

The Ship: the art of climate change

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An Evaluation



Natural History Museum

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1: Introduction

In the UK the 1990's saw a dramatic increase in collaborations between art and science (to be referred to as art/science), resulting in a range of institutions setting up their own collaborative projects like the SciArt programme at the Wellcome Institute.¹ This particular programme was initiated with the intention of widening the scope of science communication; "presenting aspects of science via the arts allows us to reach people who would not be reached by, say, a science centre event or a lecture on DNA"² argues Ken Arnold, Head of public programmes at the Wellcome Trust. These projects have placed the relationship between science and art firmly on the agenda of cultural institutions; the ICA has had a series of 'scientists-in-residence'³ while many science museums, like the Royal Institution have 'artists-in-residence' programmes.⁴

Academic debate over the value of these collaborations, the role of artists in science and the relative merits of their creative outputs continues, meanwhile these projects, their products and the cross-disciplinary principles that underlie them, have made their way into UK museums and galleries. The visitor aspect of art/science is frequently overlooked in the debate. While the intellectual or academic background to this increase in the number of art/science collaborations and their exhibitions should not be ignored, museums are increasingly being held accountable to targets of increased visitor numbers, increased access and inclusion. This report will use *The Ship* as a case study to start to explore the broad questions of how visitors respond to exhibitions of art/science and what happens at the visitor-exhibition interface to be better able to understand the role of such exhibitions in UK science museums.

The exhibition *The Ship: the art of climate change* took place in the Jerwood Gallery of the Natural History Museum in summer 2006. *The Ship* was exhibited in the context of a huge national UK science museum in central London, entry to the exhibition was free and visitors to the exhibition were therefore part of the wider NHM audience. On the 21st, 22nd and 25th of June a series of in-depth interviews were carried out with visitors to *The Ship*. These were loosely based on a series of questions (see Appendix B), without being a prescriptive interview, to encourage interviewees to communicate their impressions of the exhibition, rather than directly answer a list of questions. This exploratory research highlights some key themes in the visitor's experience of *The Ship*:

- how visitors categorised the exhibition
- whether visitors felt they had understood the exhibition
- how interpretation affected their experience
- what their expectations were
- what they felt they would take away from the exhibition

¹ Sian Ede, 'Strange and charmed' (Calouste Gulbenkian Foundations: London, 2000).

² 'Refreshing art' from www.wellcome.ac.uk/doc_WTD004714.html accessed on 20.03.06

³ www.ica.ac.uk accessed on 19.04.06

⁴ <http://www.rigb.org/rimain/index.jsp> accessed on 23.04.06

As well as these five themes, the amount of time visitors thought they spent in the exhibition was often mentioned. Interviewees talked about their overall positive or negative reactions towards the exhibition and which exhibits they had preferred or particularly disliked. The objectives, methodology and process of research will be outlined and the themes that emerged from the interviews will be discussed further. The implications of the discussion may be relevant to the use of art/science in similar exhibitions in other museums and the role of museums and their visitors in the debate surrounding collaboration between art and science. However due to the context of the research the data represents only a snap shot of the opinions of a small sample of interviewees. This case study therefore is only able to begin exploring the visitor experience of *The Ship* and further research will need to be carried out before any clear conclusions can be drawn.

2: Research aims and objectives

If the aims of the research have been to explore the visitor experience of a specific art/science exhibition in order to develop a better understanding of working with art in a science museum, then the research objectives focus on the broad sub-questions of how visitors respond to art/science exhibitions and what happens in the visitor/exhibition interface. This visitor focus is lacking in most of the current art/science literature and arises from an increased need for museums and art galleries to justify their value to society in the face of funding issues.⁵



Figure 1: The exhibition/visitor interface where meaning making occurs from theory outlined in *Making Meaning in Museums 1: visitors' interpretive strategies at Wolverhampton Art Gallery*, (RCMG: Leicester, 2001) p.1.

Current museological research suggests that interpretation, or meaning making, occurs in museums at the interface between what visitors already know and what museum professionals are trying to tell them, see figure 1 above.⁶ This complex relationship is at the centre of this research. Research conducted into how visitors make their own meanings in art galleries has shown visitors employ a

⁵ Department of Culture, Media and Sport, *Understanding the Future: Museums and 21st Century Life*, <http://www.culture.gov.uk/NR/rdonlyres/31419198-35C1-4A00-8C12-CB0572EC9B57/0/UnderstandingtheFuture.pdf> as of 17.10.05.

⁶ Theano Moussouri, Eilean Hooper-Greenhill, Emma Hawthorne and Rowena Riley, *Making Meaning in Museums 1: visitors' interpretive strategies at Wolverhampton Art Gallery*, (RCMG: Leicester, 2001) p.1.

number of interpretive techniques and that where they have less experience they will rely on interpretive material provided by the curators.⁷ Importantly it also suggests that the visitor experience is a complex area that deserves further research in order that museums and galleries can deliver the kinds of exhibitions that visitors respond to.

3: Methodology

The perspective taken by this research is that each visitor experience is important and will vary between individuals. It was expected that certain themes might be drawn out from analysis of a number of visitor experiences of the same exhibition in the same context. Visitors were viewed as individuals with emotions, reactions, behaviours and accounts specific to themselves. This view arises from the educational theories of constructivism and multiple intelligence theory outlined by George Hein and Howard Gardner.⁸ Hein argues that visitors construct their own experience using their previous experiences and knowledge background, Gardner adds to this by outlining a theory of seven different intelligences which vary between people and affect their learning styles. In this way visitors can be seen as individuals who will experience exhibitions in their own way, with different hooks required of exhibitions to allow for the different learning styles within any group of visitors. This kind of post-modern understanding of the subjectivity of knowledge, as individual and experience based underlies the sort of information that will be gathered. Interviews were conducted after visitors had been in the exhibition and tried to capture the emotions, opinions and other nuances of the visitor's experience.

The research is an ethnographic study into the visitor's experience of a particular phenomenon, the exhibition is seen as a communicative, discursive and reaction prompting tool. Since the epistemological approach is based on an understanding of knowledge as people's reactions, perceptions and feelings, the type of data to be generated will be qualitative.⁹ The case study format is particularly suitable for this kind of exploratory research examining the visitor experience, focusing on the complex relationship between visitor and exhibition. The data gathered was contextual rather than divorced from real life situations. Qualitative case studies also require flexibility, therefore data was analysed as it was collected to allow for any changes that may need to be made. The

⁷ Theano Moussouri, Eilean Hooper-Greenhill, Emma Hawthorne and Rowena Riley, *Making Meaning in Museums 1: visitors' interpretive strategies at Wolverhampton Art Gallery*, (RCMG: Leicester, 2001), And Theano Moussouri, Eilean Hooper-Greenhill, Jocelyn Dodd and Clare van Loenen, *Making Meaning in Museums 2: visitors' interpretive strategies at Nottingham Castle Museum and Art Gallery*, (RCMG: Leicester, 2001).

⁸ George Hein, 'Constructivist learning theory', pp.30-34 in *Developing museum exhibitions for life long learning*, Gail Durbin (ed.) (Museums & Galleries Commission, GEM & the Stationery Office; London, 2000), third edition and George E. Hein and Mary Alexander, *Museums: places of learning*, (American Association of Museums: Washington D.C., 1998) and Howard Gardner, 'Multiple Intelligences', pp.35-37 in *Developing museum exhibitions for life long learning*, Gail Durbin (ed.), (Museums & Galleries Commission, GEM & the Stationery Office; London, 2000), third edition.

⁹ Jennifer Mason, *Qualitative researching*, (Sage Publications Ltd: London, 2002), second editions, pp 1-23.

disadvantages of using a single case study lie in their small and specific nature, however in exploratory studies examining contemporary phenomena and gathering qualitative data; the case study approach allows a number of different angles to be researched in detail within a defined and real situation.¹⁰ This approach aimed to provide a more holistic view of the visitor experience.

Exhibition evaluation often rests upon looking for the results intended by the museum staff; this can lead to unforeseen visitor reactions being overlooked.¹¹ This qualitative visitor research took the form of interviews based on in-depth interviews, loosely structured to prompt conversation, after a visit to the exhibition. In this way it was hoped that researcher bias towards certain subjects was avoided and visitors were better able to talk about what they felt was relevant.¹² Since this research was designed to investigate what visitors felt about the exhibition as far as possible in terms the visitors themselves have used, the sample size was small as the focus is on ideas and meaning rather than a study of the socio-cultural background of visitors, additionally the sample was not taken from the target group of the exhibition since this quite narrow approach would overlook the reactions of other visitors and the research sought to investigate all visitors reactions.

Macdonald's research at the Science Museum examined how visitors understood their visits to a particular exhibition and based the research on how visitors "recoded as well as decoded the exhibition".¹³ In this way her research sought to look beyond the typical visitor research questions criticised by Heumann Gurian, as looking only for what museum staff expected to find, examining whether the messages intended in the exhibition were received. The results suggested visitors create a range of meanings from exhibitions, both intended and unintended by the exhibition designers.¹⁴ The underlying constructivist approach of Macdonald's research was followed here, with the emphasis in the visitor interviews being as far as possible on what the visitor perceived while following the main research question examining reactions to art/science. The visitor responses were analysed to draw out any themes that appeared in relation to visitor understanding, appreciation and perceptions about the scientific issues within the exhibition, their views on art/science in general and other themes that emerged.

¹⁰ Robert K. Yin, *Case Study Research*, (Sage; London, 2003) pp.1-18.

¹¹ Elaine Heumann Gurian, 'Noodling around with exhibition opportunities', pp.3-9 in *Developing museum exhibitions for life long learning*, Gail Durbin (ed.), (Museums & Galleries Commission, GEM & the Stationery Office; London, 2000), third edition, p.3.

¹² Theano Moussouri, Eilean Hooper-Greenhill, Jocelyn Dodd and Clare van Loenen, *Making Meaning in Museums 21: visitors' interpretive strategies at Nottingham Castle Museum and Art Gallery*, (RCMG: Leicester, 2001) p.3 and Theano Moussouri, Eilean Hooper-Greenhill, Emma Hawthorne and Rowena Riley, *Making Meaning in Museums 1: visitors' interpretive strategies at Wolverhampton Art Gallery*, (RCMG: Leicester, 2001) pp.28-31.

¹³ Sharon Macdonald, *Behind the scenes at the Science Museum*, (Berg: Oxford, 2002) p.219.

¹⁴ Sharon Macdonald, *Behind the scenes at the Science Museum*, (Berg: Oxford, 2002) p.217-243.

4: Research procedure and visitor outline

The population of interest to this research includes all visitors to *The Ship*, therefore the sample used in the interviews was not restricted to the target audience or any other group. Since the research is qualitative and concerned with the perceptions and reactions of visitors, it would not be appropriate to ask questions about socioeconomic status, age, race or gender, therefore no attempt was made to fill sample quotas for representative sections of the population. In spite of this, gender and approximate age were recorded for potential comparisons, see Appendix A for the visitor agreement Proforma used in this research. The age groups used by the NHM marketing department were used (see Appendix A). Due to time constraints the sample size was limited to a maximum of 20 respondents and by the end 18 visitors were interviewed, see Appendix C for day by day visitor numbers. The sample was randomised by varying the time and day at which interviews take place. Through consultation with NHM staff it was decided that one weekday morning, one weekday afternoon and one weekend afternoon would allow for a representative sample of NHM visitors to be available for interview.

Time	Monday 21 st June	Tuesday 22 nd June	Sunday 25 th June
10.00 – 13.00	10	-	-
14.00 – 17.00	-	7	1

Figure 2: Research timetable with total number of interviews carried out.

Every third visitor exiting the exhibition was to participate to maintain the random nature of the sample. Single, adult visitors were approached due to the lack of space available to carry out group interviews. Due to NHM policy no children were interviewed. Within the group of visitors asked, some refused to participate, for various reasons, often citing that they did not have time. Additionally there were visitors who could not speak good enough English to have an in-depth conversation and were therefore thanked and left to continue their visit. The basic requirement for being able to conduct interviews in English proved quite difficult due to the high numbers of tourists at the NHM and a number of visitors to *The Ship* were not interviewed on this basis.

Some interviewees approached when alone were later joined by their partner or group. This made the interviews harder to direct but did provide interesting data. Interviewees also seemed more relaxed when being interviewed with their companions. In spite of the inclusion of these group interviews, the restrictions on who to approach had a large affect on how many people were interviewed. As figure 2 shows, the weekend afternoon interview session was the most difficult to find participants for. The audience of the Natural History Museum is mainly composed of families, formal education groups and tour groups. This meant that single adult visitors were difficult to find. Future evaluations may find different

results by widening the criteria for potential interviewees to include groups, especially family groups.

In total 18 people were interviewed, this included one interview of a group of 4 and one interview of a couple. The breakdown of visitors asked to participate, those who did participate, gender and age range can be seen below in figure 4.

	Total	Yes	No	25-34	35-44	45-59	60+
Women	13	9	4	4	3	2	3
Men	12	9	3	3	4	1	3
Totals	25	18	7	7	7	3	6

Figure 3: Visitor breakdown by age, gender and agreement to participate.

In total 13 interviews were conducted with 18 interviewees. Visitor's reasons for attending *The Ship* varied, with 14 of the visitors interviewed including *The Ship* in their general visit to the NHM. Three interviewees visited *The Ship* on purpose, one citing interest in climate change as the reason, one citing interest in the art as the reason and the third citing interest in both the art and climate change as the reason for visiting. These last two (interviewees 12 and 18) were also visiting because *The Ship* had been recommended to them.

The interviews were carried out next to the entrance and exit of the Jerwood Galley, this meant there were many people present and the lack of a quiet, comfortable space may have contributed to the short length of many interviews. Interviews varied in length as follows:

- Total average interview length: 8.1 minutes
- Shortest: 7 interviews lasted 5 minutes
- Longest: 2 interviews lasted 35 minutes

During the interviews participants were asked how long they thought they spent in the exhibition, of those who gave approximate times, 7 felt they had spent 30 minutes in *The Ship*. Of the remainder, 4 thought they were in the exhibition for about 15 minutes, another estimated 20 minutes and the rest felt they were not sure.

5: Themes from the interviews

A number of broad themes emerged from the interviews, responses ranged from the very positive to the confused and negative, NHM staff responsible for evaluation did point out the potential for visitors to have a positive bias and this should be borne in mind. The themes identified are as follows:

- their emotional response to the exhibition
- how visitors categorised the exhibition
- whether visitors felt they had understood the exhibition
- how interpretation affected their experience
- what their expectations were
- what they felt they would take away from the exhibition

Each of these themes will be discussed to explore what interviewee's reactions to *The Ship* were. Implications for other art/science exhibitions will be included in the discussion.

5.1: Visitors emotional responses to *The Ship*

The visitors interviewed had a range of reactions to *The Ship*. Of this range, a crude split between positive and negative responses can be made, with 10 visitors feeling more negative towards the exhibition and 7 feeling positive about it. One visitor presented ambivalent opinions and within the rest of the group, different reasons were given for this range of emotions. Negative reactions tended to be prompted by a mismatch between visitor expectations and the visitor experience of the exhibition. Interestingly positive reactions seemed to be prompted by visitor delight in their surprise finding an artistic exhibition within the NHM, different in style and content to everything else there, which also comes from a mismatch between expectation and experience. These broad divisions of responses will be explored in more detail in the following sections.

5.2: How visitors categorised the exhibition

Visitors labelled the exhibition in a variety of ways, although often the conversation had already covered questions of science and art, therefore it is not surprising that visitors often continued using these labels. The preference amongst interviewees was to categorise the exhibition as an art exhibition, with seven participants talking about it in this way. Terms used to describe the artistic manner of the exhibition included 'impressionistic' (interviewee 1) and 'visual reflections' (interviewee 3). Four interviewees highlighted that they felt the exhibition was a combination of art and science and only one interviewee believed *The Ship* to be a science exhibition.

The remaining five interviewees felt they did not know what kind of exhibition *The Ship* was. Within this last group, the four visitors interviewed together were confused about what kind of exhibition *The Ship* was and this had a negative impact upon their experience, with interviewee 15 stating 'well it's not good enough for an art gallery and it's not good enough for a museum'. This particular group of visitors, who were interviewed together, frequently mentioned how frustrated they had been by the exhibition, perhaps their inability to place the exhibition within their own frame of reference contributed to their negative perception of *The Ship*.

5.3: Whether visitors felt they had understood the exhibition

During the interviews nine participants felt they had not understood the exhibition. Statements like 'I didn't understand them at all' (interviewee 8), 'a bit too abstract for me' (interviewee 5) and 'but I don't quite understand' (interviewee 12) arose in open conversation and many were interested in talking about what impression other visitors had of *The Ship*, perhaps as a way to improve their own understanding. Whether visitors understood the concepts within *The Ship* is further complicated by another layer of responses. When talking about the

messages they thought were in the exhibition, all but two interviewees were able to express that the exhibition was about climate change. The melting of the polar ice caps was often mentioned and some even went into detail about human impact on the planet, as interviewee 6 said, 'the snow, that was really giving the impression that at the end of the day, if they look beautiful, they might not stay that way, if we don't look after them'.

Those interviewed were able to express more than the simple blurb about climate change. Even those, like interviewee 13, who stated that the exhibition had not helped their understanding of climate change were able to explain that the exhibition was 'about the damage that we're causing at the moment and that if we're not careful we're going to lose part of the world'. These mixed messages suggest it is possible that while visitors may have been confused over aspects of the exhibition, they had collectively drawn certain inferences from *The Ship*, in particular an awareness of the transience of the polar ice caps, 'supposed to be like, about the melting' (interviewee 5). Therefore while parts of the exhibition may have been difficult for visitors to feel as though they understood, there were other, clearer messages within *The Ship* that visitors felt more comfortable with.

5.4: How interpretation affected the visitor experience

One theme that emerged with clarity from the interviews was that ten of those interviewed expressed a wish for more interpretation to assist them in the exhibition. This may have impacted upon visitor understanding of the exhibition, discussed in section 5.3 and have resulted from a gap between visitor expectations and the visitor experience, as discussed in section 5.6. Comments like 'it wasn't immediately obvious what it was about' (interviewee 5) and 'I thought it was unclear' (interviewee 13) highlighted the confusion felt by these visitors. Others were able to point precisely to their need for interpretation, 'there weren't clear explanations or explanatory materials' (interviewee 11) and 'writing to explain what was meant to be happening would have been good' (interviewee 8).

When asked about their most or least favourite exhibits those interviewed seemed best able to make a connection to the artworks they understood more and disliked those that they understood less well. Interviewee 5 liked the music in the exhibition, 'I think because I'm a composer myself, it was interesting, but I didn't really see what was the connection...between that and the other things'. In a similar manner interviewee 6 pointed to 'the woman dancing, the choreography, I didn't really understand, it didn't hold my imagination, it was just a lady dancing in a box, I didn't really get where it was coming from'. In terms of Hein's constructivist theory it could be argued that visitors were describing artworks in terms of whether their own experiences allowed them to make sense of the work. It is possible that increasing the amount of interpretation might improve visitor's ability to make connections to exhibits that they are unable to grasp using only their own background knowledge.

The curatorial team behind *The Ship* created the exhibition without the usual levels of interpretation found elsewhere in the NHM so that visitors could make their own interpretation without competing interpretation in the space. In light of the remarks made by those interviewed it may be worth including more interpretation in these art/science exhibitions in the future. A report from the Science Museum by Ben Gammon argues that since visitors do not expect to find art in science museums they may require more interpretation, especially with more modern, conceptual art.¹⁵ This interpretation gap may also appear as a result of the different styles used in art galleries or museums, where interpretation is often limited to artist, date and size of work, or type of paint and interpretation rich science museums. Regardless of the difference in approaches, these results suggest that visitors to *The Ship* may have benefited from more interpretation and that this may be something to consider in future exhibitions.

5.5: What expectations visitors had for the exhibition

It may be possible that those interviewed that expressed a need for more interpretation were made aware of the lack of interpretation because of the different approach used in *The Ship* when compared to the rest of the NHM. Many interviewees, when discussing their expectations for *The Ship*, were quick to point out that they were expecting more science and more factual information from the exhibition. Thirteen of those interviewed expressed these expectations very clearly; 'I was expecting more science' (interviewee 2) and 'I was a little surprised not to see more science in it' (interviewee 18). Within this group some were able to explain why they had expected a more scientific or factual emphasis, with interviewee 4 suggesting 'when you come here, that's what you expect, you expect it to be factual, I mean I came in here and the dinosaur, the dinosaur was all facts, but you come here, and it's different'. The majority of those expressing this expectation felt negative about the perceived lack of fact or scientific information; 'I'm not sure I learned a great deal from it...I was expecting something a little more educational...I'm very interesting in climate change, but I don't quite understand, technically' (interviewee 12) and 'I thought it was just an excuse for art really, without any...information about climate change' (interviewee 14).

While the differences between *The Ship* and the other exhibitions at the NHM do include less factual, scientific evidence and a greater focus on artist's impressions, placing a value judgement upon these differences may not be straight forward. While the thirteen interviewed visitors expressing their expectation of more science and fact were frustrated by not having their expectations met, not all felt as negative about it. 'I went to the dinosaur one and I thought, well, that's for children, and I went to this one and it was, well, I found it more interesting, a bit more artistic' remarked interviewee 3. It is possible that negative feelings arising from those interviewed could be negated by managing

¹⁵ Ben Gammon, 'Everything we currently know about making visitor-friendly mechanical interactives Or 28 painful lessons learnt', August 1999, www.big.co.uk accessed on 13.07.06

their expectations more fully through marketing and interpretation, rather than changing the exhibition to meet their expectations.

5.6: What visitors felt they would take away from the exhibition

From the interviews with visitors to *The Ship* a number of visitor outcomes were made apparent. As discussed in 5.2 many of those interviewed simultaneously expressed their lack of understanding in the exhibition and their increased awareness of climate change issues. Eight of those interviewed claimed to have developed more of an insight into climate change, two felt they had a memorable artistic experience, three sighted other, different outcomes from the exhibition while the remaining five insisted they would take nothing away from *The Ship*. In addition to this seven of those interviewed felt that the exhibition made little impression, arguing 'it's nice but I don't think it'll be remembered' (interviewee 7) and 'I don't really think it's going to change anyone' (interviewee 5). The numbers of these opinions shows those mentioning a greater awareness of climate change to be in the majority; however visitor outcomes are an area which would be more suited to a further interview at a later stage which would provide detail about what visitors could recall from the exhibition.

6: Discussion and further implications

This snapshot of research can only produce information about what those interviewed felt at the time they visited the exhibition. There are a number of intriguing questions raised about how and why visitors make judgements about what they like, dislike, understand and are confused by. It is hard to create exhibitions which strike a chord with all who visit, as these results have shown. It seems also hard for visitors to gauge what they feel about an exhibition and to convey this clearly. As seen in section 6.2, while some may have felt frustrated, confused or claim to have not understood, this is at odds with the fluent descriptions those interviewed were able to give regarding the content of *The Ship*.

None the less some clear themes are apparent; visitors had expected something different from *The Ship*. Visitors expressed their expectations of an exhibition more in line with the other content in the NHM, scientific, informative and factual. The interviewed visitors pointing towards the sparse interpretation and mentioning their preference for more explanation may also fall within this apparent gap between visitor expectation and visitor experience, see figure 4.

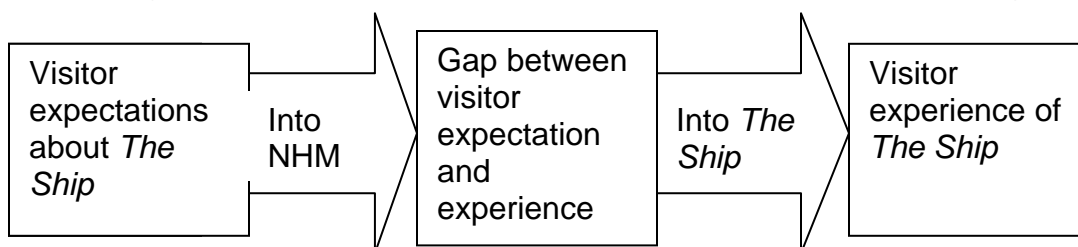


Figure 4: Diagram to show the mismatch between visitor expectation and experience.

Many of those who spoke about their scientific expectations of *The Ship* were able to draw the link between this expectation and the location of *The Ship* in the NHM. Perhaps the five visitors who were able to easily categorise *The Ship* as an art exhibition and the four who felt it to be an art/science exhibition, were better positioned in terms of expectations, than the five who felt unsure after their visit as to how to categorise the exhibition, or the visitor who saw *The Ship* as a science exhibition.

This research highlights how visitors responded to *The Ship* and has raised questions about how much interpretation visitors felt they needed in the exhibition and about the mismatch between visitor expectation and visitor experience in *The Ship*. Ben Gammon has suggested providing more interpretation for art in science museums where visitors may not expect to find art,¹⁶ and the lack of interpretation, as well as a need for more, was brought up repeatedly in the interviews. Moussouri *et al* also noticed in their research that visitors relied upon interpretive material provided in exhibitions where they did not have the skills to interpret certain exhibits on their own.

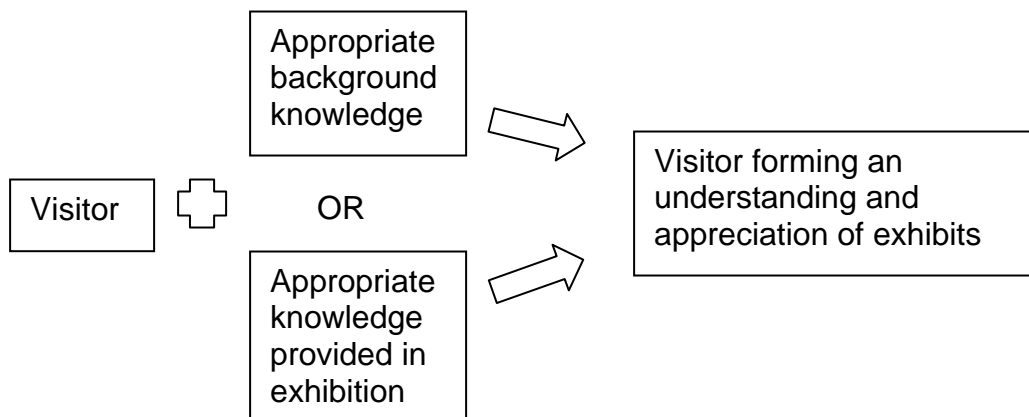


Figure 5: Diagram of visitor knowledge requirements to create an understanding of exhibits.

When talking about artworks with *The Ship* that they had liked or disliked visitors gave reasons for their choices that suggested they were using their prior knowledge to understand exhibits. Visitors pointed out artworks they had disliked as harder to understand, 'it was lost on me' stated interviewee 7 when talking about the photographs of ice that he had not liked. Taking a constructivist approach to how visitors made choices about what they preferred based on what they could understand as a result of their own background, it might be possible to increase visitor appreciation of other artworks by providing tools for visitors to understand artworks that their own background does not provide them with the skills for, see figure 5. In this way increasing the amount of interpretation in these

¹⁶ Ben Gammon, 'Everything we currently know about making visitor-friendly mechanical interactives Or 28 painful lessons learnt', August 1999, www.big.co.uk accessed on 13.07.06

art/science exhibitions may help visitors understand and appreciate more of the exhibition.

As discussed in section 5.5, altering the exhibition style and content to meet expectation held by visitors about the NHM may not be the solution to this expectation gap. The visitors who responded with enthusiasm to *The Ship* made comments like 'I was expecting something more sciency...not art, not visual things like that, I was expecting things like, this is what we're doing, this is how we can stop it, but that was fantastic, absolutely fantastic' (interviewee 6). The experience was made more interesting to this visitor by the difference between *The Ship* and the rest of the NHM. Therefore while it may be prudent to alter the marketing of such exhibitions in order to reflect more accurately the style of exhibition, changing the exhibition to reflect the style of the NHM may counteract the purpose of such exhibitions; providing a different perspective to the rest of the museum.

This research is exploratory in nature and unable to paint more than a snapshot in time of a few visitors' responses to the ship. The limitations to the research include the small sample size and the fixed point in time of the research. In spite of this the themes that have been identified from the data produced can be used as a starting point for thinking about further research and issues to consider when planning future exhibitions. While exhibitions should not pander entirely to the desires of large numbers of visitors, and it may be difficult to create an exhibition that all visitors enjoy, especially in a museum as large and varied as the NHM, but clearly some visitors to *The Ship* greatly appreciated the exhibition and their responses to it were enthusiastically positive. In this way art/science exhibitions obviously do engage a proportion of their visitors and this may be one reason to continue with these exhibitions.

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8.1: Appendix A: Visitor Agreement Proforma

Hi, My name is Emily Dawson, I am a masters student on the Leicester University Museums Studies course. I am doing some research into how visitors respond to this exhibition. Would you mind talking to me about your immediate reactions to the exhibition, it should take between ten and twenty minutes? Would you mind if I recorded this conversation?

Yes/No

If yes:-

Thank you, I would like to discuss with you, your reaction to 'The Ship', what your feelings are about it and what you think about this kind of exhibition. There are no right or wrong answers and anything you say will be useful for this research. You can also use this as an opportunity to say anything else you want about the exhibition and ask me any questions you like about the research.

Which age bracket do you fit into? (NHM standard age brackets)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Under 16	16-17	18-24	25-34	35-44	45-59	60 +

And where do you come from in the UK?

Interview number:-.....

Interview date:-.....

Time at start of interview:-.....

Time at end of interview:-.....

Length of interview:-.....

Interviewee gender:- M / F

8.2: Appendix B: List of questions that the interviews were loosely based on

- 1) Why did you come to this exhibition? What was it about this exhibition that made you want to come/that interested you? How come you were in the exhibition today?
- 2) How much time do you think you spent in there approximately?
- 3) Were there any parts of the exhibition that you especially liked of disliked?
- 4) Was there anything in particular that interested you, or caught your attention, and why?
- 5) What was your favourite part of this exhibition? Why?
- 6) And were there any sections of the exhibition that you disliked?
- 7) Why?
- 8) Did you think this exhibition was easy or difficult to understand?
- 9) Did you read much of the text/many of the labels?
- 10) What did you think of them?
- 11) What did you think this exhibition was about?
- 12) Do you think there was a message in the exhibition?
- 13) What do you think that message was?
- 14) Would you take anyone you know to go around this exhibition – why?
- 15) Who do you think this exhibition is aimed at?
- 16) What sort of exhibition would you call that?
- 17) Have you ever been to any other exhibitions at all like this one?
- 18) If you saw another exhibition like this one would you want to go?

Aim to follow visitors own responses to the exhibition rather than continually prompting with my own questions. Aim for between 5 to 30 minutes of conversation. Thank interviewees for their time. End recording.

8.3: Appendix C: Day by day visitor breakdown

21.06.06

	Total	Yes	No	25-34	35-44	45-59	60+
Women	4	4	0	3	1		
Men	6	6	0	1	3	1	1
Totals	10	10	0	4	4	1	1

Average interview length: 9.6 minutes (5+5+8+5+6+12+35+5+5)

Shortest: 5 interviews were 5 minutes long

Longest: 1 interview was 35 minutes long

22.06.06

	Total	Yes	No	25-34	35-44	45-59	60+
Women	5	4	1			1	3
Men	4	3	1	1			2
Totals	9	7	2	1		1	5

Average interview length: 15 minutes (5+15+35+5)

Shortest: 2 interviews were 5 minutes long

Longest: 1 interview was 35 minutes long

25.06.06

	Total	Yes	No	25-34	35-44	45-59	60+
Women	4	1	3	1	2	1	0
Men	2	0	2	1	1	0	0
Totals	6	1	5	2	3	1	0

Interview length: 5 minutes

Totals:

	Total	Yes	No	25-34	35-44	45-59	60+
Women	13	9	4	4	3	2	3
Men	12	9	3	3	4	1	3
Totals	25	18	7	7	7	3	6

Total average interview length: 8.1 minutes

Shortest: 7 interviews were 5 minutes long

Longest: 2 interviews were 35 minutes long