The mediatic structure opens up the intermediary space of a common world to be constructed. The device sets a priori a dual separation: with the world of knowledge and with the everyday world. But the *intermediary world* of the exhibition may to a greater or lesser extent be linked to (or alternatively separated from) one or the other of these worlds depending on the factors of its social inclusion.

functioning of the exhibition has shown that this manner of reasoning results in expectations of the exhibition which are not part of its expertise. We have seen that this difficulty to "transmit" knowledge comes rather from the fact that the exhibition was a situation of open communication; a situation which assumed, in order for it to function, the cooperation between the protagonists involved in this social activity represented by the production and reception of an exhibition. The exhibition supposes a social interplay of production *with* reception, that is to say, production *for* a public and reception *in order to* access this world. This then means that the situation of communication through the exhibition constitutes a situation of mediation and this in turn is *the construction of this situation of mediation* which is the fundamental condition for the functioning of the exhibition as media. As a result, the opening up of this interplay constitutes the mediatic form of the exhibition.

In this way it can be seen why the model of the situation of pedagogical communication is essentially ineffective as a means of dealing with communication through the exhibition since in pedagogical communication, institutionalization means that the significant level is the form of the *relation* (i.e., the dissymmetry of the relation), whereas within communication through the exhibition, it is that of the *situation* (acceptance of the relation in fact). From one to the other, the system veers from a position of control by the producer to those reasons as to whether or not the visitor agrees to the interaction.

We can now complete the table: *Comparative characteristics of situations of pedagogical communication and communication through the exhibition* by adding the consequences of these characteristics. [**Table 2**]

In this section I propose to explore the characteristics of communication through the exhibition, as the construction of a situation of mediation, from two series of observations dealing respectively 1) with the trends that have been traced out over the last twenty years concerning the concept of exhibitions or of science and technology museums; 2) then with the differences between exhibition and museum from a socio-historical point of view. The first series will allow us to clarify what may be understood by "gearing the exhibition to the visitor" and the second by "inclusion in society as media".

Table 2

COMPARATIVE CHARACTERISTICS OF SITUATIONS OF PEDAGOGICAL COMMUNICATION AND COMMUNICATION THROUGH THE EXHIBITION

	(Pedagogical Communication)	(Communication through the exhibition)
Characteristics of communication	Communication is of an intersubjective nature (interaction between protagonists *in praesentia*) within a framework of cooperation imposed on the destinee and controlled by the destinator	Communication is of a mediatic nature (object-oriented mediatization and absent destinator) within the framework of *agreed cooperation* by the destinee
Type of efficiency of the device	The institutional device sets up a situation that aims to transmit knowledge from the destinator to the destinee	The mediatic device is part of a *situation of mediation* between the world of the visitor and that of knowledge
Relevant level of analysis	Form of relation	Construction of the situation

THE VISITOR AT THE CENTRE OF EXHIBITION PLANNING

An examination of science exhibitions planned or produced over the past few years will give us a clearer idea of the manner in which the acceptance of dissymmetry by the visitor corresponds in fact to a construction of symmetry at the level of situation. Two contributing factors may be observed: one which plays upon a reduction in dissymmetry, the other which rather reinforces symmetry as the result of acceptance.

REDUCTION AND REINFORCEMENT OF THE RELATIONAL DISSYMMETRY

The reduction of relational dissymmetry is illustrated by the fact that the role as temple of science of certain large science museums (dissymmetry based on the institutional position of power which is granted to science in our society) is nowadays being counterbalanced by an awareness of expectations, motivations and representations of visitors. Yet studies concerning these visitors illustrate the fact that these often consider that it should be from the point of view

of their world of references, and from their preoccupations, that science should be presented. One might also add that the museums' recourse to such inquiries in itself signals a recognition and an awareness of this world by the museums. Should this tendency develop, then the move would be towards a dissymmetry which would be the inverse of pedagogical dissymmetry. Indeed, while in the latter case it is the one who knows who is in the dominant position, it would be the visitor who is placed in a dominant position and, by the same token, science would be reincorporated into ordinary culture or at least placed under the citizen's scrutiny.

Contrary to this trend towards a reduction in dissymmetry, the development of exhibition techniques has made the reinforcement of symmetry possible. Interactivity — beyond the straight objective of pedagogical efficiency, the limitations of which are well-known — had already started the process of establishing a relation of symmetry between the visitor and the exhibitor: the visitor being effectively required to participate for the device to function. But the projects of certain institutions to become, partly at least, a place of debate goes beyond such participation. This is an extreme form of symmetry. It is between these two forms of visitor involvement that present trends are moving, by seeking less to transmit knowledge than to make scientific method available [to use John Durant's categories, 1993], and above all, to apprehend scientific research as a social activity.

Although all these trends towards the reduction of dissymmetry or the reinforcement of symmetry are moving in the direction of what we have noted earlier on the characteristics of communication by the exhibition, their interpretation remains nonetheless quite delicate. Apart from the fact that it might be possible to oppose other contrary trends, it is important to question in what ways these trends are specific to the exhibition. The objection is a serious one. Indeed are they not just as observable in pedagogical communication? Does not this also aim towards a reduction in the dissymmetry of content between teacher and learner (when this is not reinforcement of their statutory symmetry), when this communication has the aim of training future teachers or, *a fortiori*, of future researchers? It would seem therefore necessary to underline more closely what differentiates these two factors (reduction of dis-

symmetry and reinforcement of symmetry) in each of the two types of communication (pedagogical and through the exhibition). For this it will be useful to clarify the particularities of each in the following table. [**Table 3**]

Table 3

DIFFERENCES BETWEEN FACTORS OF REDUCTION OF DISSYMMETRY AND REINFORCEMENT OF SYMMETRY IN PEDAGOGICAL COMMUNICATION AND COMMUNICATION THROUGH THE EXHIBITION

Type of communication	Pedagogical communication	Communication through the exhibition
The logic of a reduction in dissymmetry	Reduction aims towards *symmetry* of content (i.e., that both protagonists possess the same knowledge) Within the world of school, however, the relation remains dissymmetrical	Reduction occurs via the expectations of the visitor and the everyday world. However, within the exhibition dissymmetry is accepted by the visitor
The logic of a reinforcement of symmetry	Reinforcement aims towards setting up *statutory symmetry*. However this statutory symmetry can only exist within the world of knowledge (the world of research)	Reinforcement aims at a symmetry of position between the visitor and those in charge of the production of the exhibition However this symmetry is only meaningful from the viewpoint of external social worlds to the exhibition (those in which the visitor has to decide upon and take stances as a citizen)

In the column: communication through the exhibition, we find in another form, the two characteristics of communication through the exhibition which we have already pointed out, that is, the *central position* that the mediatic device gives to the visitor (particularly visible within the logic of reduction of dissymmetry) and the social inclusion which is expressed by the fact that this

must have a *social usage* for the visitor (more visible this time for the reinforcement of symmetry). All of this very clearly expresses the terms "visitor expectations" or "taking a position as citizen". And it is a comparative reading of the two forms of communication that allows one to go beyond this first impression.

EFFECTIVENESS OF THE INSTITUTION AND SOCIALIZATION OF SUBJECTS IN PEDAGOGICAL COMMUNICATION

Let us return to the factors of pedagogical communication which are easier to grasp than those of communication through the exhibition. The first of these factors, which corresponds to the teaching situation, is essentially directed towards content, while the second, which instead covers scientific training, introduces parity between the agents which is characteristic of the way the world of research functions. These two factors share the autonomy of the world of school (or of research).

We saw earlier that the situational level, which is what interests us here, is the source of a dual process as structuring framework between teachers and learners in keeping with a dissymmetrical relation, and as anchor point of this relation in the educational institution. Insofar as the institutional aspect serves in this way to define interaction to make them part of the logic of socialization (the production of social subjects), which is that of the educational institution, the organization as a whole will tend towards the focusing the process of transformation on the relation, then bear on the destinee. In the case of the teaching situation, this mode of functioning will lead to the acquisition of knowledge (what has previously been described as symmetry of content) without modifying the positions, or the organization, nor to all intents and purposes the institution. In the case of scientific training, the learner will change his statutory position so as to be recognized by the institution as one of its members.

Consequently, there exists on the one hand a great institutional permanence, an organizational stability and reproducibility of the situation, and on the other, a transfer of the processes of transformation onto the subjects taught. This is the important point to retain. On the one hand, interaction has little effect on the institution itself (or these effects are very slow-moving), whereas

on the other, the institution possesses great *efficiency* over the interactions. Moreover, any pedagogical communication, as an educational approach, entails a transformation of the subjects taking part in the interaction: not only does the educated subject acquires learning, but is transformed by the process of acquisition which in certain cases may also be more significant than the learning acquired. This process of *socialization* of the learner is expected and is part of the normal functioning of the institution. It bears no effect on the organization nor on the institution insofar as the subject will be required to leave the closed world of the school upon starting to be effectively transformed. If the social subject is in fact produced as such within the world of the school, it is to go out and function outside it. Even where the process succeeds in transforming the learner into a peer teacher or researcher, the relations maintained with these peers are largely defined and controlled by the institution.

SOCIAL OPERATIVITY OF THE COMMUNICATION THROUGH THE EXHIBITION

Two remarks will necessarily be made from this. Firstly, science and technology museums, insofar as these are institutions of education and the transmission of scientific knowledge, also institute a framework for the interaction between the visitor and the knowledge on display in terms of dissymmetry between those who know and the others. Secondly, the actions, behavior as well as the concrete interaction between the visitors and what they are being offered, are effectively anchored in the institutional logic of education and popularization, which in turn gives these meaning and makes them predictable. Yet it is these facts that are being questioned in the examination of the trends noted over the last twenty years in the planning of exhibitions or of science and technology museums. That these museums or exhibitions deal with scientific knowledge in no way authorizes them to reduce them to educational institutions, nor even to take sole account of their educational function, nor more emphatically to treat them from the sole standpoint of pedagogical communication, except of course if the term "education" is understood in a very broad sociological sense covering to a greater or lesser extent the whole process of socialization. On the contrary, what we must indeed attempt to understand is the exact counterpoint of what characterizes the functioning of pedagogical communication, namely, the institution's lack of impact on interactions and its quite relative socialization of social subjects. This is what our table may help us to explain.

To speak of visitor expectation or even to recognize that the device is directed towards the visitor is to imply that the visitors are constituted as subjects "endowed with a visitor expertise" outside the exhibition. In other words, this postulates that they have been socialized within a different social space. This obviously raises a whole series of questions: questions as to what attracts visitors to an exhibition and to agreeing to the interactions imposed on them; questions too on the manner in which the visitor has been constituted as a competent subject, a social subject. Such questions lead us to consider the visitor in a different, may we say, new light, which is precisely what the increasing number of studies on representations suggest [Davallon & Le Marec, 1995; Le Marec, 1995]. The visitor constitutes not so much what the device is there to transform but the very condition of its functioning.

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