

Objects vs informations in the expectations of the visitors of a museum

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ABSTRACT

In the period february-may 2012, 235 visitors that visited the Museum of Marine Biology "Pietro Parenzan" (MBM) for the first time, answered two questions before the visit:

- 1) in general, what do you expect when you visit a museum?
- 2) in particular, what to you expect to find in this Museum of Marine Biology?

This study aims to analyze the expectations of visitors to the Museum of Marine Biology "Pietro Parenzan", both quantitatively and qualitatively, the hypothetical differences in the various types of visitors: males and females, teachers and students, individual visitors, childrens and adults.

The results of this study will aid the future management of the MBM.

Key words:

museum, expectation, object, information.

RIASSUNTO

Oggetti vs informazioni nelle aspettative dei visitatori dei musei.

Nel periodo febbraio-maggio 2012, 235 visitatori che si apprestavano a visitare per la prima volta il Museo di Biologia Marina "Pietro Parenzan" hanno volontariamente risposto a due domande su un questionario scritto:

- 1) generalmente, quando vai a visitare un Museo cosa ti aspetti di trovare?*
- 2) in particolare, in questo Museo di Biologia Marina, cosa ti aspetti di trovare?*

Questo studio si propone di analizzare le aspettative dei visitatori del Museo di Biologia Marina "Pietro Parenzan", sia quantitativamente che qualitativamente, le ipotetiche differenze nelle varie tipologie di visitatori: maschi e femmine, scolari ed insegnanti, visitatori che individualmente decidono di visitare il museo, bambini e adulti.

I risultati di questo studio saranno utili nella gestione del Museo di Biologia Marina "Pietro Parenzan" (MBM), nell'intento di adeguare, ove possibile, le scelte museali alle aspettative espresse dai visitatori.

Parole chiave:

museo, aspettativa, oggetto, informazione.

INTRODUCTION

The whole history of art, and a good portion of the history of science are based on the history of objects (Lugli et al., 2004) whose meanings range from the search of beauty to the understanding of science and nature.

Museums are based on objects, and visitors are expected to pay attention to them, to appreciate them and also the context in which they are located (Borun, 1992). Each museum acquires its particular character through the objects inserted into the framework of the collections (Silverstone, 1998).

The work of art, being a unique and irreplaceable object, does have intrinsic value and is often

expected to "speak by itself", with just a minimal or even with no additional information. The objects in a natural history museum, on the contrary, often exist in nature with millions of replicas and their presence in a museum requires an interpretation (Pesarini, 2001). In art museums the approach to objects is exquisitely aesthetic, whereas in scientific museums (and even more in natural history museums) the same object can have multiple meanings for a visitor. According to Pesarini (1997), for instance, the same object can have at least two identities in a natural history museum: a natural identity, for its identification based on classification systems (e.g. a species), and an individual identity,

that stems from the processes that led it to be on show in a museum. For this reason, objects are more "explained" in scientific museums in respect to other types of museums, the objects being instrumental to understand concepts. Labels, explanatory panels, thematic windows, multimedia supports, guides (both in person or virtual) are the most widespread information media in this type of museums and have the scope of giving a meaning to the exhibited objects (Borun, 1992; Merzagora & Rodari, 2007). "When considered out of context, the objects exhibited in a museum are perfectly mute: for a profane visitor the non-verbal language of things is a pure museological presumption" (Drugman, 2003). The use of written texts in museums has been widely studied (Serrel, 1996; Hooper-Greenhill, 1994; Jacobi, 1998; Miglietta, 2011; Miglietta et al., 2011a, 2011b); De Mauro, 1980; Ekarv, 1987; Kelly, 2000; Lucisano, 1992; McManus, 1989; Ravelli, 2006), along with that of guides (Merzagora & Rodari, 2007; Vomero, 2009; Gomes da Costa, 2005) and of multimedial supports (Carter, 1999; Marvulli, 2003; Nielsen, 2000; Roschelle, 2005).

No explicit principle regulates the balance between objects and information in museums, but it is clear that the binomial "objects-informations" is the founding system for all museum exhibits, either permanent or temporary (Baxandall, 1991).

Hence, visitors do find both objects and informations in every museum, but is this what they expect to find? What about the two categories (objects and informations)? Do they have priorities about the value of either of them, depending on age, gender, cultural level or the way they are visiting the museum (e.g. individually, in group, as students, as tourists)?

To answer these questions, we asked first-time visitors of the Museum of Marine Biology "Pietro Parenzan" (MBM) what did they expect from a museum and what, in particular, they expect from a museum of marine biology. Both questions required open answers. The aim of the study was to analyze the expectations of visitors to the Museum of Marine Biology "Pietro Parenzan", enhancing the differences among the various types of visitors. For instance, do teachers and students have the same expectations? Are there any differences between young and adult visitors? Or are they between males and females? What about the differences according to visitors' cultural levels? Knowing the expectations of the visitors is important for the management of the museum, and can significantly help in the preparation of future exhibits and/or educational activities.

The MBM of the University of Salento receives about 12,000 visitors per year, half being students and half summer tourists who stay at Porto Cesareo due to the beautiful sandy beaches. The MMB is

being the object of evaluation of both educational activities and exhibits (Miglietta et al., 2005; Miglietta et al., 2008; Posi et al., 2010), with particular attention to the written communication in the explanatory panels (Pace et al., 2008; Miglietta, 2011; Miglietta et al., 2011b) and to the opinions and proposals that visitors write in the visitors' book (Miglietta et al., 2012).

Methods

235 visitors that were going to visit the MMB for the first time were asked to answer the following written questions:

- 1) generally, what do you expect to find when visiting a museum?
- 2) in particular, what do you expect to find in this Museum of Marine Biology?

The sample was chosen at random among people that voluntarily accepted to answer the questionnaire (single visitors, students, teachers, families) in the period February-May 2011 (tab. 1) The content of the answers was subjected to both descriptive (frequencies and percentages) and inferential analyses: ANOVA at two factors. Each visitor that answered the questionnaire was given a score related to the expectations regarding either "objects" or "informations". Both scores were subjected to one factor ANOVA to ascertain differences related to the instruction level (primary, secondary, high school diploma, or university degree).

RESULTS

Quantitative aspects of the study

Question 1 (Q1) "Generally, what do you expect to find when visiting a museum?" was answered 401 times, since many visitors declared more than one type of expectation. The answers fall into two categories:

- "objects" (276 answers, 68,82% of total answers): things, objects, species, and habitats.
- "informations" (118 answers, 29,43% of total

Sample	no.
Single visitors	95
Theachers	53
Pupils	87
Females	154
Males	81
Primary school diploma	41
Secondary school diploma	54
Hight school diploma	49
Degree	83

Tab. 1. Sample composition.

Things, exhibit, species or habitat		Informations	
old things and exhibits	56	informations, widenings	30
interesting things and exhibits	39	various aids	25
unknown things	34	documents	23
fauna e flora	34	museum informations	16
rare things and exhibits	21	explanations	14
exhibits (indefinite)	19	news, curiosities	10
recostructions	17		
things pertaining to museum type	16		
collection	11		
instructive things and exhibits	11		
curious, peculiar things	7		
habitat	5		
fine things	3		
real exhibits	3		
Things, exhibits, species or habitat		Informations	Others
68.83%		29.43%	1.75%

Tab. 2. Q1 answers: expectations.

answers) comprised also answers referred to videos, illustrations and explanatory panels, considered as information supports (7,98% of the total). This category includes also 25 answers (6,23% of the total) that refer to cognitive purposes (tab. 2).

Only 7 answers (1,75% of the total) that referred to "order, cleanness, stewardship, services" were discarded.

Most answers referred to objects that were defined as: old (56 answers), interesting (39), rare (21), instructive (11), curious (7), nice (3), and real (3).

Many visitors, however, expect to find informations (30), documents (23), informations regarding the museum (16), explanations (14), and news (10) (tab. 2). The percentage of answers regarding objects or informations changes according to the different categories of visitors (tab. 3).

One-factor ANOVA showed significant differences among visitors' categories, both for the expectations regarding objects ($P < 0,01$) and the expectations regarding informations ($P < 0,001$).

Question 2 (Q2) "In particular, what do you expect to find in this Museum of Marine Biology?" was answered 319 times, many visitors having declared more than one type of expectation.

Answers were divided into two categories, according to their content:

- "objects, species, habitats" (249 answers, 78,06% of the total)

- "informations" (70 answers, 21,94% of the total) (tab. 4).

Visitors of natural history museums expect to find many objects referable to organisms and their environment: fauna and flora (119 answers), habitats

(40), but also informations (51), hints and curiosities (8). The percentage of answers regarding either objects or informations changed according to the different categories of visitors (tab. 5).

Two-factor ANOVA evidenced that for both questions (Q1 e Q2) the correlation between expectations (relative to objects or informations) and the instruction level was statistically significant (tab. 6).

In the answers to both questions, the expectation for informations increases with age, whereas the expectation for objects decreases. Young visitors are more interested into objects than into informations. Females (154) were more than males (81) in this

	Informations	Objects
Single visitors	36%	64%
Theachers	42%	58%
Pupils	15%	85%
Males	27%	73%
Females	31%	69%
Under 15 years	9%	91%
More than 15 years	36%	64%
Primary school diploma	4%	96%
Secondary school diploma	26%	74%
Hight school diploma	34%	66%
Degree	38%	62%

Tab. 3. Q1 answers: per cent expectations in visitors categories.

Exhibit, species or habitat (78,06%)		Informations (21,94%)	
fauna and flora	119	informations	51
habitat	40	cues, curiosity	8
historical and archeological exhibits	23	history	3
unknown exhibits	18	illustrations	3
reconstructions	14	panels	3
exhibits (indefinite)	10	guide	2
collection	7		
interesting exhibits	5		
rare exhibits	5		
real exhibits	4		
instructive exhibits	2		
other	2		
Exhibit, species or habitat		Informations	
78.06%		21.94%	

Tab. 4. Q2 answers: expectations.

study, but there were no significant differences in these two classes, in terms of expectations.

Qualitative aspects of the study

In the answers to Q2, visitors refer to "fauna and flora" as expected objects in a museum of marine biology, on the contrary, while answering to Q1, visitors refer more to "ancient" things, but also to "interesting", "unknown", and "rare" objects. Some answers referred to collections.

A 60-year-old male visitor with a university degree expected: "a collection of interesting objects, ordered so as to provide a better information". A 50-year-old female visitor with a university degree expected: "a reasoned exhibit of items".

The need of understanding the displayed objects is expressed also in the expectations regarding the guide. A 15-year-old visitor expected: "a not too heavy guide".

A 55-year-old woman, with a high school diploma expected: "a good guide that explains", whereas a 60-year-old woman expected "well trained experts that clearly expose news about what will be seen".

When visiting a generic museum, teachers, just as Hooper-Greenhill (1994) reported, consider the museum as a place where to find useful informations that will sustain their teaching role. A male professor wrote to expect: "anything that regards the study that I carry out with my students on specific topics", whereas a female professor expected: "hints for her didactic activities".

Teachers, hence, visit a museum to improve their professional performances in favor of their students, whereas other visitors do not have similar expectations.

Also students were aware of the importance of this

relationship, a 16-year-old boy expected: "an help to understand matters studied at school".

Differences related to both age and cultural level were also evident. Young visitors expressed higher expectations for objects than for informations (9% for Q1 and 0% for Q2), and the same preferences emerged for various cultural levels: expectations for informations increase with the level of instruction (Primary school diploma: 4%, Secondary school diploma: 26%, High school diploma: 34% and Degree: 38%).

Museums deliver informations mainly through written texts (labels, thematic windows, explanatory panels) placed near the displayed objects. Objects are often explained by long and boring texts that are neither attractive nor understandable, especially for young readers. It is not by chance that a 11-year-old

	Informations	Exhibits
Visitors	33%	67%
Teachers	28%	72%
Pupils	12%	88%
Males	23%	77%
Females	22%	78%
Under 15 years	0%	100%
More than 15 years	28%	72%
Primary school diploma	0%	100%
Secondary school diploma	22%	78%
High school diploma	25%	75%
Degree	29%	71%

Tab. 5. Q2 answers: per cent expectations in visitors categories.

Two factors ANOVA - Q1	Significance
EXPECTATIONS AMONG GROUPS	0,000212923***
Two factors ANOVA - Q2	Significance
EXPECTATIONS AMONG GROUPS	1,58463E-05***

Tab. 6. Interaction between expectations and school level.

girl wrote that she expected: "short and interesting explanations", whereas a 17-year-old visitor expected: "specific items for the type of museum, exhibited so as to make them understandable to everybody".

Also the size of the fonts is important, a 30-year-old visitor expected: "descriptions that are not too small and difficult to read".

Sometimes, a museum is considered as an historically important place: "interesting things of the past", "historically important things", "relicts of old species that existed in the past".

When referring to a generic museum, "historical" is the most used term, suggesting that history is important in the expectations of the visitors.

We think that also the history of the exhibited items, and of the place where the museum is located, are important also in natural history museums. The fisheries hall, in the MBM, places the Museum in the village of Porto Cesareo (Lecce-Italy). The resident fishermen collaborated to set up the hall and provided the informations and the objects that are shown, documenting both modern and ancient fishery techniques.

Charm is often a requisite for the exhibited objects: "things that will impress me",

or novelties "never seen objects" and rarities "unique or rare specimens".

that envisage the museum as a place of stupefaction.

REFLECTIONS AND CONCLUSION

The answers provided by visitors were both varied and rich, in every age class, witnessing that the public is aware of own importance in the management of museums, with a strong willingness to collaborate to these studies.

The interviewed visitors expected to find both objects and informations in any kind of Museum (i.e. sensu lato and marine biology museums). This result clarifies a shared concept of museum, i.e. a place where objects are displayed and explained through informations. This also clarifies how to call the structures that do not display collections of objects, basing their informative function just on multimedia platforms: the public simply does not classify them as museums!

Visitors ranked objects first, and then informations, with a strong preference for objects. We note, however, that the expectation "information" is more

important (in percentage) in a generic museum (29.43%) compared to a museum of marine biology (21.94%). It would be to say that disclose in the question the nature of the collections takes the visitor to a greater propensity to indicate objects expected.

The quest related to cognitive aspects is not only expressed directly with a request of "informations", but is also expressed through the expectation of "interesting" or "instructive objects". Every object, in fact, has multiple meanings that are revealed both by the set up in which it is placed and by texts and other informative supports that simply "explain" what the object represents but that would be difficult to grasp by a casual observer.

Young visitors are less used than adults to receive informations from written texts (Serrel, 1996) but, with proper measures, it might be possible to encourage them towards reading, also because a museum is a less formal place than a classroom, providing a more favorable environment for learning.

Visitors answers provided several useful suggestions for the management of MBM:

- particular attention to be placed in the selection and training of the guides who need to know in depth the collections in order to explain the objects and tell the story of the museum simply and effectively for everyone but above all in a light and appealing to younger visitors.
 - The need to improve the relationship of cooperation with school teachers visiting a museum during the school year. In particular, it is important to provide them with materials before and after the visit, so that the educational activities carried out in the museum will be closely related to the school curriculum.
 - Special care has to be placed in setting media information, especially written texts, so that they are attractive, clear and understandable for young visitors. They expect almost exclusively "objects" from a museum visit, but they can also take advantage of useful and necessary information. Special care to be placed in clarifying the historical aspect of the objects.
- Data related to a generic museum show that "history" is important in the expectations of the visitors. We think that history (of collections, but also of objects) is important in every kind of museum. In fact, visitors of the Biology Museum "Pietro Parenzan" often ask about the origin of the exhibits, dealing a lot of their history.
- Visitors who have voluntarily contributed to this study see the museum with different perspectives, depending on the identity of each one, the result reflects the reality of the museum today: still a place of wonder, a container of rare and interesting things, but also place of education, updating and deepening.

The bet that the museum now has to win is to know how to adapt to the many viewpoints of the visitors to be pleasant and interesting to visit.

REFERENCES

- BAXANDALL M., 1991. *Intento espositivo. Alcune precondizioni per mostre di oggetti espressamente culturali*. In: Karp I., Lavine S.D. (eds.), *Culture in mostra. Poetiche e politiche dell'allestimento museale*. Clueb, Bologna, pp. 15-26.
- BORUN M., 1992. The exhibit as educator: Assessing the impact. *Journal of Museum Education*, 17(3): 13-14.
- CARTER J., 1999. *How old is this text?*. In: Hooper-Greenhill E. (ed.) *The Educational Role of the Museum*. Routledge, London and New York (2^a ediz.), pp. 211-214.
- DE MAURO T., 1980. *Guida all'uso delle parole*. Editori Riuniti, Roma, pp. 127.
- DE MAURO T., Moroni G.G., 1998. *Dizionario di base della lingua italiana*. Paravia, Torino, pp. 139.
- DRUGMAN F., 2003. *Imparare dalle cose*. In: Riccini R. (ed.), *Imparare dalle cose*. Clueb, Bologna, pp. 11-20.
- EKARV M., 1987. *Combating redundancy: writing texts for exhibitions*. In: Exhibitions in Sweden 27/8, 28-38. Ripubblicato in Hooper-Greenhill, E. (ed.) (2^a ediz.) 1999, *The Educational Role of the Museum*, Routledge, London and New York, pp. 201-204.
- GOMES DA COSTA A., 2005. Should explainers explain? *Journal of Science Communication*, 4(4): 1-4.
- HOOPER-GREENHILL E., 1994. *Museums and their Visitors*. Routledge, London. pp. 206.
- JACOBI D., 1998. *Communiquer par l'écrit dans les musées*. In: Schiele B., Koster E.H., *La révolution de la muséologie des sciences*. Presses Universitaires de Lyon, Editions MultiMondes, Lyon, pp. 268-293.
- KELLY L., 2000. *Writing text and Labels: a review of the literature*. <http://amonline.net.au/search.cfm?searchstring=kelly&x=0&y=0>
- LUCISANO P., 1992. *Misurare le parole*. Kepos, Roma, pp. 149.
- LUGLI A., PINNA G., VERCELLONI V., 2004. *Tre idee di museo*. Jaca Book ed., Milano, 191 pp.
- MARVULLI R., 2003. *L'identificazione cromatica dei concetti. Indagine statistica*. Celid, Torino, pp. 138.
- MCMANUS P., 1989. Oh, yes, they do: how museum visitors read labels and interact with exhibits texts. *Curator*, 32(3): 174-189.
- MERZAGORA M., RODARI P., 2007. *La scienza in mostra. Musei, science centres e comunicazione*. Mondadori, Milano, pp. 193.
- MIGLIETTA A.M., BELMONTE G., BOERO F., 2005. Conoscere il pubblico potenziale per allestire una sala museale. *Museologia Scientifica*, 20(2): 217-234.
- MIGLIETTA A.M., 2011. I pannelli esplicativi nei Musei Scientifici. Alcuni spunti di riflessione. *Museologia Scientifica, Memorie*, 8: 107-110.
- MIGLIETTA A.M., BELMONTE G., BOERO F., 2008. A summative Evaluation of Science Learning: a case Study of the Marine Biology Museum "Pietro Parenzan" (South East Italy). *Visitors Studies*, 11(2): 213-219.
- MIGLIETTA A.M., PACE R., BOERO F., 2011a. Evaluating students' comprehension of messages on panels. *Visitor studies*, 14(2): 209-218.
- MIGLIETTA A.M., PACE R., BOERO F., 2011b. I pannelli nei musei. Il punto di vista dei ragazzi. *Museologia Scientifica*, 5(1-2): 136-141.
- MIGLIETTA A.M., BOERO F., BELMONTE G., 2012. Visitors book and Museum management: there might be a link? *Museologia Scientifica*, 6(1-2): 91-98.
- NIELSEN J., 2000. *Web usability*. Apogeo, Milano, pp. 100-133.
- PACE M.R., MIGLIETTA A.M., BOERO F., 2008. Comunicare nel Museo: i pannelli esplicativi come strumento di mediazione culturale. *Museologia Scientifica*, 2(1-2): 118-126.
- PESARINI F., 1997. *La didattica del museo scientifico*. La Nuova Italia, Firenze, 64 pp.
- PESARINI F., 2001. *Musei di scienze naturali*. In: Nardi E. (ed.), *Leggere il museo. Proposte didattiche*. Seam, Milano, pp. 163-188.
- POSI M.E., BELMONTE G., BOERO F., MIGLIETTA A.M., 2010. Una sala come piace a te. Front-end evaluation per la realizzazione di una nuova proposta espositiva. *Museologia Scientifica*, 4(1-2): 152-159.
- RAVELLI L. J., 2006, *Museum texts: communication frameworks*. Routledge, London and New York, pp. 182.
- ROSHELLE J., 1995. *Learning in interactive environments: Prior knowledge and new experience*. In: Falk J.H., Dierking L.D., *Public institutions for personal learning: Establishing a research agenda*. American Association of Museums, Washington, DC, pp. 37-51. <http://ctl.sri.com/publications/displayPublication.jsp?ID=116>
- SERREL B., 1996. *Exhibit labels. An interpretative approach*. AltaMira Press, Walnut Creek CA, pp. 261.
- SILVERSTONE R., 1998. *Il Medium è il museo. A proposito di oggetti e di logiche, in tempi e spazi*. In: Durant J. (ed.), 1998. *Scienza in pubblico. Musei e divulgazione del sapere*. Clueb, Bologna, pp. 57-80.
- VOMERO V., 2009. Guide vs. Explainers e storia della comunicazione scientifica. *Museologia scientifica*, 3(1-2): 5-6.