

# *The Trouble with Boredom. Contextualising the Disposition, Analysing its Potential*

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*Abstract.* This article analyses boredom in museographic environments. From an ethnographic perspective, a difference is made between the monotony that affected the employees of the institution from the misbehaviour of not few bored souls. One aim is to rethink the importance of boredom for the human being, specially in matters of introspection and understanding. A corolary of this article is to remember that an uninteresting and static working environment evidences museographic failure; the contemplative and muted pace of the visitors does not.

*Keywords:* 1. estudios de museos, 2. aburrimiento, 3. fatiga de sala,  
4. divulgación de la ciencia, 5. organización en museos,  
6. comunidades de práctica.

*Resumen.* En el presente artículo se analiza el aburrimiento en ambientes museísticos. A partir de una perspectiva etnográfica, se marca la importante diferencia entre la monotonía que afecta a los empleados de una institución y la indeseable conducta de aquellos que parecen andar aburridos entre los corredores. Uno de los objetivos es repensar la importancia del aburrimiento para la vida humana; especialmente cuando se trata de fomentar la introspección y el entendimiento. El corolario en este artículo es recordar que un ambiente de trabajo poco interesante y estático es evidencia del fracaso museográfico; no así el andar contemplativo y silencioso de los visitantes.

*Palabras clave:* 1. museum studies, 2. boredom, 3. room fatigue,  
4. popularisation of science, 5. museums organisation,  
6. communities of practice.

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MOST POPULARISATION CAMPAIGNS, regardless of state or country, are similar in one respect: They all encourage children to find science entertaining. The adjectives most frequently used to advertise the newest exhibitions in any science museum are ‘entertaining’, ‘interesting’, ‘fantastic’, ‘enjoyable’, even ‘magic’.<sup>1</sup> As a researcher of the public understanding of science, one cannot only ask what makes science attractive; instead, an anthropologist asks first who makes it attractive. How do the staff working for museums or science centres succeed in exciting the public with displays of science? The question seems especially salient after spending several months inside a planetarium, exhausted amid its repetitive environments. After experiencing the monotonous daily routines of the workers in the centre, the most pertinent question was not only who made science attractive, but what sort of understanding of science was accomplished in a soporific working environment.

The aim of this essay is to explore boredom. It will be enquired why tediousness seems to be feared by museographers. We will consider if boredom can be significant in the socialisation of the scientific spirit, and if so, in what way. Two situations are considered here to further the understanding of boredom in museums: boredom as the preamble to the feeling of ennui, and boredom among the workers of an institution obsessed with hyperactivity. The following lines are an attempt to explain why boredom has always been so present in museums; and why it can become a problem among staff but a need for the visitor.

<sup>1</sup> Nelkin (1994) and Sánchez Vázquez (2000, 2003) have already suggested how the promotional metaphors that scientists use to communicate their science to the public are part of strategies that can mislead the public but most importantly, cause problems for the scientists themselves. In the present context it is important to notice that the museums are taking the position of the mediator and it is they who may be also causing problems for the ways in which scientific activities are perceived by the public. See as well Wynne, 1992; Neidhardt, 1993; Durant *et al.*, 1996; Macdonald, 1996; Kerr *et al.*, 1997.

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### *The power of boredom*

Given that many science centres promote science with the promise of entertainment, it becomes salient to think about how institutions attempt to avoid boredom and why it seems impossible to eradicate. The interest in thinking about boredom emerged after spending a year, 2001-2002, doing ethnography about the popularisation of science in a Mexican planetarium-museum. Time and again people of all ages—workers, guides and visitors—expressed boredom verbally or with their bodies.

Maybe boredom was felt more acutely by this observer because of the sense of expectation generated by the entertainment that was announced in every science campaign. The planetarium's ostensible function was to be a centre for leisure with the purpose of motivating people to have an interest in science. But seeing so many people bored and feeling it personally day after day, made it relevant to think about boredom in the planetarium, as well as the consequences of its presence for the understanding of science, and get rid of it to study the popularisation of science. But it never went away; boredom was ever so present that it became a must to take into account, while analysing the explanations and understandings of science.

To answer the question of what effect a soporific environment has on the popularisation of science I would first like to quote Reinhard Kuhn by saying that boredom can be seen as an *idée force*; ideas that are 'far more than abstract intellectual concepts'. The idea of boredom has 'contributed to the formation of the human spirit.' Ideas like this do not 'merely reflect what already exists' because they act as 'creative forces' that help 'mould the human mind and shape reality.' Some other similar *idée-forces* are 'love, hate, charity, envy, pride and jealousy' (Kuhn, 1976:3). Words like these hide a range of meaningful interpretations that we can too easily overlook in spite of their implications. In any case, the idea of boredom can mould our experience of understanding science, art, culture, the native,

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history, and so forth. Hence we must look at its possible effects more closely.

#### *Signs of boredom*

I seldom heard the phrase ‘*¡Qué aburrido!*’ (How boring!) – not as often as I would have expected. On one occasion I heard a girl from Tijuana, a Northern Mexican city, complain. She told her grandmother that there was nothing to see at the planetarium, and pleaded with her to do something to convince the group to leave sooner and go to the metropolitan zoo instead. But not every member of her group was bored and the grandmother expected her granddaughter to find something to attract her interest sooner or later.

On another day, a guide called for the attention of the group she was leading after she heard many of the children complaining about being in the planetarium when they wanted to go to the zoo. The children were told at school that they would visit the zoo, but they were taken to the planetarium instead.

Seeing one or two children bored was the norm. I did not ever see a whole group bored, although whole families could be, especially after the youngest children began complaining and had to be dragged through the rooms. On one occasion I helped the special-events manager treat a girl for a bite inflicted by her three year old-brother. She said her brother was so fed up that he grabbed her and bit her chest in despair. This planetarium was not entertaining for the very young; not only because the centre was designed for people who could read but because there was nothing they could safely reach. Still, many grown ups, walking in a place where they could read and reach, felt bored too while in the corridors.

There was *always* a group of bored souls in the larger groups of people old enough to understand and read. I saw many boys, girls and teenagers yawning while sheepishly following their peers. I

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saw others walking from one exhibit to the next with their hands in their pockets and moving quickly on to the next exhibit.

The characteristic interaction of the groups with the guides started by following them. Then the children or teenagers would gather in front of the first exhibit or picture. Most of the children would try to get the front places; there was always a struggle to stand at the very front, closer to the guide, in which elbows would be used. The same behaviour would be repeated at the second and some times even at the third exhibit, but thereafter attention seemed to fade and only a few children, generally those who did not fight with their elbows before, stood calmly closer to the guide until the end of the tour. Every minute expectations seemed to fade, and a sort of learned group behaviour would characterise the groups after several minutes of attention to the guide. Very few children held their level of interest throughout the tour. This syndrome is well known among museographers who call it 'room fatigue'. To prevent it, some museums suggest that those in charge of the school-groups focus on one room per visit. The reason they give is that children seem to lose interest after the first half hour of explanation, so some museums recommend that the school visit lasts for half an hour and the rest of the time is spent playing. In the planetarium observed no one suggested this and I believe that even if someone did, the teachers in charge would not pay much attention to it, because they had their own agenda during the visits.<sup>2</sup>

When groups were not interacting with the guides, different behaviour revealed the boredom of the visitors. Grown-ups crossed their arms over their chests and only followed the rest of the family or group; many visitors quickly walked through the rooms without paying much attention to anything and often with similar, characteristically expressionless faces (not even

<sup>2</sup> Some specialists in museums in Mexico mention that although many efforts are made to involve teachers in the planning of visits to best suit the children's behaviour, the teachers interest is almost nil because of the excessive workload they have in school. Attending a museum's specialist talk is an unpaid activity that is an extra job for teachers. So when a school group visits a museum or planetarium most teachers will treat it as spare time to relax their attention over their groups.

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finding me watching them seemed to matter). As for the guides, they often had to raise the volume of their voice from exhibit to exhibit, until they took the groups to the recreational physics area where all the children were free to play and touch anything, and where the guides could go backstage to relax.

Since the normal course of things was to replicate school behaviour, the guide stood in front of the group, which took notes or listened without saying anything. Complaints were not often heard because of the fear children seem to have learned to feel for the authority of the adults. Yet, the tedium was certainly felt. To contrast with the humdrum experienced inside the rooms, the behaviour of the children changed noticeably when they were outside the planetarium in the gardens, eating lunch, chatting, running and playing.

I think not much is said about boredom because people have learned to cope with it since childhood. As Reinhard Kuhn's (1976) work on ennui suggests, the kind of boredom felt by school children when listening to the teacher is the most common form. This was the expression of apathy most obviously seen at the planetarium too. Orders were given by the teachers and the guides in an environment which was interesting to a child because of its newness, but soon, after two or three stops on the tour, boredom prevailed. This common type of detachment is that illustrated by the student sitting in the classroom who half listens to the lecturer; or by the person standing in line, or people sitting in the subway. This type of boredom is a temporary state 'dependent almost entirely on external circumstances' (Kuhn, 1976).

When the conditions that induce this frame of mind cease, as they always do, the forced inactivity of the mind comes to an end as well. The bell that signals the end of the lecture always rings; one's turn at the checkout always comes; and the train always reaches the station that is home (Kuhn, 1976:6).

The cure for this distress is its termination, 'which the passage of time inevitably brings' (Kuhn, 1976:6).

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### *The search for excitement: Attraction and detraction*

Boredom and its effects would be over as soon as a new activity took place. When in large groups many things could call back people's enthusiasm, although not necessarily for the science. For example, there was one thing that excited children, teenagers, mothers, fathers, nuns and teachers all the same: The Van de Graaff generator. Many visitors had been to this planetarium more than once. If interviewed with his or her family, a child might have said that s/he visited the planetarium with his school group once or twice before visiting it with his parents, and, invariably, would remember the 'electric shocks machine'.<sup>3</sup>

Once I walked around with a family of emigrants who had come back from the United States to visit their relatives. The mother was a humorous woman who mentioned to the guide how she convinced her son and daughters to go to the planetarium. It was only by talking about the effects on the hair and the electric shocks felt when holding hands and touching the instrument that her children agreed to visit the planetarium with her. She talked to me about what she remembered from her early visits to the planetarium in the eighties, while she was 'doing chemistry' by mixing water and powdered baby milk for her youngest child.<sup>4</sup>

The generator was the major attraction in the Physics rooms. If anyone was bored, after watching how it made hair stand up in

<sup>3</sup> The generator was not just the most outstanding memory among visitors in this planetarium. In Mexico City, after I interviewed the visitors of the National University's Science Museum, most children mentioned the 'machine that raises your hair up in spikes' or 'the shocks when holding hands' as the most memorable event of their visit.

<sup>4</sup> From Barry we learn that the importance of the experimental body has been for a long time an interest among those who study science. Foucault wrote about the 'political anatomy' of the museum visitor; Simon Shaffer wrote about the essential role played by the audiences who witnessed the natural philosophers' experiments, the audience used to be 'part of the experimental apparatus' (Foucault, in Barry 2001:130-131). See also Bennett, 1995, 1998, and Barry, 1998, 2001.

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spikes, every visitor felt enthusiastic about participating with the guides. It was amusing to see how the generation of electrostatic energy made people feel enthusiastic again about spending time in the planetarium. It was the same situation as that recalled by Bachelard (1983) when during the eighteenth century, electricity was a major social attraction. Bachelard concluded how sometimes 'violent memories', like electric shocks, are remembered for their significance. These moments constitute memories that are 'excessive', over-rated experiences that provoke a fake interest in knowledge. This kind of experience satisfies our curiosity, but scientific culture is obstructed instead of favoured; 'knowledge is substituted by admiration, the images take the place of the ideas.' And the rest of scientific culture may seem boring thereafter (Bachelard, 1983:34-47). Bachelard's is a significant argument that contradicts the way science is presented in most science centres for children. A major question is how much do children learn from these experiences, and does interest in science not get substituted for the mere need for a thrill?

Whatever the case may be, at this planetarium in the year 2001 and since 1982, the generation of electrostatic energy was the most memorable experience among the public, and it revived enthusiasm for a little longer in the exploration of the rooms. After feeling the energy from the generator, every group of children always broke the circle of electrostatic current with a renewed interest in play and the objects in the room.

Some of the sounds of the environment had a similar effect on the children's attention, making the planetarium seem exciting and promising for some time. When they were organised for the first time by the guides in the foyer, the moment the children heard the roars of the dinosaurs at a nearby exhibition, they seemed to experience extraordinary excitement that made them jump or hug their friends. This happened most frequently among the very young who usually had great expectations of the centre. In contrast, many small children felt fear instead. Another sound that captured the children's attention, or at least helped to sustain



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a degree of anticipation during the visit, was the scream heard from the people gathered around the Van de Graaff generator in the physics room.

Paradoxically, the sounds were both an attraction and an annoyance. For those working at the centre, the repetitive dinosaurs' roars recording was discomfoting and sometimes even irritating. Some members of staff had suggested to the administration many times that they installed a sensor that distinguished when the Jurassic World was being visited from the long hours when it was empty. By installing this device, the roars would only be heard when visitors walked through the room and not all day long as was the case. The suggestion was never taken up, so the roars continued non-stop. Something similar happened with the xylophone. Whoever designed the instrument never imagined that, from the four tunes available on the plaques, only 'La Cucaracha' would be played again and again because of its proximity to the place the player stood. The designer did not imagine how loud *La Cucaracha* would sound in the enclosed room without a ceiling. The designer also did not imagine that putting the xylophone so close to the door of the administration office would be a major inconvenience. After several years and many more 'cucarachas', the last director finally ordered a ceiling to be built to minimise the sound from the xylophone.

### *Monotony and dullness in the working space*

These contrasting days were the norm; day after day, riot was followed by emptiness in repetitive cycles. Two or three times a day, the planetarium would be filled with the collective yell of those holding hands to feel the shocks; but even this would be drowned out by the even louder reverberation of the speakers calling an employee to the office. In the following minutes, there would be a partial silence, sustained over the repetitive cycle of the dinosaurs' roars. That steadiness, or emptiness, forecasted

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the employees' escape to their hideaways. The predictable monotony of contrasts made me grow aware of an uncomfortable creeping feeling of exhaustion. The weekly schedule made this hectic routine feel heavier and, I presume, the cycle of a year lived in the planetarium would be followed by a similar one, leaving the employees with a calendar of repetition synchronised with the school schedule. Were the employees as exhausted as I was feeling?

In the same way that there was a contradictory situation where the same sounds that annoyed the staff attracted the public, the planetarium's environment was contradictory because though it was supposed to be a place for leisure, it had an uncomfortable working atmosphere. The centre was controlled by people who behaved like teachers in a school room or like indifferent bureaucrats. Leisure and work cohabited in these spaces.

I began researching the staff's feelings soon after I began seeking real silence. I wondered if the people working inside those walls enjoyed their job and the atmosphere of their working place. Some had worked for the centre for more than fifteen years already and wanted to continue working there. After a time discovering their hiding habits and hiding with them, I woke to a different perspective. It was behind the walls where they could relax, but most importantly, where they could escape the monotony, and by consequence, the public.

I remember one morning when I saw an acquaintance—a populariser of science in the region—visit the planetarium with her daughter's school-group. After greeting each other, we arranged to meet later after the visit, outside in the garden. I was interested in finding out the impression the place made on her. Two hours later, I found her surrounded by seven girls and boys at the parking lot. They were all looking at one of the mothers' cars. A thief had broken one of the windows to steal the stereo system while the group visited the planetarium. My acquaintance was upset and began complaining angrily about the whole experi-

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ence. She said she could not understand why the planetarium was so neglected: the rooms, the toilets, the exhibits. ‘...The guides! They do not have a clue about science; they cannot answer the children’s questions!’

After visiting the planetarium, this populariser said that the absence of interest that reigned in the centre among staff and the guides’ low level of knowledge was unacceptable. She was convinced that the interest, knowledge and passion that the populariser feels for her subject is what matters most. She said the children very quickly became bored and were disappointed in their city’s planetarium. She, like many other people, wrote to complain to the administrative secretary.

The spaces outside the offices felt dull: it seemed that the employees’ routine tasks were a source of tedium and this was manifested in their apparent lack of interest. The exhibitions, the spaces, and some of the guides’ scripts were boring to the children. Not all and not for all though. This necessitates that a distinction is made between the boredom felt by the employees, and the boredom provoked by the dull exhibitions that made up the majority in the planetarium.

One evening, while eating lunch at one of the gardens with two of the guides, one of them sighed suddenly and said that she loved working at the planetarium. The other guide sighed as well while eating her hamburger. I could not believe my ears. They were so thrilled about the subject and I could not understand how they felt. I had to ask if they were serious because I thought they might be joking, but they had that special sparkle of someone who experiences an insight. They did not look at me while answering. With their eyes lost among the animal shapes of the trees, they began to talk about the effort they put in making the planetarium look better than it really was. One of them said how she had to act optimistically in the presence of the adult public whenever she heard a complaint about the poor state of the rooms or the exhibits. ‘We have to do magic’, she said. Their efforts were not enough.

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The long hours observing hundreds of girls and boys entering and leaving the rooms in the planetarium were useful for observational purposes. But it was difficult to differentiate those who understood anything at all. Were these young people learning about science? Were they learning anything at all?

An important question is how the working environment was affecting the explanation and understanding of science? A more significant one is if it is fully considered by museographic institutions how relevant it is to help the employees shake boredom off and to support them in doing so?

### *The stick and the carrot*

This section broaches the subject of the cohabitation of leisure and work and so is titled after Csikszentmihalyi's remark on how people motivate themselves:

The management of behaviour, as presently practiced, is based on the tacit belief that people are motivated only by external rewards or by the fear of external punishment. The stick and the carrot are the main tools by which people are made to pull their weight (Csikszentmihalyi, 1975:2).

This seems to also be the case in the public understanding of science. In many centres, the motivation to promote learning is concealed under the promise of fun. Like many similar institutions, this planetarium was conceived to help educate the population in a zestful environment. We have mentioned earlier how, from the perspective of science centres, understanding science can be a joyful activity: learning while playing is often their motto. But considering Lefebvre's ideas about public spaces, there are differences between conceived spaces and the ways these are lived in and perceived. The planetarium was a place conceived for the understanding of science and technology through play. But in fact, the centre was lived as a place where leisure and

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obligation shared the same setting. Play, as a motivation for learning, was less visible to the observer than the reinforcement of ordered behaviour as lived in a primary or secondary school. Discipline came first. Although the planetarium's publicity said learning science could be entertaining, the initial motivation was transformed into disciplined behaviour in most of the rooms during school visits.

The planetarium may have been presented as an entertaining place to learn science and seen by primary school children as an occasion to have fun. However, while children were in a school group, usually enjoyment came second to the educational objective of standing silent while being told about sciences and technologies. The guides characteristically behaved like an extension of the teachers in the classroom. Although each guide had her or his style, they all behaved like teachers who knew the information needed for a particular activity (reproducing the patterns they learned at school). The guides were experienced in controlling the groups, including the punishment involved (maybe also as learnt from school). Respect for the guides or reprimand by the teachers enforced the fear of punishment that the students seemed used to. In contrast, the joy of playing was sustained as the external reward; as the motivational side of attending a science or history class. Play, enjoyment and fun would come later, but it was expected that the group behaved properly during the guided session.

Following Mihaly Csikszentmihalyi's arguments on motivation, 'children are threatened or cajoled into conformity with parental demands' first, and later in life they are involved in similar environments at school, with grades and symbolic promotions used by teachers as motivation. A similar system exists even later at our workplaces (Csikszentmihalyi, 1975:2). This objectification of incentives into grades first, money and status later, has been basic to the development of a 'rational, universal motivational system whereby communities can produce desired behaviours predictably and can allot precisely differentiated

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rewards to construct a complex social hierarchy' (Csikszentmihalyi, 1975:2). For Csikszentmihalyi, the ease with which external rewards are used is frightening:

When a teacher discovers that children will work for a grade, he or she may become less concerned with whether the work itself is meaningful or rewarding to students. Employers who take for granted the wisdom of external incentives may come to believe that workers' enjoyment of the task is irrelevant (Csikszentmihalyi, 1975:3).

Jean Lave and Etienne Wenger (1991), described the learning communities we all participate in, and wondered what are people really learning? Here is a partial answer from Csikszentmihalyi to support the observations at the planetarium:

As a result, children and workers will learn, in time, that what they have to do is worthless in itself and that its only justification is the grade or paycheck they get at the end. This pattern has become so general in our culture that by now it is self-evident: what one must do cannot be enjoyable. So we have learned to make a distinction between 'work' and 'leisure': the former is what we have to do most of the time against our desire; the latter is what we like to do, although it is useless. We therefore feel bored and frustrated on our jobs, and guilty when we are at leisure (Csikszentmihalyi, 1975:3).

In the *conceptual* planetarium, work and learning should not be distinguished from leisure. In the space as it was *lived*, the understanding of science subsisted in a disciplined environment and as part of a school task, not as a rewarding activity in itself. So, in fact, it was the *process of learning* that was manipulated in the conceived plan, but in the actual and concrete place, learning was again the ideal outcome of the disciplined attention of the visitors, and the authoritarian attitudes were the norm among the guides. What were the visitors and guides understanding about science?

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#### *The objects as the core: Investing in the unintended*

Kathleen Stewart, an anthropologist, might have called this planetarium a ‘space of desire’, somehow similar to the roadside environment she described in Western Virginia, United States: ‘in-filled with texture and the force of imagination and desire’ (Stewart, 1996a:4, 1996b). The institution had been, for several administrations, the space in which to wish for the public to become interested in science. Year after year the first exhibitions in the old rooms and some newer ones filled the centre wishfully. People came and left and the employees grew older as well as the bonds or ruptures among them. The administration in turn decided to invest in the betterment of the exhibitions leaving the social aspects to the side.

One Mexican specialist in the popularisation of science said during a conference: ‘In a bad science centre a child learns that when he or she presses a button, nothing happens’. I am sure that anyone who has visited a science centre and pressed a button that did not move anything experienced an odd feeling close to frustration. Personally, what came to my adult mind whenever I pressed such a button was that maybe I was not making it work properly. The second feeling was that I could not perceive what I was supposed to. Only later did I realise that it was simply faulty. In the planetarium, often three or four displays had that kind of buttons. Once I even had to stop the director from pressing a button for the fifth time and from shaking more and more vigorously a white stick that worked as an impermanent screen for the projection of images. ‘It is out of order since two weeks ago’ I said. That optical display broke one month after its installation.

Between two extremes – electric shocks or nothing – are many slight or subtle phenomena that result from pressing the buttons that do work. However, we have already become insensitive to the minor and expectant of the obvious. I confirmed this personal impression during my attempts to explore what children

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and teenagers were learning at other science museums. When I asked them what they had learnt, the most immediate and common answer was: 'electric shocks' 'it was fun'. They only talked about the most memorable and obvious, nothing else. Walking around every room one sees children pressing, pushing or pulling violently any button, crank or handle without waiting to see the outcome. Fun seems to be to pull, push and hit. Fun is less often waiting, watching, trying again, watching again and assessing. Only a few children waited to see what happened, and even fewer considered thinking what could be wrong and tried to rearrange the exhibit before pressing again or leaving.

I remember when I saw one of these few children at the planetarium. Observing how different people used the Newton's cradle, I had time to corroborate that children learnt that the exhibit did not work. Most of them walked towards the cradle, held one of the metallic spheres higher and then released it to see how it hit the rest of the spheres. The third ball was tangled up with the fourth, leaving a space that prevented the collision of all the spheres. The third law of Newton: 'If one body exerts a force on another, there is an equal and opposite force, called a reaction, exerted on the first body by the second'<sup>5</sup> could not be properly visualised because of the entanglement. Only one child tried something else. He was a nine-year-old boy who tried the exhibit and saw it did not work. His friends left to watch something else but he stayed and untangled the spheres until he made it work properly. Indifferent, he did not read the poorly-spelled explanatory plaque; he fixed the display and left. Evidently he had seen that instrument before; he knew how it was supposed to work, so he fixed it. But, what about the children who had not seen it before? What can a person understand when there is not even a plaque informing that the instrument is out of order?

While experiencing an environment with its particularities, the individual perceives and learns from participating in that context,

<sup>5</sup> Third law of motion by Isaac Newton in the Oxford Dictionary of Science, 1999, Oxford University Press.



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not so much from the conceived concept upon which that functional or dysfunctional environment was once built (Lefebvre, 1991). If the environment where children and adults are invited to learn about science is a dysfunctional place with old exhibitions, buttons that do not make things work, unprepared staff, a bureaucratic environment and a school-like setting, then one should wonder what learning results? Or how does knowledge survive these kind of environments?

This question presupposes a difficult answer, especially after it is widely acknowledged that children learn even if we think they are ‘only playing’, because they are wholly engaged. I would like to present here the idea that among the many things we learn, we get used to feeling bored, and we learn to devalue the capacity to attend (as suggested by Bateson, 1994:56), to be patient and to contemplate. What we feel when we realise we are not excited by the stimulus seems to be uninteresting, unimportant. So the question remains, what is the ensuing learning in an environment promoted as entertaining but which is not quite?

### *Boredom in museums*

Museums in general have provoked in many a sense of boredom and this has hampered attendance at their exhibitions. Interestingly enough, in museum studies, the word boredom is not commonly found. Boredom’s symptoms raise worries, but boredom is not studied as a fact.

Among museographers, one way of describing boredom is fatigue. They fight against the room fatigue by displaying appealing exhibitions designed to secure interaction by the public with the objects (de Rosnay, 1994:24). Joel de Rosnay coined the phrase *intellectual ergonomics* to name techniques applied to exhibitions after understanding the behaviour of the public in exhibition rooms. Observing how people of different ages, gender and in

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different social groupings walk around the displays has informed the designers. To give the impression of movement is the goal; even the typography of the plaques should avoid giving the impression of stillness. Exhibitions should be placed at different levels so children of all ages can reach to see them; differing, non-linear routes should be designed so people, even if they are rushing through a room, may encounter something interesting on the way out; redundant information should be placed everywhere, so that the learning process becomes more efficient (de Rosnay, 1994:23; Brookes, 1994; Hooper-Greenhill, 1994a). The newest science centres of the world have stimulating exhibitions tailored to suit the diverse behaviour of the public in buildings. Nonetheless, boredom is still common in many intellectually designed exhibition centres. It is therefore surprising that boredom is less studied as a fact than it is fought as a problem.

A Mexican museographer called ‘the museum vaccination’ to that belittling behaviour expected in a museum (silent, of respectful contemplation and almost reverent). This phenomenon takes place in many museums and has vaccinated generations of people against the museum visit. Today, museographers must convince people to visit museums by allowing a different behaviour in the rooms – or at least in the workshops – which is still, in any case, highly controlled. However, the words of Paul Valéry make one think about the complexity of what really happens in an exhibition room:

A strangely organised disorder opens up before me in silence. I am smitten with a sacred horror. My pace grows reverent. My voice alters, to a pitch slightly higher than in church, to a tone rather less strong than that of everyday. Presently I lose all sense of why I have intruded into this wax-floored solitude, savouring of temple and drawing room, of cemetery and school... Did I come for instruction, for my own beguilement, or simply as a duty and out of convention? Or is it perhaps some exercise peculiar to itself, this stroll I am taking, weirdly beset with beauties, distracted at every moment by masterpieces to the right or left compelling me to walk like a drunk man between counters?

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Dreariness, boredom, admiration, the fine weather I left outside, my pricks of conscience, and a dreadful sense of how many great artists there are, all walk along with me (Valéry, 1960:203).

I cannot confirm that boredom is seen as an ‘enemy’ in the same way as it has been perceived in religion,<sup>6</sup> but there is certainly a noticeable emphasis on promoting exhibitions as entertaining –the opposite of boring, without assuming that a museum visit evokes many, and contradictory, emotional states.

The lines quoted above from Paul Valéry were discussed in a group of museum specialists at Manchester in the year 2002. Valéry’s text was used to provoke a discussion about the public’s experience of museums. The people gathered that evening agreed that the essence of the problem was as suggested by one archaeologist. She revealed how she constantly strived to feel surprised again, to the same degree as the first time she felt she had understood something striking. Whenever she faced the challenge of designing a new exhibition, she wanted to reproduce that original emotion of surprise and replicate it for others. This continual search for surprise may be the same in every museum that goes through changes intended to achieve the goals of becoming both sustainable and attractive to new people.

Exhibition designers strive to create hype, surprise and entertainment in their exhibitions. All over the world, people in the museum circuit is trying to counter the museum vaccination by building attractive displays and creating hands-on exhibits,

<sup>6</sup> The subject of ‘boredom as an enemy’ has been dealt with in, at least, a novel and a theological book. In *The Journal of a Country Priest* (1936), Georges Bernanos wrote about the destructive process of a bored town. Boredom was the fatal illness of the parishioners who suffered from a void that not even God could fill. In *The Enemy is Boredom* by Guy (1964), the writer, an English priest, tells of his experiences in defeating boredom among the parishioners of his church. I acknowledge the relevance of studies of boredom in religion, as in school and the working place, but given the scope of the present article that stems from a PhD thesis, they were not developed. These relationships remain for future studies.

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compelling the visitor to participate and not just to stare (Padilla 2000:85; Silverstone, 1994 [1992]; Miles and Tout, 1994 [1992]). Yet the curator's interest is not only in striving to design attractive exhibitions. Curators are asking how they can transform current practices in science museums and other institutions to improve exhibitions, attract more people, and become sustainable with reduced public funds (Brooks, 1994; Durant, 1994; de Rosnay, 1994).<sup>7</sup> It is not out of place to remember that science museums are 'communicating environments' (Silverstone 1994:36) where information tends to be presented to the public as scientific facts: 'as unequivocal statements rather than as the outcome of particular processes and contexts' (Macdonald, 1998a:2). Macdonald has explained how, after an exhibition is set in place and tidied, 'the assumptions, rationales, compromises and accidents' that lead to the finished exhibition 'are generally hidden from public view'. Exhibitions emerge as a result of a complex interplay of institutional and individual forces and are consumed in a multitude of different ways by visitors. But they appear as anything but arbitrary. They are structured according to their own rhetoric, a rhetoric which seeks to persuade the visitor that what is being seen and read is important, beautiful, true (Silverstone, 1994:36).<sup>8</sup>

<sup>7</sup> The public understanding of science has been adopted by neo-liberal governments, becoming a primary government interest and a profitable business for entrepreneurs. Educational, industrial, scientific and economic interests are merged together in the public understanding of science. John Pickstone interpreted the public understanding campaign in Britain as a 'corporate good and a corporate goal' (2001:192). In Mexico, science museums are following a similar commercial path.

<sup>8</sup> Because of all these factors, science museums, planetariums and similar institutions are seen by scholars as very rich arenas in which to analyse society through the way in which science and technology are promoted. It appears that museums are defining what science should be for society – they are a sort of interface between the scientific, the social and the productive, which must be explored (González *et al.*, 2001; Macdonald, 2001, 1998a, 1998b, 1996; Silverstone, 1994; Butler, 1992; Haraway, 1989). In the science museum, a place where science is not only produced but authorised and legitimised for public consumption, the roles of scientists and museographers have shifted.

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Hooper-Greenhill (1994b:3) differentiates the *intended* from the *unintended* messages given in a communication system like an exhibition. It appears that the promoted interest and enjoyment become the intended messages in contemporary popularisation of science activities. Boredom, an evident outcome in the planetarium rooms, is banned from the discourse, although it prevails. But boredom may be interpreted as an unintended message behind the popularisation of science. The unintended message that is communicated may be that learning science should be entertaining. If learning science is not enjoyable and leads to the child feeling bored or indifferent, then something must be going wrong with science or the individual, rather than with the object, or the environment where it is represented. Because boredom is generally interpreted as a negative outcome and we do not usually blame the objects, science or the individual's intellectual capacity are accountable.

In *Boredom [1924]* (2002), Siegfried Kracauer, analysing the everyday life of his time, wrote that 'the environment of modernity is made up of commodified forms of communication (adverts, films, radio and so on) that aggressively hail and inculcate their audience' (Kracauer, 2002:301). Ben Highmore introduced Kracauer's article, suggesting that 'the designed environment of the commodity has set its designs on us' (Highmore, 2002:302). The genuine search for the reproduction of wonder in an exhibition may be interpreted as the design of a commodified form of communication as explained by Kracauer.

A first step to understand boredom would be to keep in mind that museistic environments are the result of some sort of cognitive and behavioural engineering. Barry, as other authors, sees in interactivity a dominant model in which objects 'can be used to produce subjects' (Barry, 2001:129).<sup>9</sup> Man, as Foucault puts it, "appears in his ambiguous position as an object of knowledge and as a subject that knows; enslaved sovereign, observed spectator" (Foucault, 1997:312). In other words, interactivity has

<sup>9</sup> See for example Hooper-Greenhill, 1992; Bennett, 1998:30; Macdonald, 1998a:16.

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been taken as a promise to turn the museum visitor into a more active self (Strathern and Macdonald, in Bennett, 1995:7). In this production of active subjects, the knowledge acquired regarding the behaviour and habits of the individuals seems binding because their objective has been to increase the efficiency of the learning environment and reduce the time to learn. These intellectual designs should put the individual in the situation of *flow*. This is: the active subject should find the subject matter appealing enough as not to feel bored nor find it out of reach or difficult (Csikszentmihalyi, 1975). Although the time to learn is reduced, participation is abridged and boredom emerges filling the time that could be used to explore and understand—were the subject not so clear.

In *Politics of Display*, the authors seem to agree on the impact of the ways in which the creators and promoters of knowledge imagine their visitors to transform their spaces accordingly (Macdonald, 1998a:18). Barry explains the centrality of scientific and technical objects that are today everywhere around us: in a science museum the body of the visitor is where scientific experimentation can take place (Barry, 2001:200). However, the presence of these new environments for experimentation and technological progress does not always allow for negotiation. In such cases, the objects can turn into apolitical machines (Barry, 2001:140-141), closely resembling Ferguson's developmental apparatus or antipolitics machine (Ferguson, 1985, 1994). For Barry and Ferguson, apparatuses can easily carry the closure to any possible negotiation. The intellectual ergonomics implemented in science centres and museums stand for a contemporary learning model, leisure, and a method to keep the individual scientifically informed and entertained. Museographic interactivity is based upon the idea that we can understand scientific information by participating and using our body to learn as opposed to sitting on a bench, listening to the explanation of a teacher; activity, mind and body involvement versus passive reception. But entertainment cannot be eternal; sooner or later the individual will leave

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that engineered environment. We are conditioned to thrive for excitement at the same time that our periods of attention are reduced, and we get too susceptible about boredom.

#### *Boredom as a social issue*

Mary Catherine Bateson suggested in her book *Peripheral Visions* (1994) that we, as individuals, grow conditioned to feel bored:

Sometimes when I talk with friends who spend hours in formal meditation it strikes me that they are seeking therapy for a wounded capacity to attend. As a society, we have become so addicted to entertainment that we have buried the capacity for awed experience of the ordinary. Perhaps the sense of the sacred is more threatened by learned patterns of boredom than it is by blasphemies (Bateson, 1994:56).

Modernity is characterised by an overwhelming input of information that has conditioned recent generations to always feel the need for more of everything. Bateson illustrates her argument with the daily problems that teachers at schools face: children grow up watching scientific programmes on television and these contemporary forms of communicating science set new challenges to those interested in educating children, especially when children become used to learning mostly through overstimulation by sounds, music, fiction, suspense, colour, action, animation and/or three-dimensional information that teachers at school find impossible to reproduce. It is then understandable that children seem less and less able to concentrate in compulsory school-like environments where the same teacher, and not a film or pop star, lectures them day after day without music or special effects. Bachelard (1983 [1948]) thought that scientific culture gets buried under the thrill of excitement. It seems as if when science does not look entertaining, colourful and interesting, it is not worth the experience. Entertaining children at schools

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grows expensive and requires multiple skills that teachers have to learn. By adding chocolate flavour to milk – writes M.C. Bateson – we raise chocolate-eaters instead of milk-drinkers.<sup>10</sup> Reinterpreting the metaphor, instead of encouraging children's interest in science, their interest in hyperaction is nurtured, and the educational system appears to reinforce the child's need for fun after hours of tedium. As children we are obliged to stay inside the room and listen to the teacher, so we grow used to coping with tedious days.

In other words, there seems to be a modern race against boredom everywhere but in the school. Boredom is perceived as a problem to solve, so the imposition of new rhythms sets enormous challenges to the educational systems of the world. This old 'enemy' gets some attention after several generations of children have grown accustomed to living part of their lives in environments in which their natural disposition to play is repressed. While at school, playful interaction is seen as negative for the educational purpose of the institution, hence boring instruction is the major outcome. Boredom is not seen as a reality that might be central to behaviour and human agency in environments like school, where play and leisure are scheduled separately from the hours of learning. Although not all museums are boring and not all the time spent at school is dull, environments of inexpressive children are assumed to be negative for education, even after play is mostly forbidden.

### *Thinking about the invisible*

Were the aim here to be critical about the institution that fails to improve the working conditions of its employees, or the mediating elements that should make a visit to the rooms exciting

<sup>10</sup> The problems of worldwide compulsory and legally enforced education are not the subject here. Nevertheless it should be mentioned that in Mexico as everywhere else, formal compulsory education faces serious problems, and its reform is a major government issue (Esteve, 2003).



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for everyone, the result would be a mere critique using the same contemporary popularisation ideals as a frame of reference. A second option, and the one preferred here, was to focus on the description of the environment, as perceived, to feel boredom and analyse what was provoking it, what makes us conscious of it, and how and when we stop feeling bored.

Sharon Macdonald (2001) wrote about the possibility of paying attention to those things that do not happen. She distinguished scientific experiments that fail from successful ones that determine the paths later followed by scientists. Failure, like the never-realised efforts described in Macdonald's study of an exhibition at the Science Museum in London, are

as socially constructed and as culturally interesting, as is success [...] [An] anthropological-ethnographic exploration behind the scenes can take us into the world of such 'almosts', where they struggle with what may become 'successes', and into the classificatory battles of which finished exhibitions are an, albeit important and visible, after-effect (Macdonald, 2001:118).

The planetarium is what it is: the temporary final outcome of many attempts to keep it alive and appealing for the public. Considering the prominent presence of boredom, these attempts will always be partial because on one hand there is a powerful mediatic culture that depends on making everything for sale look exciting and perfect to satisfy created needs and on the other there is a schooling system that still trusts in the separation of play from duty and the merging of discipline and learning. Boredom will not be defeated under these circumstances. Ennui, that introspective condition, nevertheless has existed and may happen to all from time to time, always moulding the human mind and helping us make sense of reality (Kuhn, 1976).

When I first began writing I could not help but feel a degree of resentment that the planetarium was so dull when it should not be. Why not? Why should I analyse it through the same lens of a desire for fun as when it was conceived? The analysis of boredom

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has to do with what is not supposed to happen albeit it does. As stated before, boredom is a key word, an *idée-force*, a word that can shape our experiencing of the world, and as Reinhard Kuhn has invited us to think, it is not often mentioned but is part of contemporary human perception of life (Kuhn, 1976).

#### *Boredom, the eternal enemy? Whose boredom?*

M. C. Bateson (1994) wrote about being habituated to the ‘hype’ of daily modern life, whereas Kracauer wrote about being ‘pushed deeper and deeper into the hustle and bustle’ until individuals no longer find that extraordinary and radical boredom that will ‘reunite them with their heads’, and with their own existence (Kracauer, 2002).

For Kracauer, letting oneself feel boredom would allow a person to ‘do nothing more than to be with oneself, without knowing what one actually *should* be doing’ (2002:303, emphasis added).

Kracauer concluded his brief article by saying that boredom becomes the only proper *occupation* as it provides a ‘kind of a guarantee’ that one is ‘in control of one’s own existence.’ In a very similar tone, Kuhn concludes his research on boredom by highlighting how the psycho-literary term *ennui* has not been seen by every author as a malady; instead, by some authors *ennui* has meant a source of inspiration:

As a negative force, *ennui*, if it does not engulf its victim, can and often does induce efforts to fill the void that it hollows out. It is the state that, if it does not render sterile, precedes and makes possible creation in the realms of the practical, the spiritual, and the aesthetic (Kuhn, 1976:378).

For the authors mentioned here, if one were never bored, so bored as to fall in this state of near-contemplation called *ennui*, the individual could never be with her or his self, being

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subject to the artificial, the ongoing increase of consumption of unfulfilment. By sharing an ideology where boredom is seen as an enemy to the human spirit, the individual would always be subjected to that ideology that prevents him or her from exploring life; preventing the subject from being an individual (Althusser, 1976:133-138; Fortes & Lomnitz, 1991:73).

What are those 'patterns of boredom', mentioned by Bateson, that we have learned? What stops us from reaching the realms of our subjectivity when thinking is induced by our ennui?

There is one reason, at least, behind the apparent individual inability to voluntarily stop feeling bored, and it is related to coercion. Kuhn explains how ennui, under the name of acedia, assumed some of its negative force with the inception of Christianity:

ennui began to occupy a central position in man's intellectual and spiritual concerns. [...] In the religious anguish resulting from what Thomas Aquinas was to castigate as an abhorrence of all spiritual good, the romantics were to see a primitive version of their own malady (Kuhn, 1976:376).

But still in the early days of Christianity, some thinkers saw in acedia 'a condition that could lead to salvation' and later as a source of inspiration (Kuhn, 1976:376). Yet the vulgar boredom of daily drudgery is not actually what is at issue here, since it neither kills people nor awakens them to new life, but merely expresses a dissatisfaction that would immediately disappear if an occupation more pleasant than the morally sanctioned one became available (Kracauer, 2002:302).

The kind of boredom that everyone has felt during any routine or meaningless task cannot be learned nor prevented. In the words of a young female astrophysicist: 'It is natural to withdraw for some time when paying attention.' The answer to when it is that we withdraw seems more psychological, neural even, but not social. This naturalness about withdrawing for some time from

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paying attention makes a social explanation difficult. That state of mind that stops as soon as the bell chimes is learned; but it is brief, it is felt and passes. Are these brief patterns enough to distract us from introspection?

People feel bored ‘until the bell rings’ because of the power-relationships that determine our behaviour in the given context, for example the microphysics of power set in action by the school bell (Foucault, 1975). The power of the ringing or whatever distracts us again might divert our attention from our independent thought; but when we are immersed for longer in monotony, in ennui, then we spare the time to attend to our self. It may be that in this ‘monumental struggle against the power of nothingness’ (Kuhn, 1976:378) we define our self and affirm our humanity. Becoming conscious of ourselves in the middle of our lassitude can allow the individual to be attentive to space, to her existence and maybe even to abstract ourselves from the concrete world, as any scientist – social ‘or’ natural – wishes to do. This ennui, as distinguished by Kuhn from mere tiredness, may certainly be considered a relevant social side of boredom, for it is in that state of mind that individuals think about themselves and life. But how can we feel at ease when we need to be allowed to feel it, or have to hide away just to be who we are?

These are reasons why boredom matters to anthropology. Kuhn wrote about it calling it ennui. Kracauer also wrote about it calling it a bliss and completed his analysis in this way: ‘If, however, one has the patience, the sort of patience specific to legitimate boredom, then one experiences a kind of bliss that is almost unearthly. [...] then boredom would come to an end, and everything that exists would be...’ (Kracauer, 2002:304). Kracauer does not conclude his sentence, leaving it open for conclusion. Allowing for the presence of wandering visitors in a museum, without insinuating that the institution is failing, may mean the allowance for the recuperation of the capacity to attend. Different strategies should be developed, for example, giving enough freedom, space for research and enough attention to the

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guiding staffs; helping the employees to renew their interest in their subject matter before buying new exhibits or building new rooms. The staffs' boredom will hamper any attempt to improve an institution. As for the public's dreary walks through exhibitions, museum staff should consider that boredom is sometimes needed for the achievement of introspection.

The idea of boredom has been put to the test here because of its prevalence in museographic environments.<sup>11</sup> It is not easy to convince the reader or myself of the powerful ideas that boredom can provoke in all of us, and to call this a human need. The proposition then is to think of boredom as part of the significant but unconscious act of desiring to understand, and consider if its presence among the visitors to planetariums or museums really eliminates reasoning or interest. If science popularisation environments are not constantly interesting, it is not because the environments are not motivating, nor because science is uninteresting; nevertheless, with the condemnation of boredom both may be the unintentional messages.

Paul Willis explained that children at school, rather than gaining the qualifications to work as something different than shop-floor workers, learn instead what they need to become able shop-floor workers. By resisting the school's antagonism to working class culture they learn the habitus, or the cultural dispositions (Bourdieu, 1977) that facilitate their immersion in the hard life of the shop floor. I suggest that something similar was happening at the planetarium. Through being taken by school buses to the centre and by interpreting the planetarium and its contents as part of a school activity, most children would believe that science is as boring as learning in school can be. As this interpretation is not consistent with my interest in portraying boredom as a fruitful state, I formulated a second interpretation: if we are to see boredom as problematic for the popularisation of science, then we should explain that the problem is not finding oneself bored

<sup>11</sup> I cannot deny that there is a search for the explanation of consciousness. But such research is for the future.

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while learning about science, the problem is in seeing boredom as a negative state and that hype and action are more important than a contemplative state of mind. Contemplation can be seen as natural and even necessary for the human mind in order to make sense of the world and our selves in it. The greatest problem to be solved in promoting the understanding of science as exciting is the belief that boredom results from a lack of understanding. The truth may be quite the inverse, that, in fact, the process of understanding has just begun. If so, there is a problem at the very core of many popularisation campaigns.

As M.C. Bateson wrote: 'It takes adult effort to turn bright, open children into a sullen underclass or into compliant factory workers, to keep life in shades of black and white and avoid new learning' (Bateson, 1994:57). By imposing fun as the significant social behaviour, but banning play, there is a widely shared 'imposition of particular kinds of societal blindness' (Bateson 1994:57), and a learning and understanding external behaviour that may not be that useful in the long term.

It may be then, that in the same way as 'participation precedes learning' (Bateson, 1994:41), and participation will necessarily imply learning (Lave and Wenger, 1991), boredom may precede ennui, which may precede consciousness and personal involvement. Ennui, a combination of consciousness and withdrawal has taken many thinkers somewhere. Where may it take the visitor of a museum? Kuhn suggests that ennui can help to explain the creative act (1976:378). If boredom is partly a consequence of the cultural restriction of play during childhood, and as we become habituated to this limitation, we do not allow ourselves to feel calm, observant and creative. Allowing oneself to feel boredom can be the step prior to understanding anything that interests the individual (including science). The problem is that after so much habituation to patterned school-like behaviour, the subject might let ennui pass.

The fight against boredom is like keeping a state of unstable equilibrium. This equilibrium might be lost and the individual

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could enter the realm of introspection, or else the individual could stop feeling any interest in introspection, becoming subject again to the option of hyper action. The idea that people find the flow in their preferred activities when they do not get bored or challenged outside their possibilities (Csikszentmihalyi, 1975) has not exactly been corroborated here. The feeling of boredom and feeling challenged by the difficulty of a task can, on the other hand, advance exploration. Participation nevertheless most assuredly will not take place in a boring environment, and will diminish in one obsessed by hyperaction. The flow in understanding science can be achieved after boredom turns into ennui. Ennui is not thrilling because it turns the self inside itself, alone. People can flow too with their ennui. Museums should allow their visitors feel it without so much concern. On the other hand, museums should understand that a bored staff certainly forecasts an institutional failure.

If institutions could stop preferring immediate learning for the casual visitor, then time and space for contemplation—hence for understanding—should be provided too. In this strategy, the museum staff should always come first.

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